

CAPITAL STRUCTURE DETERMINANTS AMONG COMPANIES QUOTED IN SECURITIES EXCHANGE IN EAST AFRICA

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Abstract

Capital structure decision plays an important role in shareholder's wealth maximisation. Poor capital structure decision will result to high overall cost of capital and consequently low capital projects net present values. Based on the need to have firm's optimal capital structure the current study sought to find the determinants of capital structure among quoted firms in East Africa securities exchange. Specifically, the study aimed; to find out the relationship between profitability and capital structure, to establish the relationship between growth and capital structure, to find out the relationship between firm growth and capital structure, to establish the relationship between firm size and capital structure, to find out the relationship between asset structure and optimal capital structure and to determine the relationship between cost of capital and capital structure. A panel data set of 65 companies which were listed and actively trading over the 2009-2013 period of analysis was analysed using panel data and descriptive analysis. The analysis showed a positive insignificant relationship between profitability, growth, firm size and capital structure and significant positive relationship with asset structure. Further, there was a negative insignificant relationship between cost of capital and capital structure.

Key words: Capital structure, profitability, growth, asset structure, firm size.

1.1 Introduction

There has been an intensified debate among corporate financial economists on how firms choose and adjust their financing mix as such to incur minimum costs of capital and maximize the shareholders' wealth. Since 1958 on a seminar paper by Modigliani and Miller titled the dividend irrelevancy theory various scholars have extended the theory with no conclusion on optimal debt and equity mix. Capital structure could be defined in different ways. In the US, it is common to define capital structure in terms of long-term debt ratio. In a number of countries, particularly the emerging markets, companies employ both short-term and long-term debt for financing their assets, including current assets. It is also common for companies in developing countries to substitute short-term debt for long-term debt and roll over short-term debt. Hence, it is more appropriate and particularly in the context of developing economies, to define capital structure as total debt ratio. Rajan and Zingales (1995) argued that the definition of capital structure depends on the objective of the analysis. For example, for agency-problem related studies, capital structure may be measured by total debt-to-firm value ratio. Debt could be divided into its various components, and numerator and denominator could be measured in book value and market value terms. In this study, we define our dependent variable – capital structure – as total debt-to-total assets (or debt-to-capital employed) as well as long term debt to total assets as these are the most often used measure of capital structure in empirical studies. Total debt includes interest bearing long-term and short-term debt. Assets include fixed assets and those current assets that are financed by debt.

There are different determinants of capital structure; profitability, effective tax rate, market value to book ratio, firm size, earnings volatility, equity premium, term structure of interest rate, share price performance, asset tangibility, cost of capital (Antoniou, Guney and Paudyal, 2002; Mishra, 2001). Capital structure is measured using different ratios such as long term debt to total assets, total debt to total assets. Quoted companies in East Africa apply the same measures for their capital structure.

Mwangi, Anyango and Ameyia, (2012) investigated capital structure adjustment, speed of adjustment and optimal target leverage among firms quoted in Nairobi stock exchange (NSE). Results showed a significant negative relationship between growth, tangibility, profitability and firm size in relation to capital structure among all firms listed in NSE. Machogu (2012) carried out a study to determine the potential determinants of capital structure decision among Tanzania firms. Although, both tangibility and asset structure had the most significant influence on capital structure, liquidity and company size had no significant influence.

1.2 Problem Statement

The most pivotal decision that any company takes is that of capital structure. The proportions of debt and equity used to finance the firm's assets, has implications for stakeholders' value (Mwangi *et al.*, 2012). In other words, how a firm is financed is very important not just to the managers of a firm but also to fund providers. This is because if a wrong mix of finance is employed, the performance and survival of the business enterprise may be seriously affected. However, firms' financing decisions involve a wide range of policy issues which may be outside the direct control of a firm's management. At the macro level, they have implications for capital market development, interest rate and security price determination, and regulation. At the micro level, such decisions affect capital structure, corporate governance and company development. It is therefore incumbent

on management of a company to determine an appropriate capital structure which will ensure that their business continues as going concern. A thriving business environment will not only serve as a means of income generation for households alone, but it will also help in generating tax revenue for the government and immensely facilitating poverty reduction through fiscal transfers. There has been conflicting results in relation to growth and capital structure as stipulated by capital structure theories for example pecking order argues that there is a positive relationship between growth and leverage while trade off theory argues that leverage is controlled by conflict of interest between shareholders and debt providers. Most of the past studies have used panel data but have not applied panel data analysis method therefore the current study will seek to correct the methodology applied previously. Despite of all this studies giving conflicting results none of the study have considered the firm quoted in East Africa Securities exchange therefore the current seeks to fill the gap on the determinants of capital structure among the firms quoted in Nairobi securities exchange, Uganda securities exchange and Dar es Salaam securities exchange. This study however, will focus on the determinants of capital structure among the quoted companies in securities exchange in East Africa.

1.3 Hypothesis of the Study

The study tested the following hypothesis:

H₀₁: There is no significant relationship between profitability and capital structure.

H₀₂: There is no significant relationship between growth and capital structure.

H₀₃: There is no significant relationship between firm size and capital structure.

H₀₄: There is no significant relationship between asset structure and capital structure.

H₀₅: There is no significant relationship between cost of capital and capital structure.

2.0 Review of Literature

2.1.1 Static Trade off Theory

The theory stipulates that firms have an optimal capital structure which they attain through the trade-off of the cost associated with debt and equity sources of finance. Debt is preferred due to its cost advantage of the tax shield benefit but on the other hand it exposes the company on chances of financial distress. Although, this leads to the trade-off between the tax shield benefit and the probability of financial distress but there are other major costs associated with the use of debt against equity for example the agency costs. The main source of agency cost streams from the conflict of interest between the different firms stakeholders (Jensen and Meckling, 1976). With the incorporation of agency costs into the static trade off theory this means that the firm should try and take advantage of the cost benefits on its capital structure composition.

2.1.2 Pecking Order Theory

The theory argues that there is no optimal capital in an organization (Vasiliou, Eriotis & Daskalakis, 2009). The theory assumes that firms prefer internal financing (Income, amortization) and they seek for external sources of finances if they have fully exhausted their internal sources such as debt capital and their last resort is issuance of shares to the public. Jurkowski (2005) argued that it is hard to determine companies leverage since an organization cannot distinguish between internal and external sources which source will be prioritised. An organization financing order is purely determined by needs. Internal capital is more preferred especially if any organization is not willing to relinquish control to external parties. There may even be quite brave theses found that obtaining debt capital by the company does not have an influence on its value, as a positive effect of financial leverage is eliminated by negative information concerning company's debt and its financial situation (Jensen & Meckling, 1976). Therefore an organization with high chances of profitability have high chances of retaining more earning thus it has low chances of raising new finances externally.

2.1.4 Agency Theory

An agency relationship is a contract under which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf, which involves delegating some decision making authority to the agent (Jensen and Meckling, 1976). Agents are more concerned with their interests as compared to the principal's interest. They defined agency costs as out of pockets costs (monitoring and bonding costs) and opportunity cost (residual loss). Past studies such as Hall *et al.*, (2004) found that the higher the share of current assets the higher the long term debts and the higher the proportion of current assets the lower the short term debts. Jensen and Meckling (1976) showed that if a company has a large share of tangible assets serving as collateral for debt, it reduces the risk of incurring the agency costs by the lender, which causes an increase in leverage. Cornelli *et al.*, (1996) showed that the agency costs of managers who abuse perquisites are higher for firms with low levels of collateral due to the higher cost of monitoring capital expenditures by shareholders who therefore prefer companies with low levels of assets pledged as collateral to have higher levels of debt.

2.2 Conceptual Framework

A conceptual framework is the diagrammatic presentation of variables, showing the relationship between the independent variable and dependent variables. In this study, the independent variables will be; profitability, growth, firm size and asset structure. The study sought to understand how these independent variables determines the optimal capital structure among firms listed in East Africa. Capital structure will be the dependent variables as measured by long term debt to total assets and total debt to total assets. The relationship between the independent variables and dependent variable is presented schematically in the conceptual framework in Figure 2.1.

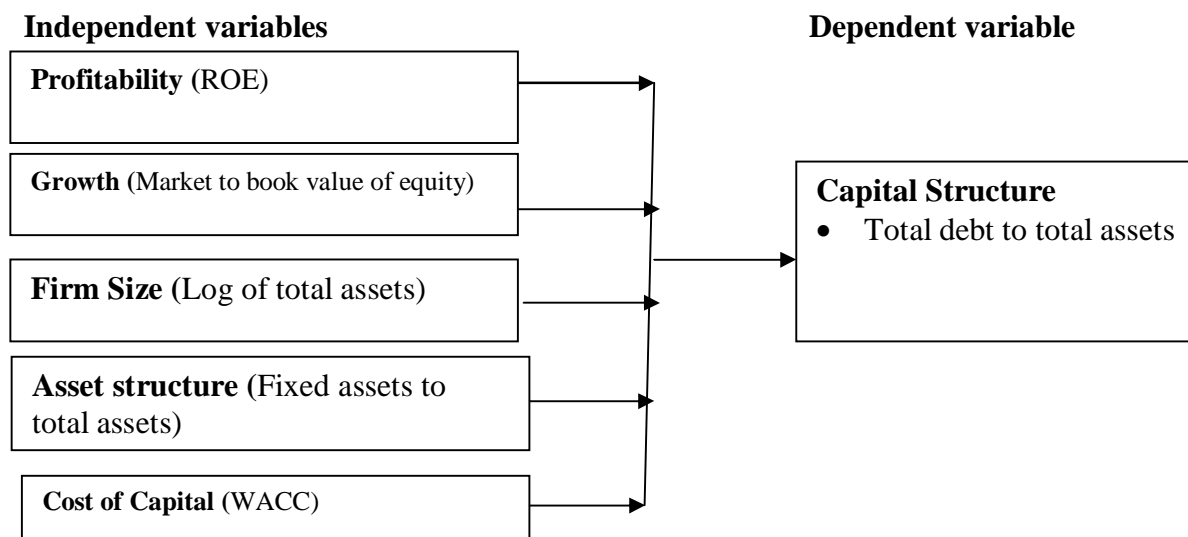


Figure 2.1 Conceptual Framework

2.3 Empirical Review of Literature

2.3.1 Profitability and Capital Structure

Velnampy and Niresh (2012) investigated the relationship between capital structure and profitability among ten listed Sri Lankan banks for eight years from 2002 to 2009. The study applied correlation design. In the study profitability was measured through accounting measures such as net profit ratio, return on capital employed, return on equity and net interest margin while capital structure was measured using debt to equity ratio and debt to total funds. Results of the study showed that commercial banks are highly geared since 89% of commercial assets were financed through the use of debts. Moreover, the study showed a negative significant relationship between debt to equity and net profit margin ratio, debt to total funds and net profit margin, debt to total funds and net interest margin. Although there was a negative relationship between debt to equity and net profit ratio, debt to equity and return on capital employed, debt to equity and return on equity and debt to total funds and return on capital employed. Since the data was collected across eight years for similar banks it would have been appropriate to carry out panel data analysis and investigate the relationship through the use of either fixed effects or random effect regression analysis. The choice of purposive sampling procedure was appropriate since the inclusion criteria of the study items was clearly indicated as only listed commercial banks. Kothari (2007) argues that correlation analysis is mainly meant to show the strength of the relationship between variables, though an appropriate method it was not conclusive to draw conclusion from only correlation results. Chisti, Ali and Sangmi, (2013) investigated the impact of capital structure on profitability of listed automobile companies. The study hypothesised that there is no significant relationship between profitability and capital structure. Secondary data was collected from five year financial records (2007 to 2012). Capital structure was measured using three ratios: debt to assets ratio, debt to equity ratio, interest coverage ratio. Profitability was measured using gross profit ratio, net profit ratio, operation profit ratio and

return on capital employed. Both descriptive and correlation analysis were applied to analyse the data. The study findings showed a negative significant relationship between overall profitability and debt to equity ratio as well as profitability and interest coverage. In addition, the study depicted that there is a positive insignificant relationship between profitability and debt to asset ratio.

2.3.2 Growth and Capital Structure

Hermuningsih (2013) defined firm growth using investment to sales, price earnings ratio, investment to net profit, market to book total assets and market to book total equity. Umer (2013) posited that firm's growth can be measured as using different measures such as research expenditure to annual sales, market to book value of equity and increase in total assets per annum. Results of the study revealed a negative insignificant relationship between company's growth and capital structure. Fissesha (2010) showed an inverse significant relationship between leverage and commercial bank growth as measured by percentage change increase in total assets per annum. Mai (2006) argued that since a firm exposed to growth opportunities have to increase its fixed assets base they should increase their levels of retained earnings in preparation of future investment opportunities. Rakhat (2006) depicted a positive significant relationship between firm growth and capital structure. Hermuningsih (2013) showed a significant positive relationship between growth opportunities and firm's capital structure as measured by the ratio of total debt to total assets. Since the independent variables had more than one measure the study used structural equation modelling approach.

2.3.3 Firm Size and Capital Structure

There have been no heterogeneous definition of firm size for example logarithm of total assets (Mouamer, 2011), net assets adjusted for inflation rate (Karadeniz *et al.*, 2009), logarithm of net sales (Fareed, Zulfiqar and Shahzard, 2014) and net sales (Lihn, 2014). In the current study logarithm of sales and logarithm of total assets will be used as the measures of firm size. Wachilonga (2013) carried out a study in Kenya to determine the relationship between firm size and capital on development of small and medium enterprises. The study applied descriptive survey design. Results of the study showed that there is a significant relationship between firm size and capital structure choice among hotel and lodging SME's in Eldoret municipality where most of the firms preferred raising their own funds to finance their operations. Although, the firms preferred bank credit to finance their business operations they too used retained earnings. In addition, the study depicted the firms in expansion phase preferred to raise their revenue through retained earnings and short term debt. Moreover, (Masnoon and Anwar, 2012; Shah and Khan, 2007) showed a negative significant relationship between firm size and capital structure. This was attributed to increased transparency among large firms which minimizes floatation costs associated with new equity issues therefore encouraging firms to finance their capital needs through new equity issues. Vatavu (2012) carried out a study to investigate the determinants of capital structure among manufacturing listed firms. The study findings showed a positive significant relationship between capital structure (as measured by debt ratios which were short term debt, long term and total debt) and firm size (logarithm of total assets). In addition, firm size was the most significant determinants therefore the larger the manufacturing firms the higher the debt level. Moreover, it was assumed that big manufacturing firms were exposed to lower levels of systematic risk thus they

had high chances of taking more business risk and owing to their market share they were assumed to be more stable for lenders.

2.3.4 Asset Structure and Capital Structure

Vatavu (2012) showed a significant inverse relationship between short term debt ratio and asset tangibility among manufacturing listed firms in Bucharest Stock exchange. In addition, the study depicted that there is an inverse insignificant relationship between both long term ratio and total debt ratio and asset tangibility. This implies that manufacturing had more access of short term debt as compared to long term debt. Olakunle and Oni (2014) conducted the study to assess the impact of asset tangibility on capital structure: choice for listed firms in Nigeria. The study adopted correlation design. Capital structure was defined as a ratio of total debt to total assets and short term debt to total assets while asset structure was measured as a ratio of fixed assets to total assets. Results of the study found a positive insignificant relationship between asset structure and total debt to total assets. In addition, a positive insignificant relationship between asset structure and short term debt to total assets was reported. In contrast an investigation of determinants of capital structure among commercial banks in Ethiopia depicted that there was a negative insignificant relationship between asset structure and capital structure (Fissesha, 2010). The study findings were contrasted by (Umer, 2013) whose study sought to investigate the determinants of capital structure amongst the large tax payer companies in Ethiopia, findings revealed a positive significant relationship between asset tangibility and capital structure.

3.0 Research Methodology

This study sought to investigate the determinants of capital structure among companies quoted in East Africa securities exchange. The study adopted correlation survey design. The target population was 79 companies listed in Kenya, Uganda and Tanzania and were actively trading between 2009-2013. Since the sample size was small all companies were considered to form part of study sample. For the purpose of this study, the researcher used secondary data. The secondary data was obtained from the published annual reports spanning five years.

Table 3.1 Operationalization of Variables

	Variables	Measures
Y	Capital structure	Total debt to total assets
X ₁	Profitability	Return on equity
X ₂	Growth	Market value to Book Value of equity
X ₃	Firm size	Logarithms of Total assets
X ₄	Asset structure	Fixed assets to total assets

3.1 Model Estimation

The nature of the data was cross sectional and time series which is panel. We used fixed effects to test the hypothesis. The panel regression model was as follows:

$$y_{i,t} = \alpha + \beta_1 x_{1i,t} + \beta_2 x_{2i,t} + \beta_3 x_{3i,t} + \beta_4 x_{4i,t} + \beta_5 x_{5i,t} + \hat{\epsilon}_{i,t}$$

y = Capital structure, x_1 = Profitability, x_2 = Growth, x_3 = Firm size, x_4 = Asset structure, x_5 = Cost of capital, $\hat{\epsilon}_{i,t}$ = error term.

4.0 RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 4.1 shows the descriptive statistics of the variables under investigation; capital structure was measured using two ratios long term debt to total assets and total debts to total assets. Results showed that on average total debt to total assets was 53%. Although, the leverage levels were widely dispersed around the mean as shown by standard deviation of 23% for total debt to total debt, most of the firms were highly leveraged. A close scrutiny shows that the highly leveraged company had a ratio of 0.98:1 for total debt to total assets. This implies that this firm's assets were financed using debt for 98%. In addition, the maximum ratio of long term debt to total assets was 0.92:1 which implies that the firms total assets were mostly financed using long term sources of finances which implies that firms quoted in East Africa securities market applies conservative financing policy. On average firms listed in East Africa had return on equity of 24%, with a maximum of 957% and a minimum of -9.7% which implies that in the period under investigations some firms were making massive losses while others registered positive annual returns. On average firm's trading in East Africa registered 14.6% growth rate with the highest registered growth of 87.5% and a minimum growth of 0%. This implies that the economy in East Africa is growing in a positive trend. On average, firms had a size of 7 with the maximum being 10. The average asset structure was 54%. The minimum cost of capital was 4% and the maximum was 17.5% while the average was 14%.

Table 4.1 Descriptive Statistics

	TD_TA	Profitability	Growth	Firm size	Asset Structure	Cost of capital
Mean	0.53	0.27	1.46	6.95	0.54	0.14
Median	0.51	0.15	0.99	7.06	0.60	0.10
Maximum	0.98	9.57	8.75	10.20	0.97	0.175
Minimum	0.07	-0.97	0.00	3.82	0.00	0.04
Std. Dev.	0.23	0.89	1.64	1.11	0.27	0.11
Skewness	0.14	3.48	2.17	-0.23	-0.47	2.29
Kurtosis	1.87	5.87	7.79	3.53	2.11	9.19
Jarque-Bera	18.27	565.00	566.88	6.65	22.40	803.46
Probability	0.00	0.00	0.00	0.04	0.00	0.00
Sum	171.56	86.71	475.82	2258.38	174.74	45.25
Sum Sq. Dev.	17.22	258.15	875.15	402.22	24.07	4.20
Observations	325	325	325	325	325	325

Data normality was tested using Jacque-Bera normality test. The null hypothesis states that the data is normally distributed and the alternative states that the data is not normally distributed. The test hypothesis that the data is normally distributed while the alternative; states that the data is not normally distributed. The test indicated that the data was not normally distributed since the P values were less than 0.05. Although, Jacque-Berra test showed data non-normality the values were not large, both skewness and kurtosis had values close to + or – 3 which depicts data normality with exception of growth and cost of capital. Further, correlation analysis was carried out to investigate the sensitivity of data outliers and multicollinearity.

4.2 Panel Regression Coefficients

Prior to regression analysis Hausman test was carried out to determine the appropriate model between fixed and random effects. Since the p value was greater than 0.05 random effects regression model was the most appropriate. Coefficient of determination explains the extent to which change in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (capital structure/ total debt to total assets) that is explained by the five independent variables (profitability, asset structure, firm size, growth, cost of capital). The five independent variables studied, explain 87.3% of variance in the capital structure (TD to TA) as represented by the R^2 . This means 13.7% of changes in capital structure of companies listed in East Africa can be explained by other factors not included in the model. The F statistics is used to test the hypothesis that all the slope coefficients are zero against the alternative that at least one of the slope coefficients is zero. Since the P value for F statistic of 25.396 was less than 0.05, therefore at least one of the slope coefficients was non-zero.

The first hypothesis of the study stated that there is no significant relationship between profitability and capital structure. Results of the study showed that there positive insignificant relationship between profitability and total debt to total assets ($\beta = 0.011$, p value > 0.05). These findings contrasted both (Velnampy and Niresh, 2012; Christi *et al*, 2013; Fareed *et al*, 2014) where there was a negative significant relationship. The findings are in disagreement with pecking order theory

which postulates that a firm will exhaust internally generated funds prior to rising from external sources.

The second hypothesis of the study stated that there was no significant relationship between growth and capital structure. The study findings showed a positive insignificant relationship between asset structure and capital structure ($\beta = 0.014$, p value > 0.05). The results were in agreement with Rakhat (2006) whose study showed a positive significant relationship between growths against capital structure.

The third hypothesis of study stated that there was no significant relationship between firm size and capital structure. Results of the study showed that there was a positive insignificant relationship firm size and capital structure ($\beta = 0.024$, p value > 0.05). The findings were in disagreement with Lihn (2014) whose study showed a positive significant relationship between capital structure and firm size.

The fourth hypothesis of the study stated that there was no significant relationship between asset structure and capital structure, the study findings showed that there was a negative significant relationship between asset structure and capital structure ($\beta = 0.166$, p value < 0.05). This implies that an increase in asset structure is associated with an increase in capital structure. The findings were in disagreement with Vatavu (2012) whose study showed an inverse relationship between capital structure and asset structure. These findings agreed with (Umer, 2013) whose study showed positive significant relationship between assets structure and capital structure. This implies that listed companies with huge asset base are less leveraged as compared to companies which have lower levels of resources endowment.

The fifth objective of the study hypothesized that there is no significant relationship between cost of capital and capital structure. Results of the study showed that there was negative insignificant relationship between capital structure and cost of capital ($\beta = -0.04$, P value > 0.05).

Table 4.2 Cross Section and Period Random Regression (Dependent Total debt to total assets)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.253	0.151	1.677	0.095
Profitability	0.011	0.009	1.287	0.199
Growth	0.014	0.008	1.787	0.075
Firm size	0.024	0.018	1.317	0.189
Asset structure	0.166	0.080	2.074	0.039
Cost of capital	-0.040	0.121	-0.333	0.739
R-squared	0.873	Mean dependent variable	0.528	
Adjusted R-squared	0.839	S.D. dependent variable	0.231	
S.E. of regression	0.093	Akaike info criterion	-1.732	
Sum squared residual	2.188	Schwarz criterion	-0.917	
Log likelihood	351.510	Hannan-Quinn criteria.	-1.407	
F-statistic	25.396	Durbin-Watson stat	2.004	
Prob (F-statistic)	0.000			

Total debt to total assets = 0.253 + 0.011 (Profitability) + 0.014 (Growth) + 0.024 (Firm size) + 0.166 (Asset Structure) – 0.040 (Cost of capital).

5.0 Discussion and Conclusion

Profitability had a positive insignificant relationship with total debt to total assets. According to these findings profitability and debt financing are in disagreement with firms financing activities as stipulated in pecking order theory which stipulates that a prudent finance manager should firm finance his financial needs from cheapest sources of finance first. The study findings disagreed with Tesfaye and Minga (2013), whose study showed an inverse significant relationship between profitability and total debt to total assets and an inverse insignificant relationship between profitability of long term to debt ratio. Based on the study findings most of the firms are registering profits though very few registered profits within the period of observations. Since firms quoted in East Africa showed positive relationship it can be implied that there were not ploughing back of their annual profits thus increasing the chances of borrowing. Therefore, firms should be encouraged to intensify their operations as such to increase their profits and consequently minimize the chances of borrowing.

There was a positive insignificant relationship between growth and total debt to total assets. Theoretically firm growth is associated with increased leverage past studies have registered mixed results such as Nadeem and Wang (2011), showed negative significant relationship between growth and debt ratio (total debt to total assets), Erdinic *et al* (2009) showed a negative insignificant relationship between growth opportunities and total debt to total assets. Currently, the study contrasted both pecking order theory and trade off. Thus, growth opportunities financing alternative in East Africa are not in agreement with the past literature. Although, most firms are exposed to growth activities there are borrowing so as to take advantage of the growth finance their expansion activities, firms should be encouraged to take advantage of borrowing facilities available and consequently promote economic growth and development in East Africa.

There was a positive insignificant relationship between firm size and total debt to total assets. The findings were in agreement with the provision of trade off theory which stipulates that large firms are more leveraged as compared to small firms which have lower access to assets for collateral security. From the findings large firms are better placed to benefit from interest tax shield benefits which are associated with borrowed funds. These findings were in agreement with Tesfaye and Minga, (2013) whose study showed an inverse significant relationship between firm size and the ratio of total debts to total assets. An increase in asset base is associated with an increase in collateral securities. Since there is a positive relationship between firm size and capital structure, both debt and equity finances should be made available through minimization of their associated floatation's cost. Small and medium enterprises in the region should be encouraged to be quoted in their respective securities exchange in the region so that they can benefit from the benefits associated with financial markets.

There was a positive insignificant relationship between asset structure and total debt to total assets. Although, theoretically it's anticipated that there is a positive relationship between asset structure and total debt to total assets, the findings were in agreements with Nadeem and Wang (2013) and Erdinic *et al* (2009) which showed an inverse relationship between asset structure and total debt to total assets. These findings were in disagreement with Tesfaye (2013) whose study showed a positive relationship with capital structure. Since the asset structure had an inverse relationship with capital structure. This implies most of the firms in the region have better potentials of borrowing in the future. Cheaper sources of finances should be made available to companies listed in East Africa

either through tax shield benefits since majority have more resources endowment as compared to their current total debt to total assets.

Firm's cost of capital showed a negative insignificant relationship with the ratio of total debt to total assets. Therefore, an increase in leverage was associated with a decrease in cost of capital. The findings are in agreement with Modigliani and Miller hypothesis which stipulates that an increase in leverage is associated with decrease in overall cost of capital up to an optimal ratio whereby an increase in debt will not be associated with any cost benefit. There is need for development of strategies aimed at minimizing the cost of capital since the higher the cost of capital the lower the chances of a project being accepted. Currently cost of capital associated with capital structure is higher as debt to total assets ratio which may threaten future operations of firms listed in the regions due to other charges which are associated with a specific source of finance.

5.1 Recommendations

Since profitability minimize the chances of firm's seeking external sources of finances listed companies in East Africa should diversify their operations so as to minimize their costs and maximize profits which will increase internally generated funds and consequently save on floatation's costs.

There is need for good financial planning and forecasting which will be associated with the company growth from which the firm can position it on most economical external financing sources to finances quoted firm's financial needs.

According to the findings there is a significant relationship between asset structure and ratio of total debt to total assets. Quoted companies within the East Africa region should increase their asset structure as such to lower their leverage and consequently minimize the chances of bankruptcy and lower future borrowing cost.

According to the study findings quoted companies should seek their asset base since it is associated with increase in the ratio of total debt to total assets. Since increased sales can accelerate an organization growth there is need for companies to diversify their operations mostly on branches which will translate to increase asset base.

Since there is an inverse relationship between cost of capital and ratio of total debts to total assets, thus companies listed in East Africa should seek on measurers which will minimize the overall cost of capital by postponing seeking fresh capital issue by seeking use of internal sources and borrow from cheaper sources of debt.

The current study helped to analyse the determinants of capital structure among listed companies in East Africa. However, there is need for a comparative analysis to be carried out among different industry sectors as well as different countries since there are not operating with the same legal framework. There are different methods which can be used for data analysis future studies should consider using alternative methods such as probit regression analysis to determine the probability of leverage in relation to specific determinants of capital structure. The current study was limited to firm's specific characteristics as the determinants of capital structure. Future studies ought to investigate macroeconomic factors in addition to firm characteristics as the determinants of capital structure.

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