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^{1*}Dakane Ibrahim Afey & ²Dr Fredrick Warui

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^{1*}Dakane Ibrahim Afey & ²Dr Fredrick Warui

^{1*}Post Graduate Student, Kenyatta University

²Lecturer, Kenyatta University

Email of the Corresponding Authors: dakaneafey@gmail.com

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Abstract

The Study sought to find out the effect of firm characteristics on financial leverage of Firms listed in Nairobi Securities Exchange, Kenya. This study general objective was to find out, the effect of Firm Characteristics on financial leverage of firms listed in NSE, Kenya. The target Population was all the 65 firms listed in NSE, Kenya. This research was based on the underpinning theories such as trade off theory, pecking order theory as well as Agency theory. The study considered firms that have listed in NSE for the past fifteen years and utilised the secondary data obtained from firms' financial statements. The period under consideration was 2003-2017. The sample size used was only 32 firms who are levered firms. The secondary data obtained from firms listed NSE financial statements was used to calculate the ratios which are relevant. Panel regression analysis, correlation analysis and the panel data obtained was analysed using descriptive statistics. The study found that firm size, profitability, tangibility, liquidity, growth had a negative and significant relationship on financial leverage. The study recommends that top management of listed firms should set up strategies of growth and expansion in sizes for example growth in market segments and shares. The study also recommended that firms listed in NSE should check their tangibility level.

Keywords: *firm size, growth, tangibility, liquidity, profitability, financial leverage, Nairobi Securities exchange*

1.0 Introduction

1.1 Background of the study

Leverage is using company's fixed cost in its Capital structure. It can also be defined as utilization of a third party's sources of funds to finance a firm that might lead to rise in profit after expenses and taxes (Barakat, 2014). In addition financial leverage is all about exactly how firms use equity and debt as much as funding there assets are concerned (Rehman 2013). It also entails variations of shareholders' income in response to change in operating profits which result from financing a corporation's assets with preferences stocks or debt (Aliu, 2010).

Most firms uses financial leverage with the intent of increasing their earnings or returns on fixed cost charges of the funds than the their cost (Enekwe, Agu & Eziedo, 2014). Financial leverage can increases Owners' income on investment since it mostly yield tax advantage on borrowing. Therefore, financial leverage decision is important since firm can make use of combination of Debt and Equity in funding its activities such as general operations or investments (Gill & Mathur, 2011).

According to Myers and Majluf (1984) in choosing sources of financing debt is preferred over equity when it comes to external finance. This is because the management will not issue new shares for undervalued firm, since issuance of new shares is a pointer of firm's overvaluation. According to Modigliani and Miller (1958) as debt increases the value the firm increases because of tax deductibility of fund cost for tax calculation, and the value of unlevered firm will be lower than the value of levered firm.

For trade-off theory firms identify financial structure optimality by matching the benefits that comes with and the cost of additional debt, tax deductibility and increased cash flow (Jensen, 1986); agency cost and bankruptcy test are used to assess borrowing cost; when the cost of debt balances the marginal gain the firm reaches optimal level. For pecking order, the theory is based on the idea that the order of resources is more efficient than its size. Other considerations are overridden by the cost of issuance of new securities; Firms consider internal financing so as to avoid such costs, they only resort to borrowing if this proves to be inadequate and as last option to external sources of financing through equity.

According to Tirole (2006), financing through use of debts takes various forms. Purpose of debt is that, the debtor commit to repay the borrowed funds along-with agreed charges like interest rate as well as mortgage initiation fees. If the borrower fails to pay as agreed, the lender can initiate collection of proceedings. This procedure may not be very comfortable for the borrower, who could lose the business and any collateral that is non-business that was used to pledge the loan. Long term debt takes between one and five years as its payback period but this depends the agreement entered, these loans are usually secured with collateral assets and guaranteed by the entrepreneurs. Terms and conditions on long term debt differs to great extent depending on the institutions financial status, Age and policies (Bichsel & Blum, 2005). Short-loan is form of debt, where by the maturity period is one year or less and it is categorized under current liability when recording in the statement of the financial position of the firm (Scherr & Hulburt, 2001).

Financing through debt comes with both an advantage and a disadvantage for its strategic investment and corporation's growth (O'Brien, & David, 2010). As per Fama and French (2002), importance of debt use includes tax deduction of interest and reduced cash flows problems, the disadvantage of debt financing include agency conflict caused that may arise between

shareholders and debtholders and possible bankruptcy cost. Hence, in reaching debt decisions, firm management try to make a balance between benefits of tax shield of debt financing and financial distress cost that comes from the possible risk of bankruptcy (Kraus & Litzenberger, 1973) and agency cost (Jensen & Meckling, 1976).

1.2 Statement of the Problem

As companies expand and as a result of increasing operations accompanied costs, this calls for more funding. Financing a business through debt obligation is considered low-cost than using equity since it has tax benefits (Pandey, 2010). Some of the related reasons include the benefits of a tax shield related to debt financing, and information costs associated with debt financing are much lower than those associated with the issuance of new shares. The theoretical relationship between profitability and leverage and the company's risk is a positive linear dependence in companies with fairly high profits, usually heavily leveraged and considered to be risky company (Yoon & Jang, 2005).

According to Abdullahi (2011) firm taking a levered position should obtain higher returns for the perceived increase in the variability of its common stock returns or financial risk. Use of leverage helps Firms or institutions to improve on their financial performance since they have the ability to maintain profit within the company and increase the return on equity for current business owners and assist in saving tax (Dang, 2011). High leverage can lead to clashes between managers and shareholders due to the choice of equity investments, debts or hybrid. When the leverage is relatively large to some extent, It leads to a rise in debt and an increase in debt of cost, as well as potential increase in the bankruptcy cost of or financial crisis due to disputes between shareholders and bondholders (Nyameyo, 2014).

However, most NSE firms have been facing debt problems. Kenya Airways is among the firms with the largest debt problem in companies traded in the Nairobi Securities Exchange, due to lenders, including banks are Sh20.80 billions compared to its entire asset balance of Sh17.00 billions. It resulted wiped shareholders net worth, making an adverse Sh 23.00 per-share or aggregate of Sh 33.80 billions. In the past one year alone the stock declined fifty five percent, which is currently trading at Sh 4.4 apiece (NSE, 2016).

Additionally Uchumi supermarket investors, which in 2014 paid 0.03 shares per share as dividend, are going to transfer controlling stake in Uchumi to a strategic investor in exchange for a capital injection of Sh5 billion shares in the form of shares or convertible debt. The retail trader also took loans to finance its expansion within the country and in a region that in observation appears to have been imprudent at best. ARM Cement shareholders are expected to give up a significant share for the institutional investor, which is expected to provide Sh12.7 billion for preferred shares to be transferred to equity within seven years. ARM Cement Company plans to use new cash to pay off debts, which have reduced its profits. Venture Company, TransCentury also faces heavy financial burden, forcing shareholders to look at net claims from their creditors. Shareholders also face major claims for future profits if the maturity of Eurobonds due on March 25 is increased. In June 2011, the company issued Sh8 billion bonds, but the investment in the proceeds did not bear fruit, as a result of which it was in an unstable position to repay the debt which approximately five times of its current market value of Sh1.60 billion (Mwangi, 2017).

1.3 Research Objectives

- i. To determine the effect of firm size on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya.
- ii. To determine the effect of profitability on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya.
- iii. To determine the effect of tangibility on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya.
- iv. To determine the effect of liquidity on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya.
- v. To determine the effect of growth on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya.

2.0 Literature Review

2.1 Theoretical Framework

2.1.1 Pecking Order Theory

This theory was proposed by Myers (1984). This theory relies on the notion that firm managers possess more fact or details concerning on their organization compared to investment specialist. The information difference is alluded to be asymmetrical of information. Different things being equal, in light of information asymmetry, company management will raise funds through debt when they are certain of their company's future prospects. On the hand when the managers sees the future is uncertain then, they will issue equity and commitment to pay measure of premium and principal to debt holders shows that, the firm expect steady cash flows (Myers, 2001).

Frank and Goyal (2003) argue that a value of equity issue would show that the present share price is over-valued. In this case, the manner wherein managers raise capital shows signs of their faith in their company's prospect to potential investors. Similarly, this suggests firms dependably to utilize sources of finance that are internal when accessible, and utilize debt over new issue of equity when outside financing is required. Myers has named it as pecking order theory since there is was no distinct equity-debt target and the there being existence of internal and external as the two sorts of equity, one being at the highest point of pecking order theory and the other at the base. Borrowing is less expensive compared to expenses that comes with internal equity financing as well as external equity financing because of deductible interest. Using internal equity financing is less expensive and less demanding compared to external financing through same equity, in light of the fact that no transactional expenses and no taxes are paid on retained earnings.

Myers (2001) argue that, due to preference of management for internal sources of financing, Firms with less volume of internal sources of financing uses high leverage compared to firms with high volume of internal financing that opt to utilize less leverage regularly. As of this case, there must be inverse connection between the resources available and level of debt (Haris & Raviv, 2003). The debt of cost is another factor that should be taken into consideration when breaking down the debt level of a firm. When considering this factor, the interest rate on the debt securities should not be taken into consideration, but the total amount of the financial expenses held by the company in relation to the total amount of the said debt is the firm's fixed value. Subsequently, this factor shows that the negative aspects of the debt are not out of ordinary

(Baskin, 2002).The theory displays firm Characteristics to have a significant impact on financial leverage.

2.1.2 The Agency Theory

Agency cost in the capital structure states that, an ideal structure of capital will be reached by limiting cost emerging from clashes between the management of the company and shareholders. According to Jensen and Meckling (1976) Agency cost assumes major aspect in financing decisions due to those controversy that might exist amongst investors & Debt holders. In the event that companies are moving to problems related financial distress, investors might urge management to take actions that will seize funds from debt holders to equity holders. Complex obligation holders will that point require higher return to their investments if there is potential transfer of wealth.

According to Harris and Raviv (1991), managers want to stay in their positions. They want to reduce the likelihood of separation. As this increases in line with the changes in corporate control, management can resist acquisition regardless of impact on shareholder value. According to operational decisions, managers and shareholders can have different preferences: Harris and Ravev (1991) noted that as a rule managers want to continue working with the company, even if liquidation is preferred by Shareholders.

According to Jensen and Meckling (1976) Commitments with no intrigue instalments, principal debt and related interest payment may reduce the Agency conflict amongst managers and debt owners. If the managements fails to make interest payments when they are due, then debt owners have legal redress, therefore managers are worried about the potential loss of jobs which make them probably run the company effectively and efficiently in order to meet the payment of interest while bringing their behaviours next shareholders wealth maximization objective. This will automatically reduce the agency conflict that will in turn reduce the agency cost. The theory presents Firm characteristics to have a significant effect on financial leverage.

2.2. Empirical Literature Review

Marete (2015) conducted research to find out the relationship between firm size and financial leverage of listed firms at Nairobi Securities exchange in Kenya. Descriptive statistics were computed for the listed companies and the main characteristics of the study variables. The findings revealed that there was statistically significant relationship between the firm size and financial leverage, hence significant positive relationship between them (Firm size and Financial Leverage). Same study confirmed that, there is a negative significant relationship between return on investment (ROA) and financial leverage. Also it was established that, there was negative connections between sales volume and financial leverage.

Adongo (2012) conducted the study on the impact of financial leverage on the profitability and risk of Nairobi securities exchange listed firms. The study used casual research model. Based on correlation and Regression analysis, the results of the first model show that 14.2% of the profit margins are explained by economic leverage and there is a positive correlation. This means that for every 1% of commercial growth in financial leverage, profitability is down by 14.2% and vice versa. The second conclusion is that the risk changes are due to leverage and positive correlation, which confirmed 23.5% variation risk. This means that as financial leverage will increase through 1%, threat will increase by 23.5%. The 0.33 locating indicated a three percent

variant of returns adjusted by way of danger being defined by financial leverage and there existed a poor courting. As financial threat increased by using 1 percent, returns adjusted with the aid of chance decreases by means of three% and vice versa. This indicated an insignificant relationship among returns adjusted by using risk and economic leverage.

Anjum and Sonia (2008) conducted a Study on the effect of size of the firm, tangibility of assets and retained earnings: Pakistani automotive industry data was used as evidence. Data from 22 companies from an analysis of the financial statements published by the State bank of Pakistan (SBP). The relationship between the underlying variables was determined by use of multiple regression analysis. Analysed data show that the size of the firm and tangibility of assets have significant impact on leverage. In addition, it also mentioned there exist a negative relationship between the individual variables. It is stated that retained earnings have no significant effect on leverage.

Suhaila (2014) conducted a study on how financial performance of commercial State Corporation in Kenyan tourism industry is effected by liquidity and leverage. Research design used in the study was descriptive. Multiple regressions and Correlation were used in order to find out liquidity and leverage on financial performance measured with profitabilities. Research outcomes that, the profitabilities of profit making State Corporations within the tourism sector in Kenya are negatively affected by increases in the liquidity gaps and leverages. A positive relationship exists between the commercial state corporations in the tourism industry liquidity and profitability. The research Outcomes displays the significant impact of all liquidity and leverage factors on financial performance in Kenya's tourism industry. An increase in liquidity ratio by these state corporations will help them to increase their profitability.

Mutai and Administration (2014) conducted a study on to find out whether is correlation between Asset growth and financial leverage of Listed Companies in Nairobi Securities Exchange. Descriptive research was used by the study. Analysis of regression outcomes in addition suggest a superb but insignificant relationship among financial leverage and asset increase of firms indexed within the NSE. The economic leverage coefficient of +0.002 within the hooked up regression model shows the high-quality dating among the two variables. The suggested p-price of 0.998 is greater than the critical fee of zero.05 therefore demonstrating the insignificance of the connection among monetary leverage and asset growth. These findings can probably be explained via the indirect courting among monetary leverage and asset increase and as such there are other factors that have a right away relationship with asset boom of corporations.

3.1 Research Methodology

The current study took an explanatory research design. This study targeted all the 65 firms listed on the Nairobi Securities Exchange since 2003. The 65 firms were targeted because they have consistently been listed at NSE since 2003 without missing any year. The study did not consider the firms that are not listed at any particular year between 2003 and 2017. Hence, the only firms that have been consistently listed were 65 which made up the study target population. NSE listed companies that did not utilize debt finance were excluded from the sample because their leverage was zero. The study conducted purposive sampling to select firms that utilized debt finance. There are 32 firms that utilized debt finance and thus the sample was 32 firms listed in NSE. During the data collection, document review guide was used by the researcher to extract

secondary data and compile so as to analyse the financial statements. Secondary data included panel data consisting of Cross sections and time series. The times series data were years between 2003 and 2017 while cross sectional data consisted of companies. Data on Firm size, profitability, tangibility, liquidity and growth was extracted from the published annual financial reports of the companies listed in NSE covering the years 2003-2017. Descriptive statistics, correlation analysis and panel regression were used to analyze the panel data obtained and STATA software was used to support the panel methodology.

4.0 Research Findings and Discussions

4.1 Descriptive Results

Descriptive results were presented in Table 1 below.

Table 1: Descriptive Results

	Obs	Minimum	Maximum	Mean	Std. Deviation
Liquidity	480	0.0436	2.4237	1.871703	0.494152
Tangibility	480	0.0446	2.6733	1.276588	0.958368
Profitability	480	-0.3569	0.5648	0.094711	0.128925
Growth	480	-0.8678	1.003	0.103287	0.214069
Firm Size	480	0.292	9.3378	5.691806	2.159631
Leverage	480	0.127	1.6283	0.478383	0.18522

Source; Author (2019)

The mean of liquidity of NSE firms running between 2003 and 2017 is 1.071703 with standard deviation of 1.871703. It's minimum and maximum was 0.0436 and 2.4237 respectively. This implied that the liquidity was not varied from the mean. In addition the mean of tangibility was 1.276588 with standard deviation of 0.958368. It's minimum and maximum was 0.0446 and 2.6733 respectively. This implied that the tangibility was not varied from the mean. The results further revealed that the mean of profitability was 0.094711 with standard deviation of 0.214069. It's minimum and maximum was -0.3569 and 0.5648 respectively. This implied that the profitability was not varied from the mean. The results further revealed that the mean of Growth was 0.103287 with standard deviation of 0.214069. It's minimum and maximum was -0.8678 and 1.003 respectively. This implied that the growth was not varied from the mean. The results further revealed that the mean of firm size was 5.691806 with standard deviation of 2.159631. It's minimum and maximum was 0.292 and 9.3378 respectively. This implied that the firm size was varied from the mean. The results also showed that the mean of leverage was 0.478383 with standard deviation of 0.18522. It's minimum and maximum was 0.127 and 1.6283 respectively. This implied that the leverage was not varied from the mean.

4.2 Hausman Test

In order to determine whether the fixed or random effects model is appropriate Hausman test was used. The Hausman test fundamentally tested whether the unique errors (ui) are correlated with the regressors.

The results in table 2 below illustrate the results of the Hausman test.

Table 2: Hausman Results

	Coef.	Std.	Err.	z	P> z	[95% Conf.Interval]
Liquidity	0.00096	0.016023	0.06	0.952	-0.03045	0.032365
Tangibility	-0.00521	0.007539	-0.69	0.49	-0.01998	0.009569
Roa	-0.17116	0.056748	-3.02	0.003	-0.28238	-0.05993
Growth	0.03378	0.028347	1.19	0.233	-0.02178	0.089339
Firmsize	0.005703	0.003471	1.64	0.1	-0.0011	0.012506
_cons	0.462337	0.03393	13.63	0	0.395835	0.528839
P = 0.0042						
Waldchi2(5)=17.21						
sigma_u	0.120473					
sigma_e	0.110346					

Source; Author (2019)

A resultant p value of 0.000 was smaller than the conventional p value of 0.05 leading to the rejection of the null hypothesis that the unique errors (ui) are not correlated with the regressors and thus the fixed effects model is more appropriate.

4.3 Correlation Analysis

Table 3 revealed the correlation results.

Table 3: Correlation Analysis

	Leverage	Liquidity	Tangibility	ROA	GROWTH	Firm Size
Leverage	1					
Liquidity	-0.0031	1				
tangibility	-0.0272	-0.1761	1			
Roa	-0.2501	-0.0882	0.4639	1		
Growth	-0.0342	0.0596	0.0543	0.3752	1	
Firmsize	-0.169	0.2169	0.0075	-0.071	0.0873	1

Source; Author (2019)

The results revealed that there was negative association between liquidity and leverage ($r = 0.0031$). These results were inconsistent with that of Owino (2011) whose study did not show a significant correlation between liquidity and leverage. In addition there was a negative association between tangibility and leverage ($r = -0.0272$). These findings agreed with that of Anjum and Sonia (2008) who found a negative relationship between tangibility and leverage. The results further revealed that there was a negative association between ROA and leverage ($r = -0.2501$). This findings agreed with that of Adongo (2012) who found that profitability has a significant relationship with financial leverage. The results further revealed that there was a negative association between growth and leverage ($r = -0.0342$). These findings agreed with that of Mutai and Administration (2014) who found a negative correlation between growth and financial leverage. The results further revealed that there was a negative association between

firm size and leverage ($r = -0.169$). These findings agreed with that of Marete (2015) who found that there was statistically significant relationship between the firm size and financial leverage.

4.4 Regression Results

Table 4 presents the regression results

Table 4: Regression Results

Leverage	Coef.	Std. Err	Z	P	[95% Conf.Interval]
Liquidity	-0.001	0.016	-0.060	0.030	-0.032
Roa	-0.179	0.055	-3.280	0.002	-0.072
Growth	-0.035	0.028	-1.230	0.020	-0.090
Firm size	-0.006	0.003	-1.710	0.001	-0.013
Tangibility	-0.02	0.01	-2.085	0.002	-0.014
_cons	0.455	0.034	13.580	0.390	0.521

Source; Author (2019)

The results revealed that liquidity had a negative and significant relationship with leverage ($\beta = -0.001$, $p = 0.030$). These results were inconsistent with that of Owino (2011) whose study did not show a significant correlation between liquidity and leverage. The results further showed that profitability had a negative and significant relationship with leverage ($\beta = -0.179$, $p = 0.002$). These findings agreed with that of Adongo (2012) who found that profitability has a significant relationship with financial leverage. In addition, growth had a negative and significant relationship with leverage ($\beta = -0.035$, $p = 0.020$). These findings agreed with that of Mutai and Administration (2014) who found a negative relationship between growth and financial leverage. The results further showed that firm size had a negative and significant relationship with leverage ($\beta = -0.006$, $p = 0.001$). These findings agreed with that of Marete (2015) who found that there was statistically significant relationship between the firm size and financial leverage. The results further showed that tangibility had a negative and significant relationship with leverage ($\beta = -0.02$, $p = 0.002$). These findings agreed with that of Anjum and Sonia (2008) who found a negative relationship between tangibility and leverage.

$$Y = 0.455 - 0.001X_1 - 0.179X_2 - 0.035X_3 - 0.006X_4 - 0.02X_5$$

Where Y is leverage, X_1 is liquidity, X_2 is ROA, X_3 is growth, X_4 is firm size while X_5 is

Tangibility

5.1 Summary of the Findings

The first objective was to determine the effect of firm size on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya. The study found that there was a consistent increase in firm size across the 15 years of study. In addition, the study findings showed that firm size lead to a negative effect on financial leverage of companies listed on the Nairobi Securities exchange, Kenya.

The second objective was to determine the effect of profitability on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya. Results showed that there was an inconsistent trend of profitability of companies listed on the Nairobi Securities exchange, Kenya. Results also showed that there was a negative association between profitability and leverage.

The third objective was to determine the effect of tangibility on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya. Results showed that tangibility of companies listed on the Nairobi Securities exchange, Kenya. In addition, results revealed that that there was a negative association between tangibility and leverage.

The third objective was to determine the effect of liquidity on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya. Results revealed that there was an irregular trend of current ratio of the companies listed in NSE. In addition, results revealed that liquidity had a negative and significant relationship with leverage.

The fourth objective was to determine the effect of growth on the financial leverage of companies listed on the Nairobi Securities exchange, Kenya. The study found that there was an inconsistent trend of growth of companies listed on the Nairobi Securities exchange, Kenya. In addition, there was a negative association between growth and leverage.

6.1 Conclusions

The study concluded that firm size and financial leverage had a negative and significant relationship. Small firms had a higher financial leverage as compared to big firms.

The study also concluded that there was a negative and significant relationship between profitability and financial leverage. Firms that made higher profits had lower financial leverage as compared to big firms.

The study also concluded that there was a negative and significant relationship between tangibility and financial leverage. Firms that made higher noncurrent assets had lower financial leverage as compared to firms with small noncurrent assets.

The study also concluded that there was a negative and significant relationship between liquidity and financial leverage. Firms with high current ration had lower financial leverage.

The study also concluded that there was a negative and significant relationship between growth and financial leverage. Firms with high total asset growth rate have low financial leverage.

7.1 Recommendations

The study recommends that top management of listed firms should set up strategies of growth and expansion in sizes for example growth in market segments and shares. One way of achieving growth may be through mergers and acquisition where a small firm in a small industry can decide to merge with another larger firm resulting into one large firm that commands the entire large market. This will help to boost the performance of the firms.

The study recommended that firms listed in NSE should check their tangibility level. In addition listed firms and all companies generally in Kenya should keep sufficient amount of fixed assets in relation to current assets which shall increase their accessibility to capital from financial and other lending institutions. The study also recommends that to facilitate favorable performance of these NSE firms, strategies to facilitate increased liquidity of NSE firms should be adopted by the firms for their efficiency in financial operations.

The study further recommends that the management of the firms listed in NSE firms should ensure they hold adequate level of financial leverage to ensure that they do not affect other functions of the firm.

8.1 References

- Adongo, J. (2012). The effect of financial leverage on profitability and risk of firms listed at the Nairobi Securities Exchange. *Unpublished MBA Research Project, University of Nairobi.*
- Aliu, N. O. (2010). *Effect of Capital Structure on the Performance of Quoted Manufacturing Firms in Nigeria.* Unpublished Thesis. Ahmadu Bello University
- Barakat, A. (2014). The impact of financial structure, financial leverage and profitability on industrial companies shares value (Applied Study on a Sample of Saudi Industrial Companies). *Research Journal of Finance and Accounting*, 5(1), 55 – 66
- Bichsel G. & Blum N. (2005), Capital structure and financing of SMEs: Australian evidence. *Accounting and Finance*, 43,123-47
- Enekwe, C. I., Agu, C. I. & Eziedo, K. N. (2014). The Effect of Financial Leverage on Financial Performance: Evidence of Quoted Pharmaceutical Companies in Nigeria. *IOSR Journal of Economics and Finance*, 5(3), 17-25.
- Fama, E. F. & French, K. R. (2002). Testing trade off and pecking order predictions about dividends and debt, *Review of financial studies*, 15 (1), 1-33.
- Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67(2), 217–248.
- Gill, A. & Mathur, N. (2011). Factors that Influence Financial Leverage of Canadian Firms. *Journal of Applied Finance & Banking*, 1(2), 19-37
- Harris, M., & Raviv, A. (1991). Capital Structure and the Informational Role of Debt, *Journal of Finance*, 45, 321-49.
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, *American Economic Review*, 2, 323-29.
- Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure, *Journal of financial economics*, 3 (4), pp. 305-360.
- Marete, D. (2015). *The relationship between firm size and financial leverage of firms listed at Nairobi Securities Exchange* (doctoral dissertation, school of business, University of Nairobi).
- Mohamed, I. B. (2016). *Effect of financial leverage on financial performance of non-financial firms listed at the Nairobi Securities Exchange* (Doctoral dissertation, school of business, university of Nairobi).
- Mutai, B., & Administration, B. (2014). The relationship between financial leverage and asset growth of firms listed at the Nairobi Securities Exchange.
- Myers, S. C. (2001). Capital Structure. *Journal of Economics Perspective*, 15 (2), 81-102.
- 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, PG. 187-221.
- Rehman, B. S. (2013). Relationship between Financial Leverage and Financial Performance: Empirical Evidence of Listed Sugar Companies of Pakistan. *Global Journal of Management and Business Research Finance*, 13 (8), 1-9
- Scherr, F. C. & Hulburt H. M. (2001). The Debt Maturity Structure of Small Firms. *Financial Management*, 2001, 85–111.
- Suhaila, A. M. (2014). The effect of liquidity and leverage on financial performance of commercial state corporation sin the tourism industry in Kenya. *Unpublished MBA Project.*