



EFFECTS OF DEBT FINANCING ON BUSINESSES FIRMS FINANCIAL PERFORMANCE

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Abstract

Debt financing has been used as an instrument of filling the budget deficits both in the private and public sector. Over the years it has gained popularity and it is now a common phenomenon to find in the financial reports of most companies volumes of short-term and long term debt. Explaining the effects of debt financing in the financial performance will help answer some important corporate finance questions on how to (i) establish the relationship between debt ratio and financial performance of selected firms in Kenya, (ii) determine the effect of short term debt ratio financial performance of a firm and (iii) investigate the influence of long term debt ratio on a firm's financial performance. This study therefore investigated the impact of debt financing on financial performance of the firm over the short-term and long-term. For the purpose of this study a population 60 firms with debt in their capital structure in Nairobi Security exchange were evaluated. Three independent variables were examined; they include Short term debt ratio (STDR) and long debt term ratio (LTDR) in determining financial performance of the firms in form of return of assets (ROA), liquidity ratio and profit margin ratio as dependent. This study utilized secondary data from audited financial report of these firms between periods of 2009-2012. From the study it emerged that the regression analysis coefficient on the debt effects on return on asset suggest that a unit increase of short term debt reduces return on asset by. However the finding relating to profit margin ratio suggests a different outcome. A unit increase in short term debt however will reduce the profit margin ratio by 1.054. The liquidity ratio response to a unit increase in short term debt ratio leads to a decrease of liquidity ration by 0.838. From this study it is evident that at 95% confidence level, the variables produce statistically significant values (high t-values, $p < 0.1$.) hence when the variables are combined hence, they can be relied on to explain debt financing of the firms listed at the Nairobi securities

exchange. From the study findings it would be safe to conclude that debt ratio had an inverse relationship with return on asset.

Keywords: debit financing, business firms and financial performance

Background to the Study

Debt financing has become a common phenomenon in the corporate world across the globe. It provides a mechanism of filling financing deficits of business firms that lack enough internal resources to finance their investment and operating activities. Financing firm's operations is an important decision that involves a combination of debt and equity which constitute the capital structure (pander 2010). In some case a firm may use preference shares. Capital structure decision directly impacts the financial performance of a firm as they influences major financial variables such returns, risk and the market value of shares. While Myers (2001) agrees that there is no universal theory on the debt to equity choice. He however notes that there are some theories that attempt to explain the amount of debt in capital structure. He cites the tradeoff theory which advocates for debt uptake by seeking debt levels that balance the tax advantages of against the costs of possible financial distress .The pecking order theory asserts that firms will rather borrow than issue equity when internal cash is not sufficient to fund capital expenditure (Myers, 2001). This is because debt financing has a non dilutive effect on the ownership on the part of the shareholders

Corporate finance studies have incorporated capital structure concept that tries to describe the proportion of long term debt and equity a firm should hold and the impact they have on financial performance. Some of the questions this study intends to answer are; does the financing mix affect the financial performance of a firm? What effect does increase in debt ratio have on the total value of the firm and its cost of capital? What effect does debt financing has on the firm's earning capacity? A number of theoretical and empirical studies have conducted tried to answer these questions. Pioneered by Modligan and Miller 1958 studies who came up with the theory of capital structure. They argued that the financing mix chosen by firm is irrelevant to the financial performance of firm, based on the assumptions of a perfect market and absence of taxes, transaction costs and bankruptcy costs. However, this theory of debt irrelevancy was hardly realistic thus necessitating Modligan and Miller (1963) to relax no tax assumption and develop a theory about benefits of debt.

Majorly there are two main benefits of debt to a firm. The first one is tax shield, interest payment is normally deductible which has a reducing effect on the cash flow problem (Famed and French, 2002), and hence the debt can increase the value of the firm. This view is supported by van Horne (2002). According to him debt has an advantage in the corporate taxes as interest is deductible as an expense. Graham (1996) states that due to tax benefit of debt, a firm with higher marginal tax rates are likely to issue more debt Miller (2012) finds that balancing bankruptcy cost against tax gains result on an optimal capital structure .A debt issue is therefore considered as an indicator that managers have confidence on the firm's ability to repay its debt. This is because a firm desires a higher debt levels when it expects higher cash flows. The second is that debt inculcates discipline to managers (Jensen 1986). This is because manager are expected to

give the debt providers detailed investment information to aid in the monitoring process Frank & Goyal, 2005. In free cash flow scenarios management invests in projects to pay dividends, in the event a firm is not committed to a fixed payment such as interest costs, managers will be tempted to have incentives to waste excess cash. For this reason shareholder acquire debt to discipline management.

The relationship between debt financing and financial performance is one that has received considerable attention in the finance literature with conflicting views. A number of studies done have shown that a positive relationship between debts uses and the firm's financial performance exist. Similarly, other studies show that corporate debt impacts negatively the firm's financial performance.

Studies by Baker (1973) reveal that large amount of debt implies large amount of risk thus raises the industry profit. This is in line with the portfolios theory that pegs higher returns of security to higher risk levels. Rose (1977) shows a relationship of a firm's financial structure and its perceived image with the other stake holders. He argues that a firm with a debt in its capital structure sends a strong signal to the market about its intentions to continue with its operations. In their study of leveraged buyouts, Roden and Lewellen (1995) established a significantly positive relation between profitability and total debt as a percentage of the total buyout-financing package. Rajin (2012) studies the influence of financial leverage on shareholders return and market capitalization based on evidence from telecommunication sector companies in India. His findings show the existence of a positive relationship between financial leverage and shareholders return. In another study by Nasrollah (2013) to investigate the effect of financial leverage on investment diversification and income earning engagement reveals leverage has an influence on income increasing engagement.

Statement of the problem

Debt financing comprises of main sources of external funding for most business firms. It provides a mechanism of filling financing deficits for firms that have insufficient financial resources. Over the years it has gained prominence as result pushing up the level of its usage and uptake. For instance in Kenya, According to Mayer 1988, debt financing by corporate entity is estimated to account for 90% of external financing. Debt financing has over the years been utilized to fund capital expenditure and in the recent years more options and packages to finance general operations have been developed. This has resulted to an increased uptake of debt facilities. The therefore seeks to establish the effect of debt financing on the financial performance of these firms over the short and long-term.

Financing decisions by a firm comprises an important. While a firm has an option of choosing between equity and debt financing, always firms are faced by a problem of deciding which option to choose. With debt financing gaining wide spread use by most firms, it is crucial to establish its effects on the financial performance of firms utilizing it. Most firms have viewed debt financing as a strategy of increasing returns on investments by generating more returns from borrowed funds. Of concern, is establishing whether firms stand to gain from debt financing and how they decide the proportion of debt that will constitute their capital structure across different industries.

LITERATURE REVIEW

The study was supported by the following theories;

The Trade-Off Theory

The tradeoff theory was initiated by Modigliani and Miller 1958 and assumes that there are benefits of debt within a capital structure up until the optimal capital structure is reached. The theory recognizes the tax benefit from interest payments. Studies suggest, however, that most companies have less leverage than this theory would suggest is optimal.

Pecking Order Theory

Myers and Majluf 1984 developed Pecking Order Theory (POT) upon the asymmetry of information between internal stakeholders (owners and managers) and external providers of the firm. Business leaders adopt a financial policy, which aims at minimizing the costs associated with asymmetric information, especially adverse selection, and prefer internal financing to external financing.

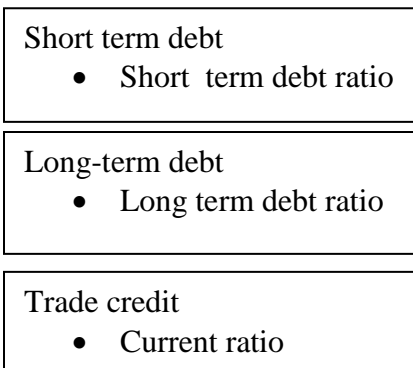
Agency Theory

This theory brings to focus the cost arising from conflict of interest between the owners, the debt holders and the management. According to Frank & Goyal, 2005, it is expected that the debt providers to be served with detailed investment information to aid in the monitoring process. However, management is opposed to the screening idea and opts to explore Alternative Avenue to finance their investments. This theory favors firm's uptake of high debt financing levels at it encourages management to work hard to safeguard the shareholders interests.

Conceptual frame work

Based on the study's objectives, a conceptual framework has been developed as indicated in the figure below.

Independent variables



Dependent variables

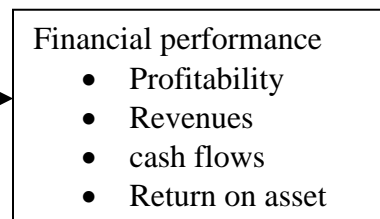


Figure 1. Conceptual frame work

Research Design

This was a case study focusing on debt financed enterprise in Nairobi security exchange. A case study research design is suitable for extensive research, rapid data collection, and ability to understand the population. In addition results from this study can be extrapolated to represent the entire population

The study population was composed of firms 60 listed Nairobi security exchanges whose capital structure comprises of debts financing as reflected in their financial.

This study employed purposive sampling technique because only those firms with short term loans and long term loans in their financial reports for the last five consecutive years from 2009-2012 will be selected from the sample of 60 firms.

This study utilized secondary data contained in the financial reports of the selected firms. The research examined audited financial report of the firms in order to obtain the viable information for this study. Secondary data is the data that have been already collected by other researchers and readily available from other sources.

The equation for the regression model used was expressed as:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where Y = profitability, Return on asset

$\alpha, \beta_1, \beta_2, \beta_3$ = Coefficients of the model

X_1 - short term debt

X_2 - long term debt

X_3 - trade credit

ϵ = error term

Data analysis

The descriptive statistics gives discussion of the characteristics of business firms that utilized debt financing during the period 2009-2012. Descriptive statistics provides information of means and standard deviations scores relating to each of the variables used in the analysis. Means and standard deviations illustrate the movement pattern for all variables under study. (Profit margin ratio, liquidity ratio, returns on asset, long term debt ratio, and short term debt ratio).

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Profit Margin Ratio	15	0.24	0.84	0.66	0.75691
Return On Asset	15	0.21	.75	0.5	0.67587
Long Term Debt Ratio	15	.0	2.65	0.42	0.46485
Short Term Debt Ratio	15	0.02	0.97	0.48	0.30825
Trade credit	15	0	3.76	0.53	0.38675

Descriptive statistic presented in Table 1 gives a summary of the mean and standard deviations of dependent and independent variables for firms under review.

Correlation Analysis

The Pearson's correlation was used to establish the nature and strength of a correlation relationship existing between variables (profit margin ratio, liquidity ratio, and return on asset, long term debt ratio, and short term debt ratio). Pearson Correlation (r), is the commonly used bivariate correlation technique, that is used to measure the association between two quantitative variables without distinction between the independent and dependent variables (For instance; it can be employed to establishing the relationship between profit margin ratio, liquidity ratio, return on asset, long term debt ratio, short term debt ratio). Table 2 provides a Correlation Statistics analysis for key variables use in this study (Performance Profit margin ratio Liquidity ratio Return, long term debt, short term debt).

Table 2: Correlation Analysis

	Performance	Profit Margin Ratio	Liquidity Ratio	Return On Asset	Long Term Debt Ratio	Short Term Debt Ratio	Trade credit
Performance	1						
	0	1					
Profit Margin Ratio	0.232**	0					
	0.004						
Liquidity Ratio	0.395**	0.329**	1				
	0	0	0				
Return On Asset	0.210**	0.281**	0.038	1			
	0.01	0	0.647	0			
Long Term Debt Ratio	0.171*	0.061	-0.102	-0.033	1		
	0.007	0.46	0.006	0.691	0		
		-		-			
Short Term Debt Ratio	0.536**	.478**	-.373**	.351**	-0.123	1	
	0.006	0.058	0.067	0.036	0.267	0.023	1
Trade credit	0.309**	0.278**	-0.126**	0.143**	0.287**	0.567**	0
	0	0	0	0	0	0	

**Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Results from table 2 reveal the existence of a weak positive relationship between liquidity and profit margin ratio. Pearson correlation value for this relationship 0.329 implies the existence of a significant relationship using a correlation significant level of 0.01 (Since the p value 0.000 is less than 0.01). These two variables are used to measures the financial performance of a firm, as such the study shows the movement of one variable affect the outcome of the other variable in the same direction. Further, the study shows that the return on asset and profit margin ratio are positively correlated although the relationship existing between them is weak 0.281. At a correlation level of .01 the relationship is considered to be significant.

Regression Analysis

Regression analysis model is used to ascertain the causal effect of independent variables (long term debt ratio and short term debt ratio) on dependent variables (profit margin ratio, liquidity ratio and return on asset). To establish the effects, the study subject data of the underlying variables of interest into regression analysis to predict the quantitative effect of the causal variables upon the variable that they influence (dependent variables).

Regression analysis report for profit margin ratio as the dependent variable

Table 3: Model Summary for profit margin ratio as the dependent variable

Model Summary									
						Change Statistics			
Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
Summary	.589a	0.347	0.305	0.53238	0.347	8.156	3	46	0

Predictor variable (constant) long term debt, short term debt, Trade credit

From the model summary in table 3, R squared which is the coefficient of determination explains the effects of short term and long-term debt financing on the profit margin ratio. Based on the R squared score of 0.347, it is evident that a weak positive relationship exists. This is significant at an adjusted r squared value of 0.35. The model also reveals that 4.5% of the profit margin ratio on the listed companies in the Nairobi stock exchange can be explained by the predictor variables. This means that at a 95% confidence level the variables produce statically significant values when combined together thus they can be relied upon to explain the financial performance of listed firms. The model show a standard error estimate of 0.53238 exists; this implies that 34 % variations of the profit margin ratio are explained by the predictor variables

Table 4: ANOVA for profit margin ratio as the dependent variable

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6.935	3	2.312	8.156	.003b
Residual	13.038	46	0.283		
Total	19.973	49			

Dependent variable; profit margin ratio

Predictor variables: (constant) long term debt, short term debt, trade credit

This means that at a 95% confidence level the variables produce statically significant values when combined together thus they can be relied upon to explain the financial performance of listed firms. The model show a standard error estimate of 0.53238 exists; this implies that 34 % variations of the profit margin ratio are explained by the predictor variables. The variance analysis (ANOVA) is a procedure designed to establish the existence of a significant relationship between a group or set of variables at a given level of probability.

Table 5: Coefficients for profit margin ratio as the dependent variable

Coefficients							
	Unstandardized Coefficients	Standardized Coefficients	Collinearity Statistics				
	B	Std. Error	Beta	T	Sig	Tolerance	VIF
Constant	0.832	0.257		3.235	0.002		
long term debt	0.322	0.342	0.113	0.942	0.351	0.982	1.01
short term debt	-1.051	0.242	-0.523	-4.346	0	0.978	1.022
Trade credit	0.686	0.841	0.212	-2.644	0	0.980	1.016

Dependent variable: profit margin ratio

The Table 5 provides the calculated standardized parameters which are constant (β_0) = 0.832 ($p=0.002<0.05$). Long term debt ratio (β_2) = 0.113 ($p = 0.351>0.05$) implying that long term debt has no significant effect on profit margin ratio in the model. highest impact on profit margin ratio as evident of t ratio -4.346. This implies that short term loans reduce firm's performance.

Regression analysis report for liquidity ratio as the dependent variable

Table 6 Model Summary for liquidity ratio as the dependent variable

Model Summary						Change Statistics			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
Summary	0.474	0.224	0.174	0.56371	0.224	4.438	3	46	0

Predictor variable (constant) long term debt, short term debt, total debt

Table 6 reported the coefficient of determination score of 0.224 signaling the presence of a weak positive relationship between liquidity ratio and the combines effects of short term ratio and long term ratio which were the predictor variable for this study. The model explains 22% of the effects of debt financing on the firms liquidity ratio a case of Nairobi security exchange. This

therefore means that out factor not reviewed in this study accounts for 78% of the effects of debt financing on the firms liquidity ratio. The model Squared values of 0.224 can be reliably used to predict this relationship at an adjusted r squared value of 0.174. Then this implies that the combined effect of long term debt ratio and short term debt ratio predicts 22.4% variation of the dependent variable (liquidity ratio).

Table 7 ANOVA for liquidity ratio as the dependent variable

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4.231	3	1.41	4.438	0.008
Residual	14.617	46	0.318		
Total	18.848	49			

Dependent variables: Liquidity ratio

Predictor variable: (constant) long term debt, short term debt, trade credit

The analysis of variance (ANOVA) indicates scored F value of 4.438 the critical at 5% significance level was 2.54 since the F calculated is greater than F critical (value=4.438) this shows that entire model was significant.

Table 8 Coefficients for liquidity ratio as the dependent variable

Coefficients							
	Unstandardized Coefficients	Standardized Coefficients	Beta		Collinearity Statistics	Tolerance	VIF
	B	Std. Error	a	T	Sig	e	
Constant	0.956	0.13	0.221	0			
long term debt	-0.263	0.126	0.113	-0.384	0.038	0.671	1.021
short term debt	-0.838	0.162	0.523	0.221	0	0.482	1.081
Trade credit	-0.550	0.139	0.63	0.606	0	0.576	1.051

Dependent Variable: Liquidity ratio

A regression equation provides the predictive power of any given variable to estimate the ultimate effect of the independent variable on the dependent through their coefficients. Results from table 4 provide coefficient of all variables under review (short term debt ratio and long term debt ratio) and a constant at zero in predicting the effect of debt financing on the firms liquidity ratio. The calculated standardized parameter for the constant at zero ($\beta_0=0.956$) indication the

existence of a constant effect of debt financing Of 0.956 at all the time. The data findings father suggest that all other predictor variables kept at zero a unit increase of long term debt ratio (β_1) will lead to a 0.155 in the effect of debt financing on the liquidity ratio, while a unit increase in short term debt will lead to 0.865 increases in liquidity ratio. This infers that short term debt greatly contribute to the liquidity position of the firm. Amirkhani and Fard (2009) found a positive relationship between long term debts and financial performance in companies designing and manufacturing clean rooms.

Regression analysis report for return on asset as the dependent variable

The model summary in Table 4.5.3 has reported a coefficient of determination (R squared) value of 0.352 suggesting a positive and weak correlation of the combined contribution of long term debt ratio and short term ratio. This means that model explains 35.2 % of the variation of the dependent variable (return on asset).

Table 9: Model Summary for return on asset as the dependent variable

Model Summary										
Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics				Sig. Change
						F Change	df1	df2	F	
Summary	0.593	0.352	0.309	0.41581	0.352	8.318	3	46	0	

Table 10 ANOVA

ANOVA						
	Sum of Squares	Df	Mean Square	F	Sig.	
Regression	4.315	3	1.438	8.218	0.000	
Residual	14.617	46	0.318			
Total	18.848	49				

Dependent Variable: Return on asset

Predictor s: (Constant), Short term debt, long term debt, trade credit

The above explanation was supported by ANOVA test for regression model; F test was 8.318

with p value 0.00 which was less than 0.05 point confidence interval implying that the model was fit in showing the casual effect of the independent variable on dependent variable.

Table 11: Coefficients for return on asset as the dependent variable

Coefficients							
	Unstandardized Coefficients	Standardized Coefficients	Collinearity Statistics				
	B	Std. Error	Beta	T	Sig	Tolerance	VIF
Constant	0.871	0.158		0.221	0		
long term debt	-0.093	0.192	-0.053	-0.384	0.038	0.671	1.021
short term debt	-0.738	0.143	-0.668	0.221	0	0.482	1.081
Trade credit	-0.416	0.339	-0.361	-0.303	0	0.577	1.051

Dependent Variable: Return on asset

Long term debts shows to have least impact on return on asset as evident of t ratio = -1.660. Long term debt had coefficient of estimate of -0.199 implying that increase in long term loan debt with one unit would decrease return on asset with 0.199 units. The effect was significant as clearly shown by p value of 0.104 which is more than 0.05. Myers (1997), views that a firm's reliance on long term debt leads to greater distortions in the owner/manager risk.

Summary of Findings

The main objective of this study was to establish the impact of debt financing on firms financial performance in Kenya. To achieve the objective the researcher sampled firms listed under the Nairobi securities exchange that exhibited the characteristics for the study. Secondary data was used in this study. Data was collected by the review of documents, annual reports of the sampled companies published books of accounts.

Short term debt ratio

The regression analysis coefficient on the debt effects on return on asset suggest that a unit increase of short term debt reduces return on asset by. However the finding relating to profit margin ratio suggests a different outcome. A unit increase in short term debt however will reduce the profit margin ratio by 1.054. The liquidity ratio response to a unit increase in short term debt ratio leads to a decrease of liquidity ration by 0.838. From this study it is evident that at 95% confidence level, the variables produce statistically significant values (high t-values, $p < 0.1$.) hence when the variables are combined hence, they can be relied on to explain debt financing of the firms listed at the Nairobi securities exchange. From the study findings it would be safe to conclude that debt ratio had an inverse relationship with return on asset.

Long term debt ratio

The regression analysis coefficient on the debt effects on return on asset suggest that a unit increase of long term debt has a reducing effect of return on asset by 0.0193 points. This is However different in the case of profit margin ratio. A unit increase in long term debt has an incremental effect on the profit margin ratio by 0.322 points. The liquidity ratio response to a unit increase in long term debt ratio is a corresponding decrease of 0.263. From this study it is evident that at 95% confidence level, the variables produce statistically significant values (high t-values, $p < 0.1$.) hence when the variables are combined hence, they can be relied on to explain debt financing of the firms listed at the Nairobi securities exchange.

Trade credit

The regression analysis coefficient on the debt effects on return on asset suggest that a unit increase of trade credit reduces return on asset by 0.550 points. However the finding relating to profit margin ratio suggests a different outcome. A unit increase in trade credit however will increase the profit margin ratio by 0.416. The liquidity ratio response to a unit increase in short term debt ratio leads to a decrease of liquidity ration by 0.838. From this study it is evident that at 95% confidence level, the variables produce statistically significant values (high t-values, $p < 0.1$.) hence when the variables are combined hence, they can be relied on to explain debt financing of the firms listed at the Nairobi securities exchange. From the study findings it would be safe to conclude that debt ratio had an inverse relationship with return on asset.

Conclusions

It was considered to be very important when finance directors and managing directors trying to Finance the firm's assets to understand the impact of debt financing on the capital structure and financial performance as well the cost of funds. It was evident from the study and analysis arising thereof. This study established that capital analysis and asset structure analysis was a very important analysis used to boost firm's competitive advantage and consequently profitability. In addition the capital market analyst as well investment analyst should advise the investors as well firms on the optimal capital structure based on capital structure analysis. Borrowing introduces a risk to the company and on the return to shareholders in terms of reducing the amount of profit available to them, as well as exposing their assets to dissolution in the event of failing to repay the debt in the stipulated time. When a business's returns are likely to fluctuate greatly the use of increased debt magnifies the risk. Adequate emphasis must be placed on enabling such companies to employ more shareholders' funding than debt and reduce the risk that is inherent in the increased use of debt.

Recommendations

Arising from this study, the following directions for future research in Finance were recommended as follows: First, this study focused on all the 60 listed companies in the Nairobi Securities Exchange. Therefore, generalizations could not adequately be extended to every listed company as they have varying industry risk and asset structure. Based on this fact among others, it is therefore, recommended that a narrow based study covering a specific segment or company be done to find out the Impact of Capital Structure on Performance. Similar studies to this can also be replicated in a few years to come to asses if the Impact of debt financing capital Structure

and financial Performance of the firms listed at the Nairobi Securities Exchange has changed as the Nairobi Securities Exchange continues to change. Also the effect of capital structure on corporate strategy is also another area of interest which can be under the area of further research and a more intense study along that area can come in handy.

Areas of further research

This study focused on all the 15 listed companies in the Nairobi Securities Exchange. These results can not address specific risk associated with different industries across the economy. Based on this fact among others, it is therefore, recommended that a narrow based study covering a specific industry to find out the impact of debt financing

REFERENCES

- Berger, P.G., Ofek, E. & Yermack, D.L. (2012). *Managerial entrenchment and capital structure decisions*, *The Journal of Finance*, 52 (4), pp. 1411-1438
- DeAngelo, H. & Masulis, R.W. (1980). *Optimal capital structure under corporate and personal taxation*, *Journal of Financial Economics*, 8 (1), pp. 3-2
- Fan, J.P.H., Titman, S. & Twite, G. (2012). *An International Comparison of Capital Structure and Debt Maturity Choices*, *Journal of Financial & Quantitative Analysis*, 47 (1), pp. 23-56
- Goswami, G. & Shrikhande, M.M. (2001). *Economic exposure and debt financing choice*, *Journal of Multinational Financial Management*, 11 (1), pp. 39-58
- Jensen, M.C. (1986). *Agency costs of free cash flow, corporate finance, and takeovers*, *American economic review*, pp. 323-329.
- Kraus, A. & Litzenberger, R.H. (1973). *A State-preference model of optimal financial leverage*, *The Journal of Finance*, 28 (4), pp. 911-922.
- Lemma, T.T. & Negash, M. Mizruchi, M.S. & Stearns, L.B. (1994). *A longitudinal study of borrowing by large American corporations*, *Administrative Science Quarterly*, pp. 118-140.
- Abor, J. (2005). *The Effect of Capital Structure on Profitability. Empirical Analysis of Listed Firms in Ghana*. *Journal of Risk Finance* .vol. 6, 438-445.
- Amirkhani, A. and Fard, R. S (2009). *The Effect of Market Orientation on Business Performance of the Companies Designing and Manufacturing Clean Rooms*. *American Journal of Applied Sciences* 6 (7), 1373-1379.
- Damodaran, A. (1999) .*Applied Corporate Finance* .New York. Johnwiley and sons Inc. Demirguc- Kunt, A.V and Maksimovic (2002). *Firms as Financial Intermediaries: Evidence from Trade Credit Data*. University of Maryland.
- Fama, E. F., K. R. French, 2002, 'Testing Trade-Off and Pecking Order Predictions about Dividends and Debt', *The Review of Financial Studies* Vol. 15 No. 1, pp. 1-33.

- Gang Fu, Weilan Fu and Dan Liu (2012). *Empirical Study on Financial Risk Factors: Capital Structure, Operation Ability, Profitability and Solvency Evidence from Listed Companies in China*. Sichuan agricultural university (2000). *The Practice of Monetary Policy in Kenya*. Nairobi, Kenya: Central Bank of Kenya.
- CBK (2001), *Annual Banks Supervision Reports*. Nairobi, Kenya. Central Bank of Kenya Central Bank of Kenya (2004). *Risk Management on Kenya's Banking Sector*. From <http://www.centralbank.go.ke>
- Central Bank of Kenya (2006): *Central Bank of Kenya Prudential Guidelines for Institutions Licensed Under the banking Act*, Nairobi, Central Bank of Kenya.
- Chang, S.-C., Chen, S.-S. and Liu, Y. (2004). *Why firms use convertibles: A further test of the sequential-financing hypothesis*. *Journal of Banking and Finance* 28(5), 1163–1183
- Christian S. Arnold A., and Sorensen H. (2008), *Analyzing Banking Risk- A Framework For Assessing Corporate Government and Financial Risk Management*. Washington, D.C: The World Bank.
- Clarke C.J and Survirvarma (1999). *Strategic Risk Management: The New Competitive Long Range Planning*.32. Published by Elsevier Ltd.
- Cooper, D.R and Schindler, P.S. (2003) *Business Research Methods (8th edn)* McGraw-Hill: New York
- Demirgüç-Kunt, Ash and Huizinga, Harry (1999) *Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence*. *The World Bank Economic Review*, 13,2, 379–408.
- Emery, G (1998) *Corporate Finance, Principles and Practices*, New York: Addison -Wesley
- Emery, John T. (1971), *Risk, Returns, and the Morphology of Commercial Banking*, *Journal of Financial and Quantitative Analysis*, 6, 2, March, 763-776.
- Flamini L., Hitchins J. and Brock K. (2009) *Preventing Systematic Crisis Through Bank Transparency*, *Economic Notes by Bancamonte Del Paschi Disiena SPA*. 33
- Flannery, Mark J. and Rangan, Kasturi P. (2002) *Market Forces at Work in the Banking Industry: Evidence from the Capital Buildup of the 1990s*. AFA 2003 Washington, DC Meetings; EFA 2002, Berlin Meetings Presented Paper.