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Relationship between capital structure and profitability of oil marketing companies (OMCs)

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Abstract
The study investigated the relationship connecting capital structure and profitability of two listed firms on the Ghana Stock Exchange (GSE) from the year 2010 to 2014. With regards to the firm's capital structure, the study employed short-term debt to total capital, long-term debt to total capital and total debt to total capital in comparison with return on assets (ROA), return on equity (ROE) and net profit margin (NPM). The mixed method was used to capture both qualitative and quantitative data. The study employed both primary and secondary data and the data was analyzed using multiple regressions. The outcome from the review demonstrates that increments in short term debts and long term obligation influences the execution of the oil marketing companies. The suggestion is that managers ought to ensure that they recognize and keep up the ideal capital structure level to augment the organization's profit base.

Keywords: capital structure, oil marketing companies, return on assets (ROA), return on equity (ROE) and net profit margin (NPM)

1. Introduction
With adverse of technology and the need for organizations to maximize profit among institutions, various literature relating capital structure and company profitability has been investigated, such as (Adesola, 2009; Chandrasekharan, 2012; Gatsi & Akoto, 2010) [7, 24, 54]. This is as a result that company's use of debt and equity form a prime foundation of capital structure needed for operations (Gatsi & Akoto, 2010; Kajola, 2008; Salawu, 2007) [54, 55, 56]. This study is not new among developing continents such as Africa, Asia and South America. For example, Chandrasekharan's, (2012) [24] and Shehu's (2011) [57] findings were inconsistent with common attributes in the capital structure of companies in Nigeria. Several studies in Ghana including Abor, (2005; 2007; 2008) [2, 5, 3, 4]; Awunyo-victor & Badu (2012) [12]; Boadi, & Li (2015) [19]; Boadi *et al.,* (2013) [19]; Gatsi & Akoto, (2010) [54]; Marfo-Yiadom & Boachie-Mensah, (2010) [58] and Amidu, (2007) [11] have identified various determinants of capital structure and performance of listed companies and their results showed mixed findings. Some studies found mixed results suggesting either positive relationship or negative relationship for capital structure and companies profitability. Shehu's (2011) [57] findings revealed that businesses with more debts tend to be more profitable. In line with these findings was a study by Gatsi & Akoto, (2010) [54] on firms in Ghana which established a positive link between profitability and capital structure. A more recent study by Boadi & Li (2015) [19] examined the association of capital structure and firm performance in Ghana by testing the link using GMM regression method and established a positively significant relationship between leverage and companies performance. The findings from Boadi & Li (2015) [19] was consistent with Aliakbar et al., (2013) [9]. Also Awunyo-victor & Badu (2012) [12] empirically determined the correlation involving capital structure and performance of listed banks in Ghana for the period 2000-2010 using Return on Assets, Return on Equity and Tobin's Q ratio derived from annual reports of the listed 7 banks on the Ghana Stock Exchange. Other studies conducted in Ghana have used profitability ratios to measure, how efficient managers generate profits on sales and investments (Marfo-Yiadom & Boachie-Mensah, 2010) [58], profitability of public companies on the Ghana Stock Exchange by (Abor, 2005) [2, 5]; determinants of capital structure of listed companies on GSE (Abor & Biekpe, 2005) [2, 5], determinants of capital structure for banks (Amidu, 2007) [11], and capital structure and profitability of banks in Ghana (Gatsi & Akoto, 2010) [54].

2. Problem Statement
The relationship between capital structure and profitability or performance have been conducted on financial institutions. Although, the Ghana capital market is developing, undertaking a study on the Oil Marketing Companies (OMC's) in the Ghanaian context is worthwhile especially to examine how the sharp increase in crude oil prices on the global market up until the early 2015 has impacted on the profitability of the Oil Marketing Companies especially in Ghana. Two main factors informed this study as most Oil Marketing Companies (OMCs) in Ghana are highly financially leveraged. The first factor is that the players in the industry are not able to raise the needed capital to play actively in the industry because of the capital intensive nature of the business and the second is the Government of Ghana indebtedness to the sector. They then fall on bank loans to complement their finances. Majority of the Oil Marketing Companies' capital structure is therefore skewed towards debt finance with little equity finance, hence this research to consider the link between the capital structure and profitability of Oil Marketing Companies (OMCs). This creates a research gap that needs to filled, thus, the exploring of OMC's listed on the Ghana Stock Exchange (GSE) is worthwhile. Boadi and Li (2015) [19], Boadi *et al.,* (2013) Awunyo-victor & Badu (2012) [12], Abor (2007; 2008) [3, 4], Gatsi & Akoto, 2010 [54]; Amidu, 2007 [11], Abdul, (2012) [1] and Chandrasekharan, (2012) [24] have demonstrated that the

industry type affects the use of debt and in general, the company's overall performance, but relied predominantly on financial institutions. Therefore, to test our theory in relation to oil marketing companies, the study sought to establish the relationship between the capital structure and profitability among the Oil Marketing Companies (OMCs) present on the GSE.

3. Objectives

The main objective of this study is to determine the relationship between capital structure and profitability of Oil Marketing Companies in Ghana in terms of Return to Equity (ROE), Return on Asset (ROA) and Net Profit Margin (NPM).

Research Questions

The research questions that guided this study is; What are the relationships between capital structure and profitability of oil marketing companies in terms of Return on Asset, Return on Equity and Net Profit Margin?

4. Review of Related Literature

4.1. Determinants of Profitability

Profit is the primary objective of any business enterprise (Bayeh 2013) [15]. Heavy capital investment is necessary for the success of all business enterprises. Profit is usually a long term objective which measures not only the success of the product and business enterprise, but also of the development of the market for it. It is determined by matching revenues against the associated costs. The only costs placed against revenue, are those which have a contribution in the generation of such revenue. An enterprise should earn profits to survive and grow over a long period of time. Capital invested is eroded if the enterprise fails to make profit, and if this situation prolongs, the enterprise ultimately ceases to exist. A number of factors affect the profitability of an enterprise. Their influence varies in the short term, as well as in the long term. Recognizing these factors will be very helpful in managing a business entity. These determinants can be of a positive or negative nature. In the latter case, an important role falls to the manager of the enterprise, who must make all efforts to improve the financial results of the company (Singh, 2013) [64]. There is a positive significant relationship between size and profitability (Chen & Chen, 2011; Ross, 1977, Yusuf *et al.,* 2015) [22, 13]. Leverage is positively correlated with firm size (Akhtar & Oliver, 2009; Rajan & Zingales 1995; Kouki 2012; Booth *et al.,* 2001) [8, 65, 59]. The degree of which various financial, legal and other factors such as corruption affect profitability is strongly related to firm size (Singh, 2013; Van Horne & Wachowicz 1995) [64, 66].

4.2. Empirical Review of Capital Structure

Amidu's (2007) [11] studied on determinants of the capital structure of banks in Ghana and found an inverse relationship between short-term debt and firm profitability; Abor's (2005) [2, 5] also studied on the effect of capital structure on the profitability of listed firms in Ghana. Abor (2005) [2, 5] in his studies also found an inverse relationship between company profitability and long-term debt. Graham's (2004) study on how big the tax benefits of debt also concluded by saying that there is an inverse relationship between total debt and profitability. Abdul, (2012) [1], Awunyo-victor & Badu (2012) [12] and Saeedi & Mahmoodi (2011) [67], concluded in similar manner. Furthermore, the findings from this study were inconsistent with Kouki (2012) [59], and the empirical evidence obtained by Kaumbuthu (2011) [33] where a negative relationship between capital structure and ROE exist. The findings showed mixed results with the study findings from Ali-Akbar & Safari (2009) [10] and Lara & Mesquita (2003) [60]. Kouki (2012) [59] also found a significantly negative relationship between profitability and debt/asset ratios.

Numerous studies specifically suggest a positive association between capital structure and performance (Abor 2005 [2, 5]; Cassar & Holmes (2003) [61]; Hall *et al*., (2004) [28]. A study by Esperança *et al*. (2003) showed positive relationships between asset structure and both long-term and short-term debt. Salteh *et al.* (2009) [62] empirically found the positive and significant relationship between capital structure and firm performance as measured by ROE with leverage ratios, namely short-term debt to total assets, long-term debt to total assets, total debt to total assets and total debt to equity. Umar *et al.*'s (2012) [49] findings which showed a positive relationship between firm performance and leverage ratios for firms in Eastern Asia and firms listed on the Karachi stock exchange respectively. The finding is inconsistent with the findings by Javed & Akhtar's (2012) findings of a positively significant relationship between debt to equity ratio and ROE. Ali-Akbar & Safari (2009) [10] findings are inconsistent with the findings from the results obtained in this study that short term and total debts are positively related to ROE. Petersen & Rajan (1994) [46], however, found a significantly positive association between profitability in terms of NPM and debt ratio. Thus a positive significant relationship between ROA, ROE and NPM is expected for Oil Marketing companies in Ghana.

4.3. Overview of Goil and Total Petroleum Ghana Limited Companies

The study data analysis is based on companies listed on the Ghana Stock Exchange. The Ghana Stock Exchange is widely regarded as the best gauge of firms' equities market since 2003. Ghana Stock Exchange (GSE) index comprises over 20 companies in leading industries of the Ghanaian economy, capturing about 50% coverage of Ghanaian firms' equities. This indicates that the study focuses on companies whose dataset comprise of highly liquid firms. Financial data relating to our sample was obtained from the website of Ghana Stock Exchange over the period 2010-2014 and consists of the firms' annual financial reports and income statements. The sample was reduced due to lack of oil marketing company data. The Oil marketing companies with missing data from 2003 through to 2013 were excluded from our sample.

Ghana Oil Company Limited (GOIL) was established on 14th June 1960 under the Companies Ordinance (CAP 193) as AGIP Ghana Limited with AGIP S.P.A of Italy having 855,000 shares and SNAM SPA also of Italy having 95,000 shares.

Total Petroleum Ghana Limited was incorporated in Ghana on December 31, 1951 as Socony-Vacuum Oil Company (Gold Coast Limited). This was then a wholly owned subsidiary of Sucony-Vacuum Oil Limited of USA. The name of the Ghanaian subsidiary was changed from Mobil Oil Gold Coast Limited to Mobil Oil Ghana Limited. On September 6, 2006 the shareholders of the company approved that the company's name be changed to Total Petroleum Ghana Limited. Total was provisionally listed on the Ghana Stock Exchange on July

19, 1991 and later had its official listing on September 18, 2006. It has a total of 50 million authorized shares and 13.9 million of these have been issued. Total Petroleum has a stated capital of GH¢50.05 million.

5. Methodology

The study was based on exploratory and confirmatory research and more especially on confirmatory since it aims at finding the relationship between capital structure and profitability of Oil Marketing Companies (OMCs) in Ghana in terms of Return to Equity (ROE), Return on Asset (ROA) and Net Profit Margin (NPM). The methodology adopted for this study was the mixed method. Hence both quantitative and qualitative method was applied to capture all relevant data that enhances the analysis of capital structure profitability in Oil Marketing companies in Ghana. The study choose two OMCs on the Ghana Stock Market precisely the Ghana Oil Company Ldt. (GOIL) and Total Petroleum Ghana Ltd. (Total). The study used both primary and secondary data for analysis. The study used multiple regression model to determine the relationship between capital structure and profitability.

6. Findings and Results

In order to determine the strength and associations with the repressors, a correlation matrix of the variables for the sampled firms is presented in the Tables 1, 2 and 3 below. The study also employed the Box-Ljung statistic test for autocorrelation. The essence was to test for the incidence of autocorrelation for all the variables used in the study. The variables used in the multiple regressions were transformed by natural log to ensure the smoothness of the variables. The three dependent variables of ROE, ROA and NPM were separately regressed against the explanatory variables as presented in Table 4.5 below.

6.1. Diagnostic tests Multicollinearity

The correlation coefficients of all variables were less than 0.8 for the column ROA (Table 1), ROE (Table 2) and NPM (Table 3). This result implies that the study data did not display severe multicollinearity in accordance with Cooper & Schindler, (2008).

6.2. Autocorrelation Test Results

The null hypothesis of this Box-Ljung statistic test for autocorrelation was that there was no first order autocorrelation in the data. The test statistic reported was F test with four degrees of freedom and a value of 5.851 (ROA), 3.410 (ROE) and 10.209 (NPM). The p-value of the F test was 0.056, 0.129 and 0.021 respectively implying the F test was statistically significant at 5 percent confidence interval. The results suggest that there was no problem of dependence that might cause autocorrelation in the data.

Table 1: Pearson Correlation matrix of Return on Assets (ROA) for listed OMC's

Correlations							
		Ln ROA	***Ln STD/TC***	***Ln LTD/TC***	***Ln (STD+LTD)/TC***	***Ln FIRM SIZE***	***Ln SALES GROWTH***
Ln ROA	Pearson Correlation	1					
Ln STD/TC	Pearson Correlation	-0.470	1				
Ln LTD/TC	Pearson Correlation	-0.403	-0.104	1			
Ln (STD+LTD)/TC	Pearson Correlation	-0.658*	0.857**	0.376	1		
Ln FIRM SIZE	Pearson Correlation	0.326	0.367	0.035	0.394	1	
Ln SALES GROWTH	Pearson Correlation	-0.293	0.021	0.711*	.232	0.210	1
*. Correlation is significant at the 0.05 level (1-tailed).							
**. Correlation is significant at the 0.01 level (1-tailed).							

Authors' computations, 2016

Table 2: Pearson Correlation matrix of Return on Equity (ROE) for listed OMC's

Correlations							
		Ln ROE	***Ln STD/TC***	***Ln LTD/TC***	***Ln (STD+LTD)/TC***	***Ln FIRM SIZE***	***Ln SALES GROWTH***
Ln ROE	Pearson Correlation	1					
Ln STD/TC	Pearson Correlation	-0.063	1				
Ln LTD/TC	Pearson Correlation	-0.243	-0.104	1			
Ln (STD+LTD)/TC	Pearson Correlation	-0.201	0.857**	0.376	1		
Ln FIRM SIZE	Pearson Correlation	0.681*	0.367	0.035	0.394	1	
Ln SALES GROWTH	Pearson Correlation	-0.176	0.021	0.711*	0.232	-0.210	1
*. Correlation is significant at the 0.05 level (1-tailed).							
**. Correlation is significant at the 0.01 level (1-tailed).							

Authors' computations, 2016

Table 3: Pearson Correlation matrix of Net Profit Margin (NPM) for listed OMC's

Correlations							
		Ln NPM	***Ln STD/TC***	***Ln LTD/TC***	***Ln (STD+LTD)/TC***	***Ln FIRM SIZE***	***Ln SALES GROWTH***
Ln NPM	Pearson Correlation	1					
Ln STD/TC	Pearson Correlation	-0.400	1				
Ln LTD/TC	Pearson Correlation	-0.451	-0.104	1			
Ln (STD+LTD)/TC	Pearson Correlation	-0.600	0.857**	0.376	1		
Ln FIRM SIZE	Pearson Correlation	0.429	0.367	0.035	0.394	1	
Ln SALES GROWTH	Pearson Correlation	-0.376	0.021	0.711*	0.232	-0.210	1
*. Correlation is significant at the 0.05 level (1-tailed).							
**. Correlation is significant at the 0.01 level (1-tailed).							

Author's computations, 2016

As shown in Table 1 above, the results show that ROA is negatively and significantly correlated with total debt to total capital (STD+LTD/TC) (-0.658) at 95% confidence interval. However, the correlation of ROA is negatively correlated with STD/TC (-0.470), LTD/TC (-0.403) and SG (-0.293). ROA is positively correlated with FS (0.326). However, ROA showed no significant relationship with STD/TC (-0.470), LTD/TC (-0.403), SG (-0.293) and FS (0.326). The results suggest that there was negative and an insignificant relationship between capital structure and firm performance of Oil Marketing Companies listed in the GSE as measured by ROA. The result from Table 2 above shows that ROE showed significant relationship and positive correlation with FS (0.681*) at 95% confidence interval. The remaining leverage ratios showed a negative correlation and insignificant relationship with ROE from Table 2 above. The results suggest that there was negative and an insignificant relationship between capital structure and firm performance of Oil Marketing Companies listed on the GSE as measured by ROE. The results from Table 3 above shows that there exist a positive correlation and insignificant relationship between NPM and FS but NPM showed negative and no significant relationship with (STD/TC) and (STD+LTD/TC) and SG. The results suggest that there was positive and an insignificant relationship between capital structure and firm performance of Oil Marketing Companies listed on the GSE as measured by NPM.

6.3. Regression Results

The results of the three regressions are presented in Table 4 below. The result from Table 4 below is shown in the model estimation equation as follows:

Model Estimation

LnROA= 1.933 –0.470STD/TC – 0.403LTD/TC - 0.658(STD+LDT/TC) + 0.326FS -0.293SG

LnROE= -7.555– 0.063STD/TC – 0.243LTD/TC - 0.201STD+LDT/TC - 0.681FS -0.176SG

LnNPM= -2.932 – 0.400STD/TC – 0.451LTD/TC - 0.242STD+LDT/TC + 0.429FS - 0.376SG

Table 4: Regression Results of Firm Profitability against Capital Structure

	Return on Assets (a)			**Return on Equity (b)**			**Net Profit Margin (c)**		
Exploratory variables	Coef	t-test	t(stats)	Coef	t-test	t(stats)	coef	t-test	t(stats)
Constant	1.933	0.380	0.723	-7.555	-1.484	-0.212	-2.932	-0.618	0.570
STD/TC	-0.470	-0.006	0.996	-0.063	-0.090	0.933	-0.400	-0.200	0.851
LTD/TC	-0.403	-0.314	0.719	-0.243	-0.407	0.705	-0.451	-0.626	0.565
STD+LTD/TC	-0.658*	-0.677	0.536	-0.201	-0.242	0.821	-0.600*	-0.628	0.564
Firm size (FC)	0.326	3.600	0.023	-0.681*	3.827	0.019	0.429	5.103	0.007
Sales growth (SG)	-0.293	0.632	0.562	-0.176	0.836	0.450	-0.376	0.703	0.473
R^2	0.880			0.81			0.927		
Adjusted R^2	0.729			0.572			0.837		
F-statistic	5.851			3.410			10.209		
Prob (F-statistic)	0.056[b]			0.129[b]			0.021		
Str Err	0.143			0.143			0.133		
Durbin-Watson	1.218			1.152			1.339		

Authors' computations, 2016

Table 4a (Return on Assets) above presents the regression results between Return on Assets (ROA) and the independents variables. The adjusted R^2 indicates that 88.00% of the OMC's Return on Asset is explained by the variables in the model. The model is statistically significant at 5% confidence level. From Table 4b (Return on Equity) above short term debt to total capital ratio (STD/TC) has a co-efficient of -0.470. This means that there is a negative relationship between STD/TC and ROA. Table 4b above shows the regression results of Return on Equity (ROE) against the independent variables. The adjusted R^2 of 0.729 indicates that 72.9% of the variation in the Return on Equity can be explained by the variation in the independent variables in the model. This result also indicate that there is a negative and statistically significant relationship between total debt to total capital (STD+LTD/TC) and OMC's profitability as measured by ROE. Table 4c (Net Profit Margin**)** above shows the regression results of net profit margin (NPM) against the independent variables. The adjusted R2 of 0.837 indicates that 83.7% of the variation in the net profit margin can be explained by the variation in the independent variables in the model. This result also indicate that there is a negative and statistically significant relationship between total debt to total capital (STD+LTD/TC) and OMC's profitability as measured by NPM.

The results indicate that there is high cost of total debt to total capital as the OMC's use a higher proportion of debt; thereby increasing debt interest payments and as a consequence reduces the Oil Marketing Companies' profit levels. Since ROE is a ratio of pre-tax profit to owners' equity, the lower the profit as a result of interest payment tend to reduce the ROE, this has accounted for the observed relationship. In addition, as the OMC's use more debt they are prone to indirect bankruptcy cost such as loss of sales and goodwill and may find it difficult to attract additional funds. The other control variables in the model namely the firm size, and sales growth showed a negative relationship with Return on Equity (ROE).

7. Conclusion

The results from this study was partly consistent in terms of showing a positive link with NPM and not statistical significant with several studies in the 1970s (Miller, 1977) [36], the 1980s (Yusuf *et al.,* 2015) [13], and early 2000s (Hovakimian *et al,* 2001) [31] where the authors empirically demonstrated that more profitable firms reached to a significant and positive relationship between the NPM and liabilities. Empirically, a study from Friend & Lang (1988) [26] conducted on 948 American companies during 1979 to 1983

revealed that there is a positively significant relationship between capital structure and profitability in these companies.

The second school of thought argue in support of agency cost theory, which pushes that, depending on short term debt and long term debt to finance projects would lead to conflict of interest between management and shareholders. Fama & French (1998) have demonstrated that debt never leads to access to the tax advantages contrary to the M&M theory but rather more borrowing leads to conflict of interest between managers and owners (agency theory) and that it can create a negative relationship between profitability and long term debt ratio in the end. The third school of thought mainly push that debt financing affects firms' profitability negatively. A study by Lara & Mesquita (2003) [60] found a negative relationship between profitability and long-term debt ratio through a study of 70 Brazilian companies during 1995 to 2001.

The results of the regression analysis disclose that short-term debt to total capital, long-term debt to total capital and total debt to total capital as independent variables in comparison with ROA, ROE and NPM as dependent variable concludes that capital structure using leverage ratios has a negative effect on profitability as measured by Return on Assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM) of Oil Marketing Companies listed on the Ghana Stock Exchange. The study therefore concluded that the Agency theory which postulates that leverage lessens against the agency problem cannot be applied among OMC's listed on GSE and thus a firm's capital structure and profitability as measured by ROA, ROE and NPM is contrary to the expectations based on the agency theory.

8. Recommendations for Policy Formulation and Implementation

The impression from the study confirms that capital structure influences firms' profitability although the sample size was too small to make a generalized conclusion. The researcher recommends that managers of oil marketing companies should not spend too much to control cost in their capital structure, but rather, they must try to provide financial support for their projects with obtained earnings and profit. It is highly recommended that Managers work to achieve the optimal capital structure level to maximize the firm‘s performance and try to maintain it as much as possible. The outcome from the review demonstrates that increments in short term debts and long term obligation influences the execution of the oil marketing companies. The suggestion is that managers ought to ensure that they recognize and keep up the ideal capital structure level to augment the organization's profit base.

9. Reference

1. Abdul GK. The Relationship of Capital Structure Decisions with Firm Performance: A Study of the Engineering Sector of Pakistan. International Journal of Accounting and Financial Reporting. 2012; 2(1):2162-3082.
2. Abor J. The effect of capital structure on profitability: an empirical analysis of Listed firms in Ghana. Journal of Risk Finance. 2005; 6:438-447.
3. Abor J. Debt policy and performance of SMEs: evidence from Ghanaian and South Africa firms. Journal of Risk Finance. 2007; 8:364-379.
4. Abor J. Determinants of the capital structure of Ghanaian firms. African Economic Research Consortium. Research paper Nairobi. 2008, 176.
5. Abor J, Biekpe N. What determines the capital structure of listed firms in Ghana? African Finance Journal. 2005; 7(1):37-48.
6. Al-Najjar B, Taylor P. The Relationship Between Capital Structure And Ownership Structure. New evidence from Jordanian Panel Data. 2008; 34:919-933.
7. Adesola WA. Testing Static Trade off Theory against Pecking Order Models of Capital Structure in Nigerian quoted firms. Global Journal of Social Sciences. 2009; 8(1):61-76.
8. Akhtar S, Oliver B. Determinants of Capital Structure for Japanese Multinational and Domestic Corporations. International Review of Finance. 2009; 9(1-2):1-26
9. Aliakbar R, Seyed HSN, Pejman M. The relationship between capital structure decisions with firm performance: Comparison between big and small industries in firms listed at Tehran Stock Exchange. World of Sciences Journal. 2013; 1(9):83-92.
10. Ali-Akbar, Safari, Mehdi. The effects of capital structure and profitability in the listed firms in Tehran Stock Exchange. Journal of Management Perspective. 2009.
11. Amidu M. Determinants of capital structure of banks in Ghana: An empirical approach. Baltic Journal of Management. 2007; 2(1):67-79. http://dx.doi.org/10.1108/17465260710720255
12. Awunyo-Vitor D, Badu J. Capital Structure and Performance of Listed Banks in Ghana. Global Journal Of Human Social Science. 2012; 12(5):1-7.
13. Barclay M, Smith C. The capital structure puzzle: The evidence revisited. Journal of Applied Corporate Finance. 2005, 17(1). http://dx.doi.org/10.1111/j.1745-6622.2005.012_2.x
14. Barton SL, Hill NC, Sundaram S. An empirical test of stakeholder theory predictions of capital structure. Financial Management. 1989; 18(1):36-44.
15. Bayeh, Asnakew Kinde. Impact of Firm Level Factors on Capital Structure: Evidence from Ethiopian Insurance Companies. Global Journal of Management and Business Research Finance. 2013; 13(4):23-29.
16. Brealey RA, Myers SC. Principles of Corporate Finance.7th edition. Publisher: McGraw-Hill. 2003.
17. Brigham EF, Ehrhardt MC. "Financial management: theory andpractice", 1Ith ed., International student ed. edn, South-Western Mason, Ohio. 1999.
18. Brigham EF, Foster E, Houston JF. Fundamental of Financial Management, 10th ed., edn Brush, T. H., Bromiley, P., &Hendrickx, M. 2000, "The free cash flow hypothesis for sales growth and firm performance", Strategic Management Journal. 2004; 21(4):455.
19. Boadi EK, Li Y. An Empirical Analysis of Leverage and Financial Performance of Listed Non-Financial Firms in Ghana. International Journal of Economics and Finance. 2015; 7(9):120-153.
20. Chen L, Zhao XS. Profitability Means Reversion of Leverage Ratios and Capital Structure Choice." Working Paper Series, Michigan State University. 2004.
21. Chen J. Determinants of capital structure of Chinese-listed companies. Journal of Business Research. 2004; 57:1241-51.

22. Chen Shun-Yu, Chen Li-Ju. Capital structure determinants: An empirical study in Taiwan. African Journal of Business Management. 2011; 5(27):10974-10983.
23. Cooper RD, Schindker SP. Business Research Methods. India: Tata McGraw-Hill. 2008.
24. Chandrasekharan CV. Determinants of Capital Structure in the Nigerian Listed Firms. International Journal of Advanced Research in Management and Social Sciences. 2012; 1(1):108-133.
25. Frank MZ, Goyal VK. Testing the Pecking order Theory of Capital Structure. Journal of Financial Economics. 2003; 67:217-248.
26. Friend I, Lang L. An Empircal Test of the Impact of Managerial Self-Interest on Corporate Capital Structure. Journal of Finance. 1988; 43:271-281.
27. Graham JR. How big are the tax benefits of debt? Journal of Finance. 2000; 55:1901-1940.
28. Hall G, Hutchinson P, Michaelas N. Determinants of the Capital Structures of European SMEs, Journal of Business Finance & Accounting. 2004; 31:711-728.
29. Hamada RS. Portfolio Analysis, Market Equilibrium and Corporation Finance. Journal of Finance. 1969.
30. Hatfield GB, Cheng L, Davidson W. The Determination of Optimal Capital Structure: The Effect of Firm and Industry Debt ratios on Market value. Journal of Financial And Strategic Decisions. 1994.
31. Hovakimian A, Opler T, Titman S. The Debt-Equity Choice. The Journal of Financial and Quantitative Analysis. 2001; 36(1):1-24
32. Kayhan A, Titman S. Firm history and their capital structures. Journal of Financial Economics. 2007; 83:1-32.
33. Kaumbuthu AJ. The relationship between capital structure and financial performance: a study of firms listed under industrial and allied sector at the NSE,(MBA Dissertation, university of Nairobi. 2011. Retrieved from http://erepository.uonbi.ac.ke
34. Kyereboah-Coleman A. The impact of capital structure on performance of microfinance institutions. Journal of Risk Finance. 2007; 8:56-71.
35. Mesquita JMC, Lara JE. Capital Structure and Profitability: The Brazilian Case Academy of Business and Administration Sciences Conference, Vancouver. 2002, 11-13.
36. Miller M. Debt and Taxes. Journal of Finance. 1977; 32:261-275.
37. Modigliani F, Miller MH. Corporate income taxes and the cost of capital: A correction. American Economic Review. 1963; 53(3):443-453.
38. Modigliani F, Miller MH. The cost of capital, corporation finance and the theory of Investment. American Economic Review. 1958; 48(3):261-97.
39. Moyer RC, McGuigan JR, Kretlow WJ. Contemporary Financial Management 10th Edition, South-Western College Publication, New York. 2005.
40. Muritala T. An Empirical Analysis of Capital Structure on Firms‘ Performance in Nigeria. International Journal of Advances in Management and Economics. 2012, 115-124.
41. Myers SC. Capital structure. Journal of Perspectives. 2001; 15(2):18-102. http://dx.doi.org/10.1257/jep.15.2.81
42. Myers SC. Financing of corporations, Handbook of the Economics of Finance. 2003; 1:216-253.
43. Myers SC. The capital structure puzzle. Journal of Finance and Economics. 1984; 39:575-592.
44. Myers SC, Majluf NS. Corporate financing and investment decisions when firms have information the investors do not have. Journal of Finance and Economics. 1984; 13:187-221.
45. Nyanamba SO, Nyangweso GN, Omari SM. Factors that Determine the Capital Structure among Micro-Enterprises: A Case Study of Micro-Enterprises in Kisii Town, Kenya. American International Journal of Contemporary Research. 2013; 3(7):139-147.
46. Petersen MA, Rajan RG. The benefits of lending relationships: Evidence from small business. 1994.
47. Taggart RA. A model of corporate financing decisions. J Finance. 1977; 32(5):1467-1484.
48. Titman S, Wessels R. The Determinants of Capital Structure Choice. 1988.
49. Umar M, Tanveer Z, Aslam S, Sajid M. Impact of capital structure on firms' financial performance: Evidence from Pakistan. Research Journal of Finance and Accounting. 2012; 3(9):1-12.
50. Structure of Thai Firms. Pacific-Basin Finance Journal. 7, 371-403.
51. Wippern R. Financial Structure and The Value of the Firm. The Journal of Finance. 21(4), 615-633.
52. Yin RK. Case study research: design and methods. Los Angeles: Sage Publication, Inc. 2009.
53. Yusuf, Aziz N, Al-Attar, Ali M, Al-Shattarat, Husni K. Empirical Evidence on Capital Structure Determinants in Jordan. International Journal of Business and Management. 2015; 10(5):143-152
54. Gatsi JG, Akoto RK. Capital structure & profitability in Ghaniainbanks. Social Science Research Net Work, 2010, 1-69.
55. Kajola M. Corporate Governance and Firm Performance, The case of Nigeria listed firm. European Journal of Economics, Finance and Administrative Sciences. 2008; ISSN: 1450-2887.
56. Salawu RO. An Empirical Analysis of the Capital Structure of Selected Quoted Companies in Nigeria. International Journal of Applied Economics and Finance. 2007; 1(1):16-28.
57. Shehu UH. Determinants of Capital Structure in the Nigerian Listed Insurance Firms. International Journal of China – USA Business Review. 2011; 10(12):81-98.
58. Marfo-Yardom E, Boachie-Mensah FO. Strategic management. Cape Coast: Nyakod Printing Works, 2010.
59. Kouki M, Said HB. Capital Structure Determinants: New Evidence from French Panel Data. International Journal of Business and Management. 2012; 7(1):214-229.
60. Lara JE, Mesquita JM. Capital Structure and Profitability: The Brazilian Case. Academy of Business and Administration Sciences Conference, 2003.
61. Cassar G, Holmes S. Capital structure and financing of SMEs: Australian evidence, Accounting & Finance. 2003; 43(2):123-147.
62. Salteh H, Ghanavati V, Khosroshahi M. Capital Structure and Firm Performance: Evidence from Tehran Stock Exchange, 2009.

63. Akhtar S, Oliver B. Determinants of Capital Structure for Japanese Multinational and Domestic Corporations. International Review of Finance. 2009; 9(1-2):1-26.
64. Singh G. Interrelationship between Capital Structure and Profitability with Special Reference to Manufacturing Industry in India. International Journal of Management and Social Sciences Research. 2013; 2(8):55-61
65. Rajan RG, Zingales L. What do we know about capital structure? Some evidence from international data. Journal of Finance. 1995; 50:21-60. http://dx.doi.org/10.1111/j.1540-6261.1995.tb05184.x
66. Van Horne J, Wachowicz J. Fundamentals of financial management (9th ed.). New Jersey: Prentice Hall, 1995.
67. Saeedi A, Mahmoodi I. Capital Structure and Firm Performance: Evidence from Iranian Companies. International Research Journal of Finance and Economics. 2011; 70:20-29.