CAPITAL STRUCTURE ON THE COST OF CAPITAL OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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Abstract

Purpose: The purpose of this study is to investigate the effects of CS on the cost of capital of organizationslisted at the NSE. Kenya.

Methodology: The study adopted a descriptive research design. The target population for this study were the 41 listed companies on the NSE which were drawn from a list of 65 after applying various exclusion and inclusion criteria. A census of 41 firms was therefore used. Secondary Data for the year 2010 to 2014 was collected from the NSE handbook. Data collected was analysed using descriptive statistics which included means and standard deviations. Inferential statistics such as Pearson correlation and panelregression was also used.The results were presented in form of tables, figures, charts, graphs and trend lines.

Results: Based on the findings, the study concluded that there was a significant and positive relationship between asset ratio, total equity to debt ratio, total long term debt to total asset ratio and total short term debt to total asset ratio and cost of capital of firms listed in the NSE. These findings imply that an increase in any of the ratios led to an increase in cost of capital.

Policy recommendation: Based on the findings the study recommended that firms should pursue optimum capital structure mix, which will ensure minimum cost of capital. They can do this by focusing on those forms of capital that had lower impacts on cost of capital.

Keywords*: asset ratio, cost of capital,total equity to debt ratio, long term debt to total asset ratio,total short term debt*

1.1:INTRODUCTION

Capital structure seeks to identify the type of financing used by companies to fund its investments. Myers, (2001) and Brigham, (2004) defined capital structure as the way in which a firm funds its activities which can be by borrowing or equity capital. The value of equity capital is obtained byapproximating the current market value of all that is owned by the company where all liabilities are subtracted from. Equity capital is listed as stockholders' equity or owners' equity on the balance sheet of the company. Also called equity financing or share capital. These form the firm's capital structure (CS). The overall objective of the firm is wealth maximization therefore the firm must determine the optimal CS that will maximize its value (Morris, 2011).

The firm however creates value when it provides a return greater than its cost of capital (COC) (Khadka, 2012). As a result, an optimal CS will seek to minimize the firm's COC as a whole. CS irrelevance has however been debated under the Modigliani-Miller (1958) theory which states that the COC is independent of the degree of Tangibility in a firm's CS. This irrelevance proposition assumes that there are no taxes, no bankruptcy costs, no transaction costs, information symmetry and other market imperfections which otherwise exist in the real world.

Several other theories on CS have emerged over the years. These include the trade-off theory and the pecking order theory which state that firm's trade off the costs and benefits associated with debt and equity by finding an optimal CS after accounting for market imperfections and those firms will source for funds following a preference order of internal funds, debt and then equity (Myers &Majiluf, 2009). In as much as there has been numerous researches on CS and COC as distinct areas in financial institutions, the effect of CS on the COC remains unclear. Research studies on the effect of CS on the COC have mostly been conducted in developed countries. In Kenya, there has been little research on the effects of CS on the COC of firms listed in the NSE. As a result, this formed the motivation for this research. The variables of this study are CS and COC. This study sought to measure the effect of CS on the COC of firms listed on the NSE. It sought to establish whether the COC is dependent on the firm's CS.

Capital structure (CS) is the combination of debt, equity or internal funds that an organization chooses to run its operations (MengmengZheng, 2013). The decision on whether to use debt, equity or a combination of both is determined by several factors such as market conditions, business risk, tax exposure, the firm's growth rate and the COC (Huang & Song, 2006). According to Modigliani and Miller (1958) under perfect markets, the value of the firm and COC are independent of CS and therefore whether the firm is highly Tangibility or has a lower debt component, there is no bearing on the firm's market value or COC. These theories paved the way for alternative theories of CS and empirical analysis because once the assumption of perfect capital markets is relaxed, the choice of CS and the COC becomes important value-determining factors (Marietta, 2012).

The relationship between the COC and CS has been found to either be positive, negative or have no relationship at all as studied by Gapenski (1987), Singh &Nejadmalayeri (2004) and Khadka (2012) respectively. CS and COC are allied in a such a way that will enable display how decisions on ways of handling an organization positively affect both the debt and equity that a firm has at a point in time. When firms fail to recognize the relationship between CS and COC,

the potential for taking on additional debt without generating much income is increased (Khadka, 2012).

1.2 Problem statement

Capital structure has been a subject of concern for many researchers over the past several years because it is linked to the firm's ability to meet the objectives of various stakeholders. CS is a critical decision for any business organization because of the need to maximize stakeholder value (Morris, 2001). As a result, the choice of CS is of utmost importance in determining the value of the firm and consequently its survival (Ogebe&Kemi, 2013). The question of financial management risk should however be, concerned with what cost the firm is willing to incur in order to maximize value. This is because a firm creates value when it provides a return greater than its COC. The cost of capital in the developed economies has been cited by many scholars to be increasing at an alarming rate. A good example is the 2008 world economic crunch where by banks are business risk from relying on risky forms of borrowing, which were blamed for making the financial crisis much more dangerous (Krugman, 2009).

Studies on the effect of CS on the COC have mostly been conducted in developed nations presenting findings that may not be applicable in the Kenyan context. Galindo (2011), Khadka (2006) and Dhaliwal (2005) when conducting studies on the relationship between Tangibility and the COC found that there exists a negative relationship between the two variables. On the contrary, Gapenski (1987) in his study on the relationship between financial Tangibility and COC for electric utility firms found there exists a positive relationship between the two variables. The findings of these studies produced mixed results because of the difference in measures of Tangibility. Where there existed a negative relationship, Tangibility was calculated as the ratio of total debt to total assets and where there existed a positive relationship, it was calculated as the ratio of debt to equity.

The lack of agreement by various academicians on the effect of CS on the COC forms the reason for further investigation on the area of study. As much as cost is an important factor in determining the choice of CS, research on the relationship between CS and COC remains inadequate in the Kenyan context. This forms the basis of this research. While it is important for firms to determine the best combination of debt and equity to finance their operations, they must bear in mind the costs associated with these sources of financing.

Previous research work done in Kenya on capital structure include Rutto (2008) who studied the effect of capital structure change on share prices for firms quoted at Nairobi Stock exchange. Musyoka (2009) examined the relationship between capital structure and corporate governance of the firms listed at the Nairobi Stock Exchange. Etyang', (2012) studied the determinants of capital structure of private hospitals in Nairobi.

Most of these studies did not seek the relationship between effect of CS on the COC of firms thus there existed a research gap.This paper sought to establish the effect of CS on the COC of firms listed on the NSE.

1.3   Research Objectives

i.   To establish the effects of asset ratioon the cost of capital of firms listed at NSE.

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ii.   To determine the effect of total equity to debt ratio on cost of capital of firms listed at NSE

iii.   To establish the effect of total long term debt to total asset ratio on cost of capital of firms listed at NSE

iv.   To establish the effect of total short term debt to total asset ratio on cost of capital of firms listed at NSE

2.0 LITERATURE REVIEW

2.1 Theoretical review

### 2.2.1   Modigliani-Miller Theory

The Modigliani and Miller theorem of CS as established by Modigliani and Miller is an irrelevant approach with three arguments. The first argument postulates that in other occurrences, a firm's debt-equity ratio has no significant effect on its market value (Modigliani and Miller, 1958). The second argument (Modigliani and Miller, 1961) asserts that a firm's physical ability has an insignificant effect on its WACC and the third argument (Modigliani and Miller, 1965) establishes that firm market value is independent of its dividend policy. This theory assumes that there exists a perfect market where there is information symmetry, no taxes, no bankruptcy costs and no transaction costs. The value of the firm is therefore not affected by its CS but rather dependent on the ability of the firm's assets to generate income.

Under the first proposition where there are no taxes, it is assumed that investors will value the firm based on its cash flows regardless of how the firm is financed. This is because there is no benefit of interest deductibility as a result of using debt as a source of financing. Firms would therefore be indifferent to the source of capital they choose (Chen, Jung, & Chen, 2011). The second proposition where the firm's COC is independent of its financial Tangibility assumes that the cost of equity is a linear function of the firm's debt to equity ratio. The cost of debt is considered to be cheaper than the cost of equity because creditors have a preferential claim to the firm's income and assets compared to equity holders. As a result, the more debt a company uses the greater the cost of equity but the WACC remains the same. The third proposition where the value of the firm is independent of its CS, itfinalizes by stating that with a firm's investment policy, the kind of dividend payoutpolicy it will insignificantly affect the current price of neither its shares nor the total urn to its shareholders (Luigi &Sorin, 2012).

In the real world, the assumptions made under the Modigliani and Miller theorem of CS do not exist. There exists information asymmetry, taxes, transaction costs as well as bankruptcy costs. This therefore means that the results of the Modigliani and Miller theorem of CS may not be practical and only exist in theory. In the presence of taxes and other market imperfections, this study seeks to establish the effect of CS on the COC of firms listed on the NSE.

This theory is applicable to our study because the results of the Modigliani and Miller theorem of CS may not be practical and only exist in theory hence it was suitable to verify by facts effects of capital structure on the cost of capital of firms listed at the Nairobi Securities Exchange

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2.2   Conceptual Framework

Independent Variable   **Dependent Variable**
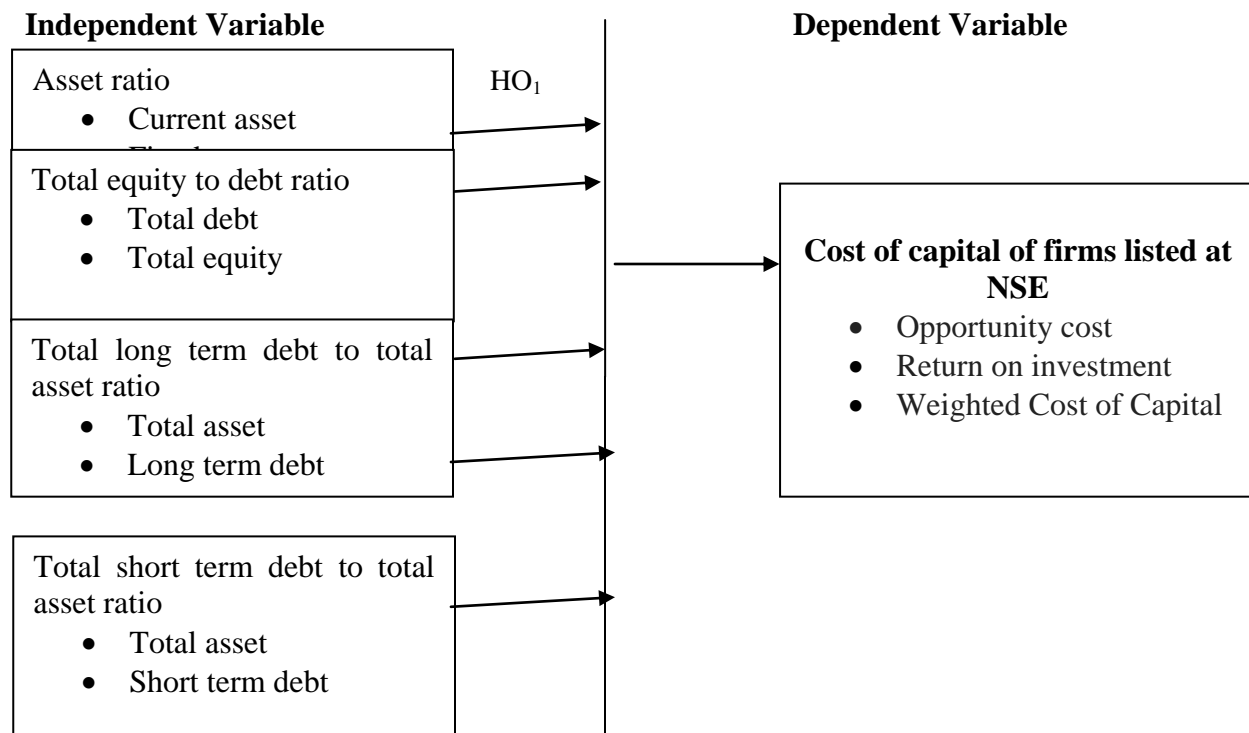
Independent Variables   **Dependent Variable**
Figure 2.5: Conceptual Framework

3.0 METHODOLOGY

The study adopted a descriptive research design. The target population for this study were the 41 listed companies on the NSE which were drawn from a list of 65 after applying various exclusion and inclusion criteria. A census of 41 firms was therefore used. Secondary Data for the year 2010 to 2014 was collected from the NSE handbook. Data collected was analysed using descriptive statistics which included means and standard deviations. Inferential statistics such as Pearson correlation and panel regression was also used. The results were presented in form of tables, figures, charts, graphs and trend lines.

4.0 RESULTS FINDINGS

4.1 Response Rate

4.1 Asset Ratio On the Costof Capital of Firms Listed at NSE.

4.1.1 Descriptive Statistics

The first objective of this study was to establish the influence ofasset ratio on the cost of capital of 41 firms listed at NSE.Results in table 1 showed that the mean for 2010 was 0.62 ,while std.dev was 006, results also showed that mean for 2011 was 0.65 while std.dev was 0.08

,results also showed that mean for 2012 was 0.64 while std.dev was 0.07 ,2013 posted a mean of 0.63 while std.dev was 0.08 ,finally final results show that mean for 2014 was 0.64 while std.dev was 0.08.Results thus implied that asset ratio influenced the cost of capital of the 41 firms listed at NSE.

Table: 1 Asset Ratio On the Cost of Capital of Firms Listed at NSE.

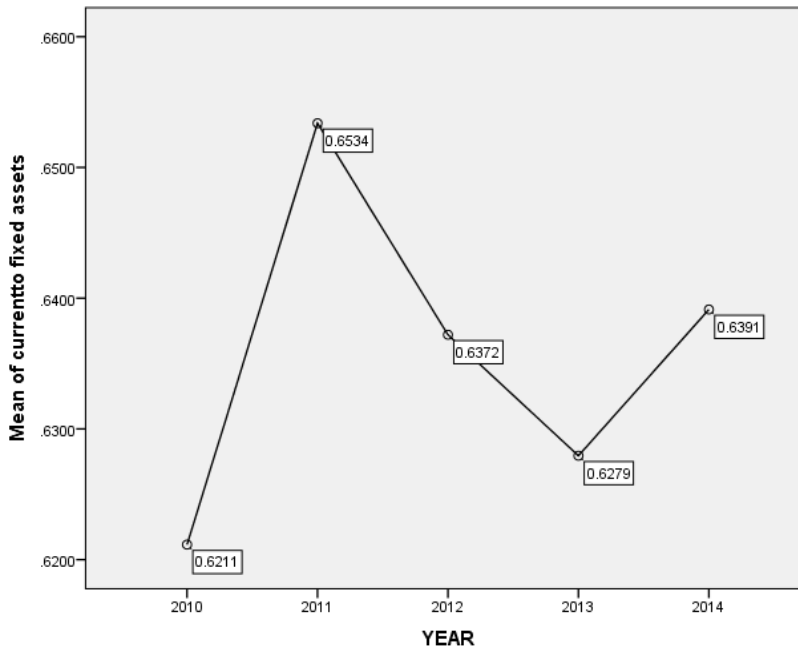|	N	Mean	Std. Dev	Std. Error
2010	41	0.62	0.06	0.01
2011	41	0.65	0.08	0.01
2012	41	0.64	0.07	0.01
2013	41	0.63	0.08	0.01
2014	41	0.64	0.08	0.01
Total	205	0.64	0.07	0.01

Source, Author 2016

These results were supported by Narayanasama (2014) who found out that that the relationship between CS and the overall COC in both sugar and spinning industries is that the overall COC increases as the proportion of debt in the CS increases. This was attributed to the high cost of debt when compared to share capital and retained earnings. Samples of 32 firms were selected for study and simple correlation was used to measure the relationship between the two variables. The results of this study indicated that the use of debt in CS affects the overall COC and thus the COC is a function of Tangibility. Secondly, it also concluded that there exists a direct relationship between CS and COC which is inconsistent with the Modigliani and Miller (1958) theory of CS.

4.1.2 Trend Analysis

This section provides graphical representation of influence of asset ratio on the cost of capitalon firms listed at NSE for 2010 to 2014.The figure 4.1 below shows the asset ratio on the cost of capital of firms listed at NSEfor 2010 to 2014.The figure indicates that Asset Ratiofor the 41 companies rose up to 0.65 to 2011 then dropped to 0.62 to 2013 and then rose to 0.63 to 2014.This implies that the asset ratio on the cost of capital structure was fluctuaing and asset ratio had an influence on the cost of capitalOf Firms Listed At NSE.

Figure 1: AssetRatio On the Cost of Capital of Firms Listed at NSE for 2010 To 2014.

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Vol.2, Issue 4, No.5 pp 84 - 105, 2017

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4. 2 Total Equity to Debt Ratio On Cost of Capital of Firms Listed at NSE

4.2.1 Descriptive Statistics

The second objective of this study was to establish the influence of debt equity ratio on the cost of capital of 41 firms listed at NSE. Results in table 4.2 showed that the mean for 2010 was 0.61 while std.dev was 0.074.Results also showed that mean for 2011 was 0.61 while std.dev was 0.08, results also showed that mean for 2012 was 0.64 while std.dev was 0.07 ,2013 posted a mean of 0.61 while std.dev was 0.08, finally final results show that mean for 2014 was 0.59 while std.dev was 0.08. The average mean for the four years was 0.59 and a varied   results of std.dev of 0.08. Results thus implied that debt equity ratio influenced the cost of capital of the 41 firms listed at NSE.

This results were in accordance to Booth (2002) who in his study asserts that an organization that puts into use equity finance improves in performance because there is a straight line of control and the resources are allocated efficiently so as to optimize the equity at hand. Jones Boateng (2003) on the other hand assert that equity capital is significantly correlated with the financial performance of firms. In spite of this, because of having no access to previous research and empirical evidence in this sector, mostly on the utilization of equity financing, the prediction is tentative.

Table: 2 Total Equity to Debt Ratio On Cost of Capital of Firms Listed at NSE

	N	Mean	Std. Deviation
2010	41	0.61	0.074
2011	41	0.61	0.086
2012	41	0.64	0.07
2013	41	0.61	0.08

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	2014	41	0.59	0.079
Total		205	0.61	0.08

Source, Author 2016

4.2.2   Trend Analysis

The figure 2 below shows the total equity to debt ratio on cost of capital of Firms Listed at NSE
for 2010 to 2014.The figure indicates that total equity to debt ratio on cost of capital of Firms for
the 41 companies rose up to 0.641 to 2012 then dropped to 0.599 in 2014.This implies that the
total equity to debt ratio influences the cost of capital of Firms Listed at NSE

Figure: 2 Total Equity to Debt Ratio On Cost of Capital of Firms Listed at NSE
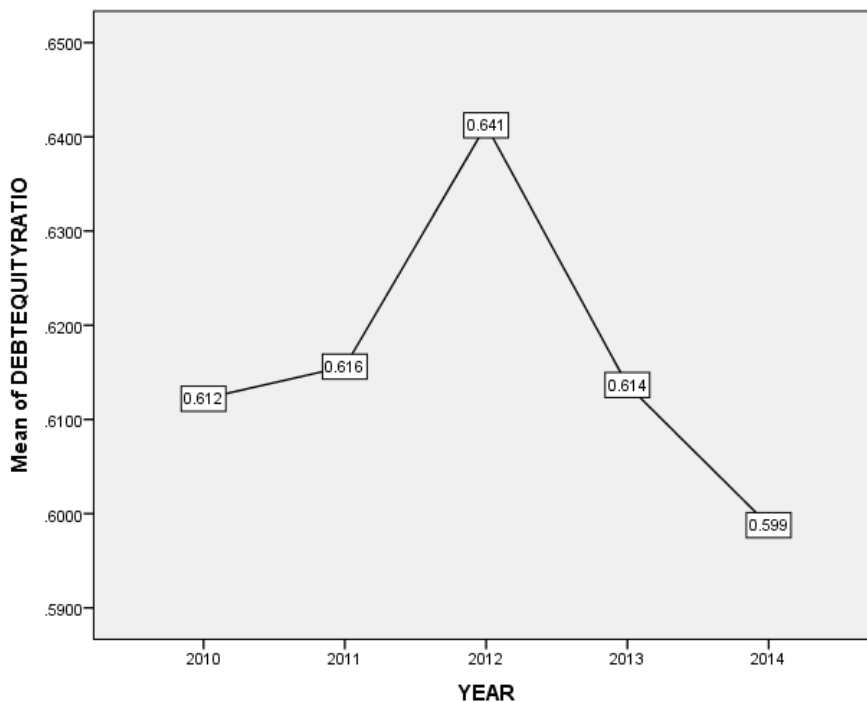
Source, Author 2016

4.3 Total Long Term Debt to Total Asset Ratio on Cost of Capital of Firms Listed atNSE

4.3.1Descriptive Statistics

The third objective of this study was to establish the influenceofasset ratio on the cost of capital
of 41 firms listed at NSE. Results in table 4.3 showed that the mean for 2010 was 0.09, while
std.dev was 0.06 results also showed that mean for 2011 was 0.10 while std.dev was 0.06
,results also showed that mean for 2012 was 0.11 while std.dev was 0.06 ,2013 posted a mean
of 0.10 while std.dev was 0.06 ,finally final results show that mean for 2014 was 0.11 while
std.dev was 0.06.The average mean for the four years was 0.10 and a varied   results of std.dev of
0.06.

Results thus implied that total long term debt to total asset ratio influenced the cost of capital of the 41 firms listed at NSE.

Results findings are supported by Lancett (2008). These are funds that lenders are owed for a time period exceeding one year from the date of current balance sheet. Long term debt goes to short term debt if it remains less than one for the debt to be cleared Long term debt is mainly used to fund business investments that take long to make returns on equity. An empirical analysis by EBaid (2009) found that there was a negative correlation between long term debt and return on assets. Long term debts are the most used types of financing by major corporate institutions due to their asset base and collateral which is needed thus a lot of financial institutions give limits to the small enterprise making them not able to access these types of loans efficiently.

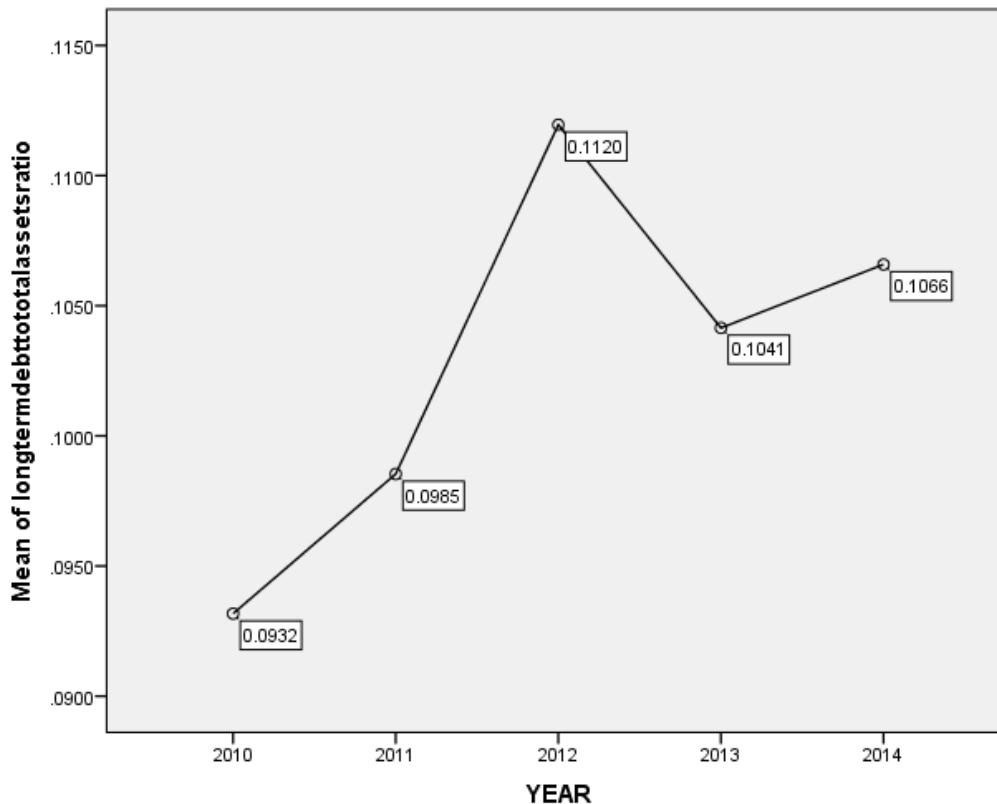**Table 3: Total Long Term Debt to Total Asset Ratio on Cost of Capital**

	N	Mean	Std. Deviation
2010	41	0.09	0.06
2011	41	0.10	0.06
2012	41	0.11	0.06
2013	41	0.10	0.06
2014	41	0.11	0.06
Total	205	0.10	0.06

Source, Author 2016

4.3.2 Trend Analysis

The figure 1 below shows the Asset Ratio On the Cost of Capital ofFirms Listed at NSE for 2010 to 2014.The figure indicates that Asset Ratio for the 41 companies rose up to 0.65 to 2011 then dropped to 0.62 to 2013 and then rose to 0.63 to 2014.This implies that the asset ration on the cost of capital structure was fluctuaing and asset ratio had an influence on the cost of capitalof Firms Listed at NSE

Figure 3: Total Long Term Debt to Total Asset Ratio On Cost of Capital

Source, Author 2016

4.4 Total Short Term Debt to Total Asset Ratio On Cost of Capital of Firms Listed at NSE

4.4.1 Descriptive Statistics

The fourth objective of this study was to establish the influence oftotal short term debt to total asset ratio on cost of capital of firms listed at NSE.Results in table 4.4 showed that the mean for 2010 was 0.29, while std.dev was 0.1. Results showed mean for 2011 was 0.31 while std.dev was 0.12. Results also showed that mean for 2012 was 0.33 while std.dev was 0.11 ,2013 posted a mean of 0.29 while std.dev was 0.11 finally final results show that mean for 2014 was 0.31 while std.dev was 0.12.The average mean for the four years was 0.31 and a varied   results of std.dev of 0.11.

Results thus implied that total short term debt to total asset ratio influenced the cost of capital of the 41 firms listed at NSE.

 Results findings are in agreement with Garcia-Terul and Martinez -Solano, (2007) who in their study assert that short-term debt has a significant relationship with the rate of growth of the firm. Jun and Jen (2003) in their study argue that there are many positive attributes of short term debt because it goes directly to financing a person's immediate needs without many complicated processes. Secondly it brings in a positive rapport between the bank and lender thus they are able to maintain a continuous relationship. According to a study carried out by Ozkan (2000) it puts away agency conflicts between shareholders and debt holders. Studies conducted revealed that

companies can use short term debt loans to solve the challenge investing below the required standards.

Table 4: Total Short Term Debt to Total Asset Ratio On Cost of Capital of Firms Listed at NSE

	N	Mean	Std. Deviation
2010	41	0.29	0.11
2011	41	0.31	0.12
2012	41	0.33	0.11
2013	41	0.29	0.11
2014	41	0.31	0.12
Total	**205**	**0.31**	**0.11**

Source, Author 2016

4.4.2 Trend Analysis

The figure 4 below shows graphicalrepresentation oftotal short term debt to total asset ratio on cost of capital of firms listed at NSEfor 2010 to 2014.The figure indicates that total short term debt to total asset ratio on cost of capital of firms listed at NSE for 2010 to 2014 rose up to 0.332 to 2012 then dropped to 0.28 in 2013 and then rose to 0.305 in 2014.This implies that the total short term debt to total asset ratio cost of capital of firms listed at NSEwas fluctuaing and total short term debt to total asset ratio had an influence on the cost of capital of firms listed at NSE.

Figure 4: Total Short Term Debt to Total Asset Ratio On Cost of Capital of Firms Listed at NSE
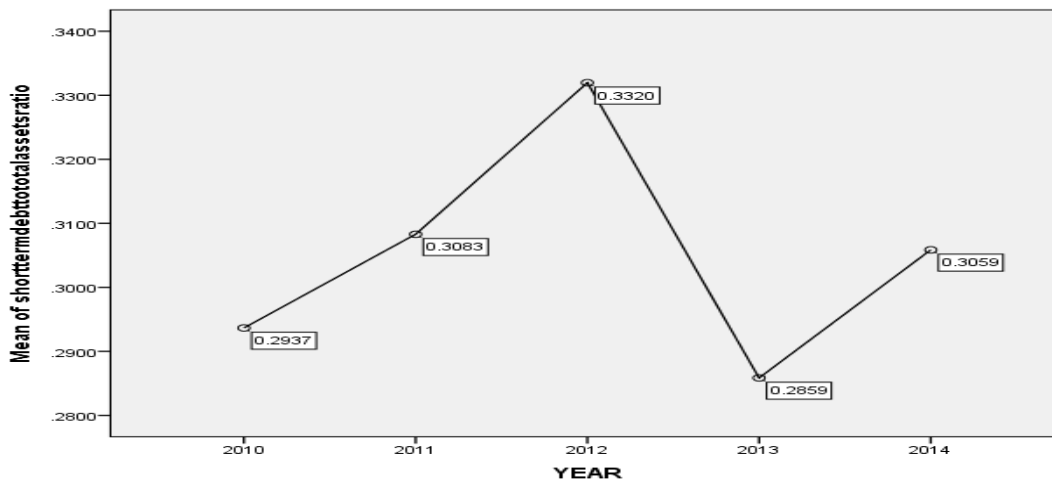
Source, Author 2016

4.5 Cost of Capital of Firms Listed at NSE

4.5.1Descriptive Statistics

The study sought to establish the cost of capital of firms listed at NSEfirms. Results in table 4.5 showed that the mean for 2010 was 0.15 while std.dev was 0.04, results also showed that mean for 2011 was 0.16 while std.dev was 0.05,results also showed that mean for 2012 was 0.18 while std.dev was 0.04 ,2013 posted a mean of 0.17 while std.dev was 0.05 ,finally final results show that mean for 2014 was 0.16 while std.dev was 0.06. The average mean for the four years was 0.17 and varied results of std.dev of 0.04. Results thus implied that total long term debt to total asset ratio influenced the cost of capital of the 41 firms listed at NSE.

**Table 5: Cost of Capital of Firms Listed at NSE**

	N	Mean	Std. Deviation
2010	41	0.15	0.04
2011	41	0.16	0.05
2012	41	0.18	0.04
2013	41	0.17	0.05
2014	41	0.16	0.04
Total	205	0.17	0.04

Source, Author 2016

4.5.2 Trend Analysis

The figure 4.5 below showsgraphical representationof cost of capital of firms listed at NSEfor 2010 to 2014.The figure indicates that cost of capital of firms of listed at NSEfrom2010 to 2014rose up to 0.178 to 2012 then dropped to 0.162 in 2014 .This implies that capital of firms listedat NSEwas fluctuaing.

Figure5: Cost of Capital of Firms Listed at NSE
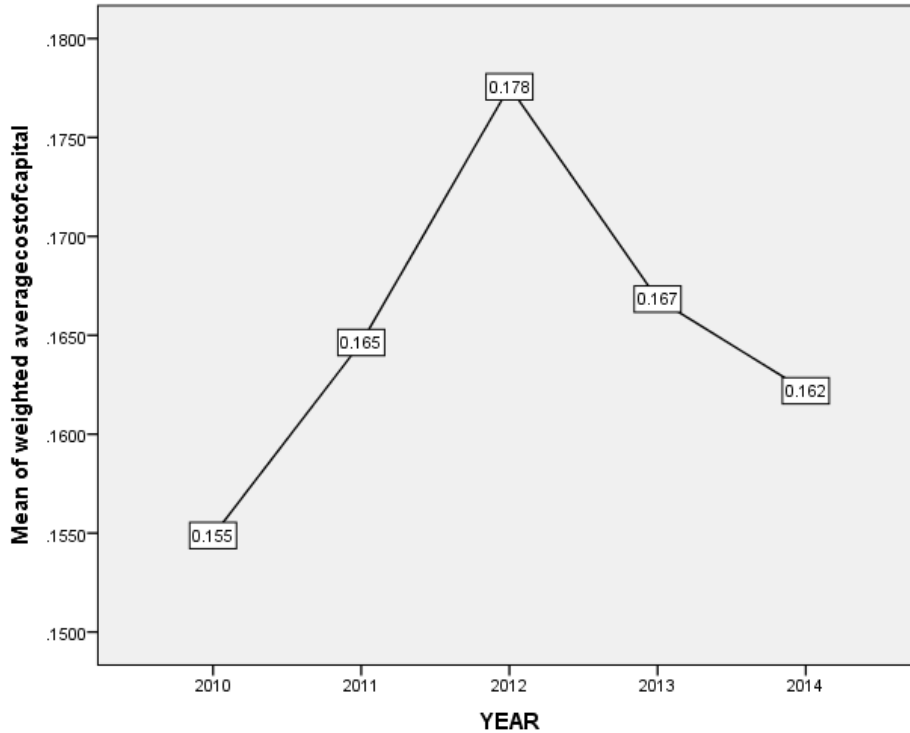
Source, Author 2016

4.6 Correlation Analysis

Asset ratio and costofcapital were positively and significantly related (r=0.268, p=0.000).Total equity to debt ratio and costofcapitalwere positively and significantly related (r=0.376, p=0.000).In addition, Total Long Term Debt to Total Asset Ratio and CostofCapital were positively and significantly related (r=0.361, p=0.000).Total Short Term Debt to Total Asset Ratio and CostofCapitalwerepositively and significantly related (r=-0.455, p=0.000). This implies that an increase Asset RatioTotal Equity To Debt Ratio,Total Long Term Debt To Total Asset Ratio Total Short Term Debt, leads to an improvement in costof capital.

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Table: 6 Correlation Analysis

		CostOfCapital	asset ratio	Total Equity To Debt Ratio	total long term debt to total asset ratio	Total Short Term Debt To Total Asset Ratio
Cost OfCapital	Pearson Correlation	1	.268	.376	.361	.455
	Sig. (2-tailed)		0	0	0	0
Asset Ratio	Pearson Correlation	.268	1	0.039	0.072	.138
	Sig. (2-tailed)	0		0.575	0.304	0.048
Total Equity To Debt Ratio	Pearson Correlation	.376	0.039	1	.252	.249
	Sig. (2-tailed)	0	0.575		0	0
Total Long Term Debt To Total Asset Ratio	Pearson Correlation	.361	0.072	.252	1	0.07
	Sig. (2-tailed)	0	0.304	0		0.32
	N	205	205	205	205	205
Total Short Term Debt To Total Asset Ratio	Pearson Correlation	.455	.138	.249	0.07	1
	Sig. (2-tailed)	0	0.048	0	0.32	

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

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

Source, Author 2016

4.7 Overall regression model

The results presented in table 4.7 present the fitness of model used of the regression model in explaining the study phenomena. Asset Ratio, Total Equity to Debt Ratio, Total Long Term Debt to Total Asset Ratio and TotalShort Term Debt to Total Asset Ratio explained 37.8% of the variation in CostofCapital. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 7: Model Fitness

Indicator	Coefficient
R	0.624
R Square	0.390
Adjusted R Square	0.378
Std. Error of the Estimate	0.399

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In statistics testing the p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number found is less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; else the model would be regarded as non-significant.

Table 4.7 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of Cost of Capital of Firms Listed atNSE.

This was supported by an F statistic of 31.956 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. This study is supported by Tatum, (2015). An optimal CS is therefore one where the combination of debt and equity minimizes the COC. CS and COC have a direct relationship in terms of the financial well-being of a company. When in balance, both the CS and the specific type of COC employed can aid in selecting the right type of investments to make on behalf of the company.

Table 8: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.148	4	0.037	31.956	**.000**
Residual	0.231	200	0.011		
Total	**0.379**	**204**			

Asset Ratioand cost of capital are positively and significantly related (r=0.112, p=0.01). Total Equity to Debt Ratio and cost of capital are positively and significantly related (r=0.113, p=0.000). Total Long Term Debt to Total Asset Ratioand cost of capital were positively and significantly related (r=0.197, p=0.000), while Total Short Term Debt to Total Asset Ratio and cost of capital were positivelyand significantly related (r=-0.135, p=0.000).

This agrees withTatum,(2015) who says that an optimal CS is therefore one where the combination of debt and equity minimizes the COC. CS and COC have a direct relationship in terms of the financial well-being of a company. When in balance, both the CS and the specific type of COC employed can aid in selecting the right type of investments to make on behalf of the company.

Table 9: Regression of Coefficients

	B	Std. Error	t	Sig.
(Constant)	-0.037	0.027	-1.374	0.000
Asset Ratio	0.112	0.033	3.409	0.001
Total Equity to Debt Ratio	0.113	0.031	3.601	0.000
Total Long Term Debt To Total Asset Ratio	0.197	0.042	4703	0.000
Total Short Term Debt To Total Asset Rati0	0.135	0.022	6.201	0.000

$Y=-0.037+0.112_{X1}+ 0.113_{X2}+ 0.197_{X3}+0.135_{X4}$

The specific model was;

Where;

Y=cost of capital

X1 is Asset Ratio

X2 is Total Equity to Debt Ratio

X3 is Total Long Term Debt to Total Asset Ratio

X4 is Total Short Term Debt to Total Asset Ratio

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

5.2.1 The Influence of Asset Ratio on the Cost of Capital

The first objective of the study was to establish the influence of asset ratio on the cost of capital. The findings revealed that asset ratio had a positive and significant effect on the cost of capital of Firms Listed at NSE. This is also supported by the secondary data statements obtained from NSE. This was also supported by the regression results which revealed that asset ratio had a positive and significant effect on cost of capital as supported by a beta coefficient of 0.112 and a p value of 0.001.

Contrary to the results, Amjad*et al* (2007) posit that a higher fixed total assets ratio ensures higher level of security, thus offering more value to liquidate assets in the case of bankruptcy. In a similar vein, Huang & Song, (2006) note that firm's tangible assets can be used as collateral thereby reducing the lender's risk of suffering business risk. On the same note, Amidu, (2007) infers that tangibility has a direct relationship with the firm's CS when using the ratio of fixed assets over total assets as a measure of tangibility. However, when building on the preposition of Modigliani & Miller, (1958), cost of capital is independent of the degree of tangibility of in a firm's cost of capital. The same results as that of Modigliani & Miller, (1958) were evidenced among Nepalese firms whereby tangibility was found to have no effect on the firm's COC (Khadka 2006). From the extant literature, it appears that the relationship between asset ratio and cost of capital is mixed since previous authors have found differing results on the effect of asset tangibility on COC. The study findings however have exhibited an insignificant effect between the two variables

5.2.1 Effect of Total Equity to Debt Ratio on Cost of Capital of Firms Listed at NSE

The second objective of the study was to establish the effect of total equity to debt ratio on cost of capital of firms listed at NSE. The findings revealed that long term debt to total asset ratio had a positive and significant effect on the cost of capital of Firms Listed at NSE. This is also supported by the secondary data statements obtained from NSE. This was also supported by the regression results which revealed that long term debt to total asset ratio had a positive and significant effect on cost of capital as supported by a beta coefficient of 0.113 and a p value of 0.000.

Similarly, Booth (2002) argues that the firm that uses equity finance is able to make its performance better since there is direct control. In fact, the equity holders ensure that resources are allocated efficiently and in so doing, there is maximization of shareholder's wealth. As well,

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Kisgen (2006), postulates that equity capital enables equity holders to exert influence and monitor managerial decisions continuously through the board of directors hence making it easier to take immediate corrective action whenever inefficiency is noted in the utilization of resources. Moreover,equity holders can work in hand with managers so as to bring out the desired changes. Such coordination leads to high firm performance (Gibson, 2002).

5.2.3Establish the InfluenceofLong Term Debt to Total Asset Ratio On the Cost of Capital

The third objective of the study was to establish the influenceoflong term debt to total asset ratio on the cost of capital.The findings revealed that long term debt to total asset ratiohad a positive and significant effect on the cost of capitalof Firms Listed at NSE.This is also supported by the secondary data statements obtained from NSE. This was also supported by the regression results which revealed thatlong term debt to total asset ratio had a positive and significant effect on cost of capital as supported by a beta coefficient of 0.197 and a p value of 0.000.

In conformity with the study findings, Pelham (2000) revealed that long term debts gave minor firms greater competitive advantages thus a direct relationship between long term debts and firm performance. Pelham (2000) was of the opinion that long term debts were more advantageous to small firms compared to large ones and it contributed to the growth/share, /sales effectiveness, and gross profit in small and medium size manufacturing firms. Consistently, Mensah, (2004) notes that the development of customized products and appropriate credit management systems has led to increased lending to SMEs thereby improving their performance.Nonetheless, results from the According to the European Commission (2008) many large financial institutions have reduced their level of lending to SMEs thus reducing potential for growth of these firms. Additionally, as opposed to study findings, the study by Ebaid (2009) found that there was no significant relationship between long term debt and return on assets.

5.2.4 Influence ofTotal Short Term Debt to Total Asset RatioOn the Cost of Capital.

The final objective of the study was to establish the influence ofTotal Short Term Debt to Total Asset Ratio on the cost of capital. The findings revealed that Total Short Term Debthad a positive and significant effect on the cost of capitalof Firms Listed at NSE.This is also supported by the secondary data statementsobtained from NSE. This was also supported by the regression results which revealed thatlong term debt to total asset ratio had a positive and significant effect on cost of capital as supported by a beta coefficient of 0.135and a p value of 0.000.

As opposed to the study findings, Garcia-Terul and Martinez -Solano, (2007) revealed that short-term debt has a significant relationship with firm performance. It could be attributed to the fact that short-term debt satisfies more quickly a firm's financial needs and benefits (Jun and Jen 2003). However, Ebaid (2009) found out that there was a negative impact of short term debt on return on assets.

5.3   Conclusion

The study concluded that asset ratio, total equity to debt ratio, total long term debt to total asset ratio and total short term debt to total asset ratioinfluences cost of capital of firms listed in the NSE.The argument in the literature is that higher fixed total assets ratio ensures higher level of security, thus offering more value to liquidate assets in the case of bankruptcy.

Anorganization that puts into use equity finance improves in performance because there is a straight line of control and the resources are allocated efficiently so as to optimize the equity at hand. Furthermore, total long term debt to total asset ratio was shown to have a positive and significant effect on COC. This is as a result of the competitive advantage accrued to firms because of receiving financing.Short term debt to total asset ratiofinancing facilitates the relation between the firm and the lender due to frequent renewals, can be used as a mode of financing as short term debts are easy to repay with minimum constraints.

5.3   Recommendations

In light of the findings and conclusion of the study, asset ratiohas no significant effect on COC. It is therefore recommended that firms hold higher fixed total assets ratio so that they can have high levels of security and have more value on the liquid assets in the case of bankruptcy.

Additionally, firms can take advantage of equity financing so that they can benefit from direct control and appropriate utilization of resources. There is also need for equity financing so as to effectively monitor and coordinate managers so that they act in a manner that increases firm performance.

Further, total long term debt to total asset ratio positively and significantly influences COC. It is therefore imperative for financial institutions to develop a favorable credit policy that will facilitate long term lending by small firms. There is also need for financial institutions to develop customized product that will increase lending to small firms thereby improving their financial performance.

Finally, firms can benefit from short term debt financing through close monitoring of the management thereby mitigating agency conflicts between shareholders and debt holders as well as the problem of underinvestment. Further, firms need to use short term financing as a means to instill confidence by banks through frequent renewals. Short term financing can also be used by firms as a means to obtain credit condition benefits.

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