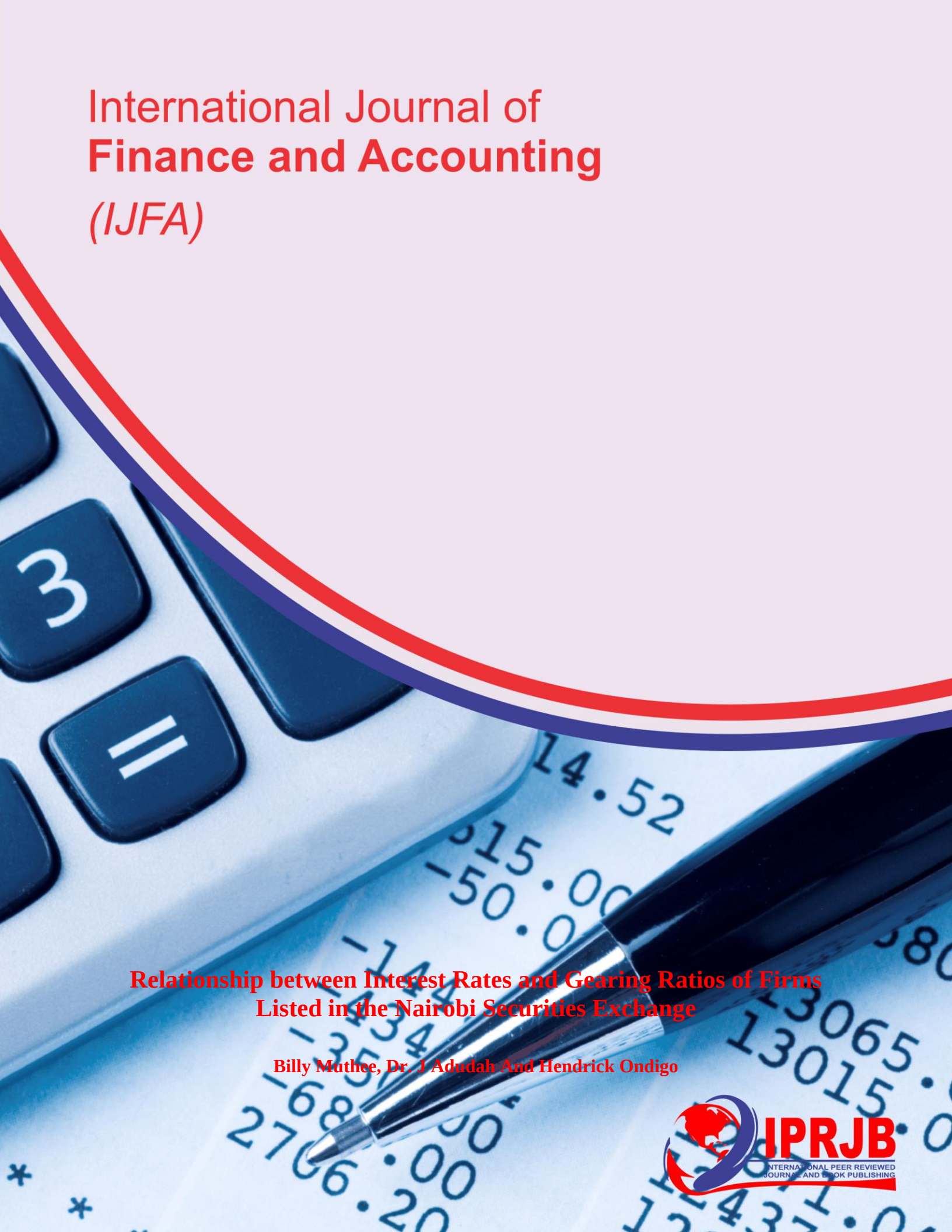
International Journal of
Finance and Accounting
(IJFA)



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IPRJB
INTERNATIONAL PEER REVIEWED JOURNAL AND BOOK PUBLISHING

International Journal of Finance and Accounting
ISSNxxxx-xxxx (Paper) ISSN xxxx-xxxx (Online)
Vol.1, Issue 1 No.1, pp 30-44, 2016

www.iprjb.org

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Abstract

Purpose: The objective of this study was to establish the relationship between interest rates and gearing ratios of firms listed in the Nairobi Securities Exchange.

Methodology: The study was carried out using a longitudinal research design, employing secondary quantitative data. The population for this study constituted of all listed companies in the Nairobi Securities Exchange. As at December 2013, there are 62 companies listed on the Nairobi Securities Exchange. This study did not sample and hence a census survey was carried out for the study. The study used secondary data. All the data was collected by review of documents, annual reports of the companies, the Nairobi Securities Exchange Handbooks and published books of accounts. The selected period was year 2009 to year 2013 (5 years).The researcher used frequencies, averages and percentages in this study. The researcher used Statistical Package for Social Sciences (SPSS) to generate the descriptive statistics and also to generate inferential results. Regression analysis was used to demonstrate effect of interest rate on the gearing ratio of listed firms.

Results: These results showed that there is a negative relationship between gearing ratio and interest expense and profitability as supported by beta coefficients of -0.486 and -0.129 respectively. Firm size had a positive correlation (0.275), which means that an increase in firm size causes an increase in the gearing ratio. The analysis also yields results that showed that interest expense, firm size and profitability were statistically significant.

Unique contribution to theory, practice and policy: the study recommended that; the firms should adopt strategies that increase their firm size resulting to a scenario whereby they increase their collateral and thus granting them the ability to access more debt, firms should ensure that they optimize their profits so as to reduce their gearing ratio and thus cause growth, firms should

seek to adopt other ways of financing their activities since interest expense had a negative relationship with gearing ratio.

Keywords: *gearing ratio and interest expense and profitability, firm size*

1.0 INTRODUCTION

Interest rates represent the cost of borrowing capital for a given period of time. According to Myers and Stewart (1984), prevailing interest rates are key to many firms, because of indexing of interest rates to inflation. Studies show that interest rates affect capital structure decisions. Jalilvand and Harris (1984) in a study of United States of America(USA) Corporation obtained results which suggested that financial decisions are interdependent and firm size, interest rate conditions and stock price levels affect speed of adjustments to capital structure implying that they do influence it. Singh (1993) notes that if the interest rate is high investment falls, a low rate of interest may lead to increase in investment activity.

Increased investment may imply use of more debt. It can thereby be concluded that a relationship exists between investment and use of debt and level of interest rates. Interest expenses is an expenses directly associated with the value of debts. Thus increase in interest rate might influence the firms' gearing level. Increase in interest rate means higher expenses incurred for debt capital thus it will reduce level of gearing. Interest rate has a positive relationship with gearing (Owusu and Badu, 2009).

Gearing ratio is a general term describing a financial ratio that compares some form of owner's equity (or capital) to borrowed funds. Gearing is a measure of financial leverage, demonstrating the degree to which a firm's activities are funded by owner's funds versus creditor's funds. Different firms use different proportion or mix. A firm may adopt to use all equity or all debt. All equity is preferred by investors as they are not given conditions on the type of investment and usage of funds from providers. All debt is preferred by investors in a country where debt interest is tax deductible. Firms use a mix of debt and equity in various proportions in order to maximize the overall market value of the firm (Abor, 2007).Gearing ratio is the proportion of debt to equity of the firm. It is calculated by dividing the total debt to total equity of the firm. It can further divided into two; total short-term debt divided by total equity and long-term debt divided by total equity. The firm with more than 50% debt-to-equity ratio is considered as high geared firm while firm with debt-to-equity ratio less than 50% is a low geared firm.

Business enterprises use debt in their businesses, because it offers them potential to increase the volume of their operations and increase the average return on their equity funds. The use of debt will have this effect only if the rate of return on the investment is greater than the rate of return on the debt (Watkins, 2002). The borrowing firm takes a chance to use debt in the hope that it will elevate the firm to a more valuable level, by increasing the turnover and therefore increase the profits. The financial leverage chance will arise if the rate of interest charged to the firm is lower than the internal rate of return (IRR) for the company, in which case the firm will be making enough to pay the interest charged and the principal repayment and retain the surplus for the shareholders.

On the other hand the firm may experience a financial leverage risk that the returns of the business are not enough to cover the interest charged. This occurs when the rate of interest exceeds the internal rate of return of the company. To avoid liquidation, the firm will have to use

part of the shareholders' funds to repay the interest and principal. This could eventually lead to erosion of the equity and the collapse of the business. The simplest way to assess whether borrowing has increased the return on equity is to contrast the return on the investment with the loan interest rate. When the return is higher than the loan interest rate, there is positive leverage (that is the return on equity increases as more is borrowed (Rowland, 2002).

The Nairobi securities exchange (NSE, 2011) was established in 1954 as a voluntary association of stock brokers with the objective to facilitate mobilization of resources to provide long term capital for financing investments. Through stringent listing requirements the market promotes higher standards of accounting, resource management and transparency in the management of business. The NSE is regulated by Capital Markets Authority (CMA, 2011) which provides surveillance for regulatory compliance. The exchange has continuously lobbied the government to create conducive policy framework to facilitate growth of the economy and the private sector to enhance growth of the stock market (Ngugi, 2005). The NSE is also supported by the Central Depository and Settlement Corporation (CDSC) which provides clearing, delivery and settlement services for securities traded at the Exchange. It oversees the conduct of Central Depository Agents comprised of stockbrokers and investments banks which are members of NSE and Custodians (CDSC, 2004). These regulatory frameworks are aimed to sustain a robust stock market exchange that supports a cogent and efficient allocation of capital allowing price discovery to take place freely based on the market forces.

1.2 Problem Statement

Capital structure is one of the contentious issues in finance. Various theories have been put forward by researchers to justify the existence of optimal capital structure of a firm. The theories have been developed to try to unearth the financing preferences managers may have in selecting a particular capital structure (Abor, 2007). Different nations have different tax regulations and culture (Suh, 2008) hence the results of one nation may not apply to other nations as the interactions between various variables may not be the same. Hence, Kenya a developing nation require such a research to enable managers and investors to undertake prudent investment decisions as researches in this area are only centered on developed nations.

Magara (2012) did a study on capital structure and its determinants at the Nairobi Securities Exchange. The study sought to find out the major determinants of capital structure. It was established that from the period 2007 to 2011, there was a positive significant relationship between the firm size, tangibility and growth rate and the degree of leverage of the firm. The study did not take into consideration macro- economic factors like inflation and interest rates.

Muthama, et al. (2013) did analysis of macroeconomic influences on capital structure of listed companies in Kenya. The research concluded that macro-economic factors have strong influence on capital structure, GDP growth rate had positive influence on long term debt ratio and negative influence on total and short term debt ratio. Inflation had negative influence on short term debt ratio, interest had positive influence on long term and total debt ratio and negative influence on short term debt ratio.

Findings appear to suggest that there is a significant impact of interest rate on gearing ratio of listed firms at the NSE. No sufficient exploitation study has been done on effect of interest rate on the gearing ratios of listed firms in Nairobi security exchange. This study therefore sought to

fill in this gap by investigating the relationship between interest rates and gearing ratios of firms listed in the Nairobi Securities Exchange. The question that the study addressed was: What is the relationship between interest rates and gearing ratios of firms listed in the Nairobi Securities Exchange?

1.3 Research Objective

The objective of this study was to establish the relationship between interest rates and gearing ratios of firms listed in the Nairobi Securities Exchange.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

Trade-off theory of Capital Structure and Taxes

Myers (2001) in his research on capital structure noted that the trade-off theory justifies moderate debt ratios. The purpose of the trade-off theory of capital structure is to explain the strategy a firm uses to finance investments which may be by equity and sometimes by debt. Trade off theory predicts that a weak firm will rely exclusively on a bank for debt capital. That is, for weak firms, bank debt dominates any mix of market and bank debt regardless of the priority structure. This result contradicts the notion that small/young firms avoid public debt because they lack access to such markets or face prohibitive costs in so doing (Hackbarth, Hennessy, &Leland, 2007). Within the tradeoff theory, there is a debt "pecking-order" with bank debt being preferred to market debt due to the lower implied bankruptcy costs. When the bank holds all expost bargaining power, the desired level of debt tax shields can be achieved using only bank debt (Hackbarth et al., 2007). While Myers noted that the firm would borrow up to the point where the marginal value of tax shields on additional debt is offset by the increase in the present value of possible costs of financial distress (Myers 2001).

According to Modigliani and Miller (1958), the attractiveness of debt decreases with the personal tax on the interest income. A firm experiences financial distress when the firm is unable to cope with the debt holders' obligations. If the firm continues to fail in making payments to the debt holders, the firm can even be insolvent. The theory can be explained by costs of financial distress and agency costs (Pandey, 2005). In addition direct costs of financial distress to include costs of insolvency which may manifest in the form of demoralised employees, customers who eventually stop purchasing a company's products, investors who may decline to supply capital or avail it at a high cost and lastly managers who may pass up profitable investment opportunities to in order to avoid any sort of risk (Pandey, 2005).

Murinde et al (2002) stated that tax policy has an important effect on capital structure decisions of a firm. This is in the sense that corporate tax allows firms to deduct interest on debt when computing taxable profits. This suggests that tax advantages derived from debt would lead firms to be entirely financed through debt because interest payments associated with debt are tax deductable whereas payments associated with equity such as dividends aren't tax allowable deductions. This means that the effect of more or less debt in a firm may either reduce or increase firm value depending on the nature of one's business. It was concluded that trade-off theory couldn't account for the correlation between high profitability and low debt ratios. Rajanet al (1995) also confirmed a negative correlation between profitability and leverage for the

United States, Japan and Canada although no significant correlations were found for France, Germany, Italy and Britain.

Irving Fisher's Theory of Interest Rates

The bridge or link between income and capital is the rate of interest. We may define the rate of interest as the per cent of premium paid on money at one date in terms of money to be in hand one year later. The theory of interest bears a close resemblance to the theory of prices, of which, in fact, it is a special aspect. The rate of interest expresses a price in the exchange between present and future goods. Just as, in the ordinary theory of prices, the ratio of exchange of any two articles is based, in part, on a psychological or subjective element their comparative marginal desirability so, in the theory of interest, the rate of interest, or the premium on the exchange between present and future goods, is based, in part, on a subjective element, a derivative of marginal desirability; namely, the marginal preference for present over future goods. This preference has been called time preference, or human impatience (Fisher, 1930).

What are these goods which are thus contrasted? At first sight it might seem that the goods compared may be indiscriminately wealth, property, or services. It is true that present machines are in general preferred to future machines; present houses to future houses; land possessed today to land available next year; present food or clothing to future food or clothing; present stocks or bonds to future stocks or bonds; present music to future music, and so on. But a slight examination will show that some of these cases of preference are reducible to others (Fisher, 1930). When present capital wealth, or capital property, is preferred to future, this preference is really a preference for the income expected to flow from the first capital wealth, or capital property, as compared with the income from the second. The reason why we would choose a present fruit tree rather than a similar tree available in ten years is that the fruit yielded by the first will come earlier than the fruit yielded by the second. The reason one prefers immediate tenancy of a house to the right to occupy it in six months is that the uses of the house under the first leasehold begin six months earlier than under the second. In short, capital wealth, or capital property, available early is preferred to the capital wealth or capital property of like kind, available at a more remote time simply and solely because the income from the former is available earlier than the income from the latter (Fisher, 1930).

Time preference, a concept which psychologically underlies interest, lends itself to express any situation, either preference for present as against future goods or preference for future as against present goods or for no preference. The term impatience carries with it the presumption that present goods are preferred. But I shall treat the two terms (impatience and time preference) as synonymous. Henceforth the term impatience will be the one chiefly used partly because its meaning is more self-evident, partly because it is shorter, and partly because it does carry a presumption as to the usual direction of the time preference. The degree of impatience varies, of course, with the individual, but when we have selected our individual, the degree of his impatience depends on his entire income stream, beginning at the present instant and stretching indefinitely into the future; that is, on the amount of his expected real income and the manner in which it is expected to be distributed in time. It depends in particular on the relative abundance of the early as compared with the remote income items or what we shall call the time shape of the expected income stream. If income is particularly abundant in the future; that is, if the person expects an increase in his income stream, he would willingly promise to sacrifice out of that

increase, when it comes, a relatively large sum for the sake of receiving a relatively small sum at once. Thus the possessor of a strawberry patch might, in winter, be willing to exchange two boxes of strawberries, due in six months, for one available today. On the other hand, if immediate income is abundant but future income scarce, the opposite relation may exist. In strawberry season, the same man might willingly give up two boxes of his then abundant crop for the right to only one box in the succeeding winter. That is, time preference may not always be a preference for present over future goods; it may, under certain conditions, be the opposite. Impatience may be and sometimes is negative (Fisher, 1930).

Pecking Order Theory

The pecking order theory as developed by Myers (1984) stated that firms prefer internal sources of finance; they adapt their target dividend payout ratios to their investment opportunities although dividends and payout ratios are gradually adjusted to shifts in the extent of valuable investment opportunities. In addition, Myers (1984) stated that in the event that external finance is required, firms are most likely to issue the safest security first that is to say they start with debt then possibly convertible debt then equity comes as last resort. In summary, Myers' argument was such that businesses adhere to a hierarchy of financing sources and prefer internal financing when available. Should external financing be required, debt would be preferred over equity.

Pandey (2005), also concurred with Myers' argument when he noted that managers always preferred to use internal finance and would only resort to issuing shares as a last resort. He went on to add that the pecking order theory was able to explain the negative inverse relationship between profitability and debt ratio within an industry however; the theory did not fully explain the capital structure differences between industries. Scherr et al (1993); Holmes et al (1991) and Quan (2002) considered the pecking order theory as an appropriate description of Medium Sized Enterprises' financing practices because debt is by far the largest source of financing and that small and medium enterprise managers tend to be owners of the business who do not normally want to dilute their ownership. In addition, they concurred that firms consequently tend to prefer internal financing to external financing of any sort and if they must obtain external funding, they have a preference of debt over equity. They also noted that the order of preference reflected the relative costs of various financing options. Firms therefore would prefer internal sources of finance as compared to expensive or costly external finance and that firms that are profitable and therefore generate earnings are expected to use less debt than those that do not generate high earnings.

Cosh and Hughes (1994) on the other hand argued that within the overall pecking order theory, Small and Medium Sized Enterprises' when compared to large enterprises would depend more on holding excess liquid assets to meet discontinuities in investment programs, depend more on short term debt including trade credit and overdrafts, rely to a greater extent on hire purchase and leasing equipment. Therefore in relation to Small Medium Enterprises financing, (Cosh & Hughes, 1994) proposed a refinement of the theory due to its lack of information to assess risk both on individual and collective basis.

2.2 Empirical Review

Maina and Ishmail (2014) did a study on the effect of capital structure on financial performance of firms listed at the NSE. The population of interest of this study was the firms quoted at the NSE, and a census of all firms listed at the NSE from year 2002-2011 was the sample. Secondary data was collected from the financial statements of the firms listed at the NSE. The study used Causal research design and Gretl statistical software to perform the panel Regression analysis. The study concluded that debt and equity are major determinants of financial performance of firms listed at the NSE. There was evidence of a negative and significant relationship between capital structure (DE) and all measures of performance. This implies that the more debt the firms used as a source of finance they experienced low performance. The study also concluded that firms listed at NSE used more short-term debts than long term.

Muthama, et al. (2013) did analysis of macroeconomic influences on capital structure of listed companies in Kenya. The research concluded that macro-economic factors have strong influence on capital structure, GDP growth rate have positive influence on long term debt ratio and negative influence on total and short term debt ratio. Inflation have negative influence on short term debt ratio, interest have positive influence on long term and total debt ratio and negative influence on short term debt ratio.

Owusu and Badu (2009) in their study stated inflation as other factor that may effect gearing decision of firms. Inflation may encourage and discourage demand and supply of loan. In time with high inflation, loan provider will less likely to offer loan due to reduce in real value of money. High interest rate is required to compensate the reducing in real value of money. Thus, inflation may give some effect to the gearing ratio but there is no empirical result testing the hypothesis done by author. The study only did a survey questionnaire to persons in 54 large construction firms operating in Ghana.

3.0 RESEARCH METHODOLOGY

The study was carried out using a longitudinal research design, employing secondary quantitative data. The population for this study constituted of all listed companies in the Nairobi Securities Exchange. As at December 2013, there are 62 companies listed on the Nairobi Securities Exchange. This study did not sample and hence a census survey was carried out for the study. Secondary data was used in the study. The researcher used Statistical Package for Social Sciences (SPSS) to generate the descriptive statistics and also to generate inferential results. Regression analysis was used to demonstrate effect of interest rate on the gearing ratio of listed firms.

Regression analysis was used to determine the relationship between the dependent variable and the independent variables. A multivariate regression model was used to link the independent variables to the dependent variable as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$$

Where;

Y = Gearing Ratio (Dependent Variable)

X_1 = Interest Rate (Interest Expense) (Independent Variable)

X_2 = Firm Size (control variable) (Independent Variable)

X_3 = Profitability (control variable) (Independent Variable)

β_0 = the constant term

$\beta_i i$= 1….3 measure of the sensitivity of the dependent variable (Y) to unit change in the predictor variables X_1, $X_2$and X_3.

μ = is the error term which captures the unexplained variations in the model.

4.0 RESULTS AND DISCUSSIONS

4.1 Descriptive Statistics

This section presents the descriptive results. The measures of central tendency were presented first followed by the trend analysis.

4.1.1 Measures of Central Tendency

The table 1 below indicates the descriptive statistics of the variables that were used in the study. The results indicate that the gearing ratio (debt-to-equity ratio) of the listed companies had a minimum of zero and a maximum of two point two (2.20) and its reported mean was 1.0815 which deviated by 0.76333. Similarly, the results of interest expense indicate that the minimum and maximum values in this case were 6.03 and 17.75 respectively with a mean value of 16.014 deviating by 2.236. Results also indicated that the Firm size had a minimum and maximum values of 11.12 and 20.48 respectively had a mean value of 16.01 and a standard deviation of 1.91 among the other variables adopted in the study was profitability whose reported mean and standard deviation values were 13.456 and 1.80 respectively.

Table 1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ln gearing	62	.00	2.20	1.0815	0.76333
Ln interest Expense	62	6.03	17.75	12.2478	2.23593
Ln firmsize	62	11.12	20.48	16.0136	1.91134
Ln profitabilty	62	8.71	17.89	13.4558	1.79841
Valid N (listwise)					

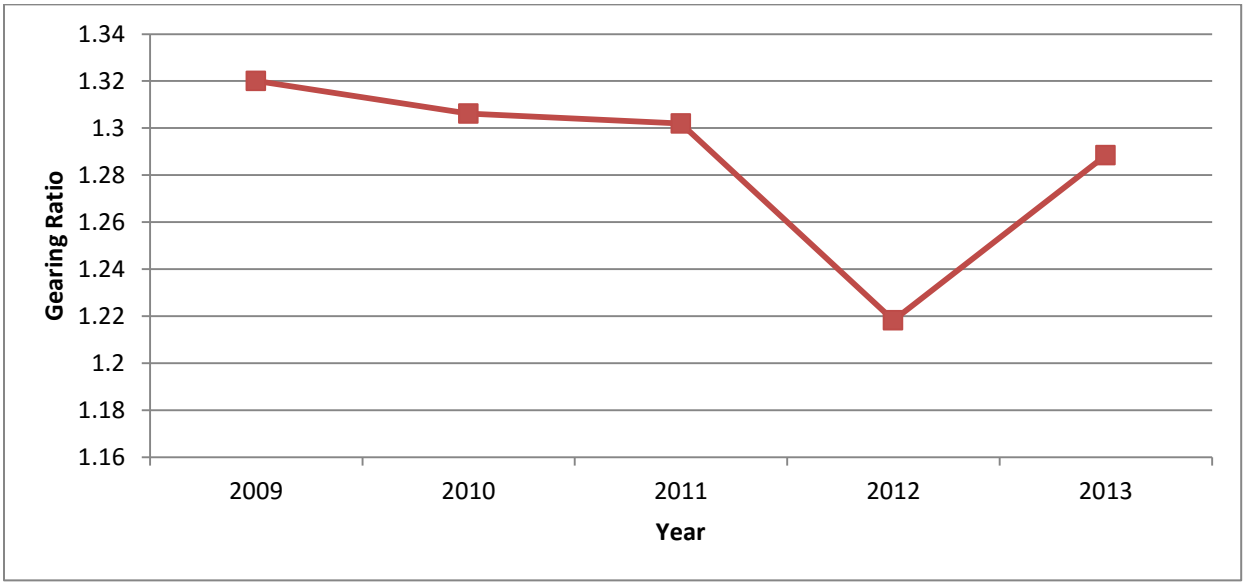
4.2 Trend Analysis

This section provides graphical representation of the movement and changes of the variables under study over the years 2009 to 2013.

4.2.1 Trend Analysis of Gearing Ratio

The figure 1 below shows the gearing ratio of firms listed at NSE for the period 2009 to 2013. The figure indicates that gearing ratio for the 62 companies used in the study over the 5 year period declined between 2009 to 2013. This implies that the firms that the proportion of debt to equity has been on the decline and firms have a higher prefference for equity as opposed to debt. It can also imply that the cost of debt is higher compared to that of equity.

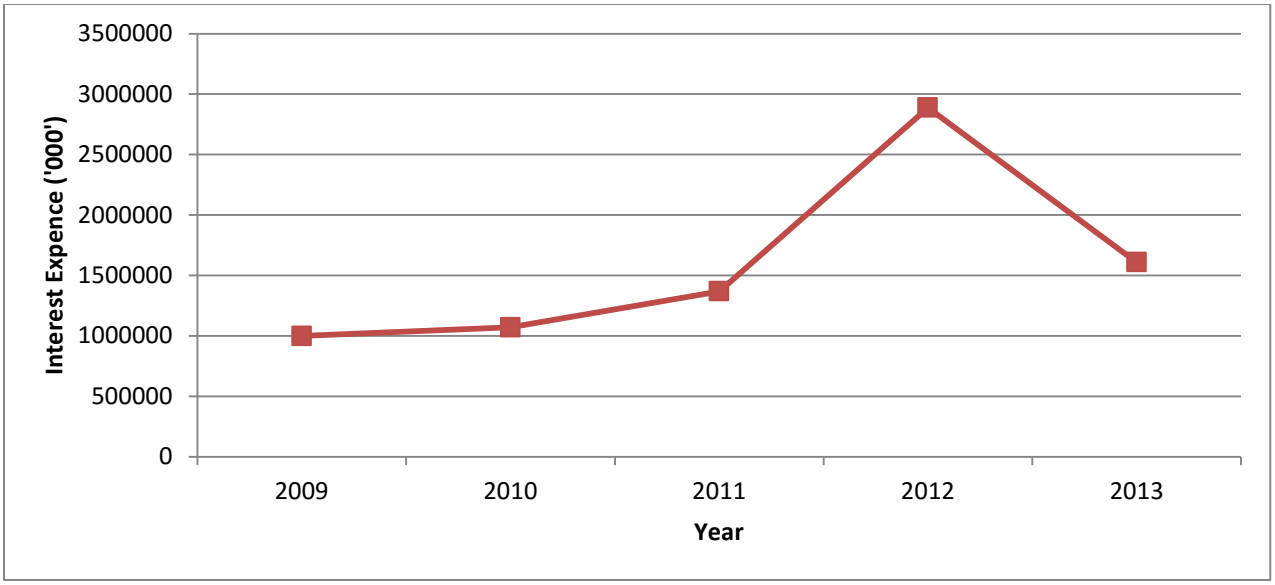
Figure 1 Trend Analysis of Gearing Ratio



4.2.2 Trend Analysis of Interest Expense

The figure 2 below shows the interest expensse of firms listed at NSE for the period 2009 to 2013. The figure indicates that interest expense for the 62 companies used in the study over the 5 year period was linear in nature between 2009 to 2011 where there was an increase and then stabilised again in the year 2013. This implies that the interest rates for borrowing were very high for all the companies. This can be explained by the declining gearing ratio.

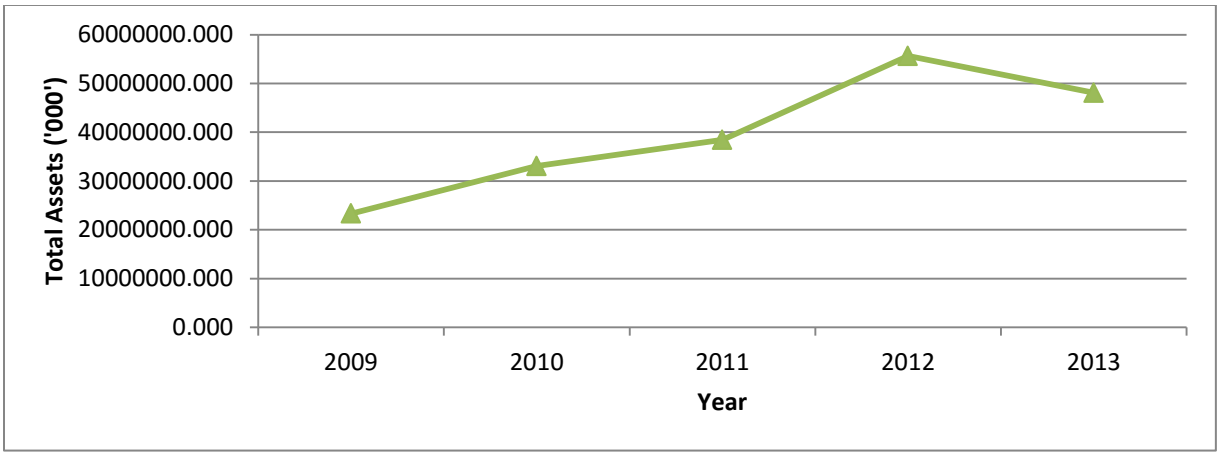
Figure 2 Trend Analysis of Interest Expense



4.2.3 Trend Analysis of Total Assets

The figure 3 below shows the total assets of firms listed at NSE for the period 2009 to 2013. The figure indicates that total assets for the 62 companies used in the study over the 5 year period was increasing linearly in nature between 2009 to 2012 where there was a decline in the year 2013. This implies that the firms have been increasing their assets over time. It can also imply that firms have been embrasing diversification and coming up with new ventures thus causing increase in their portfolios.

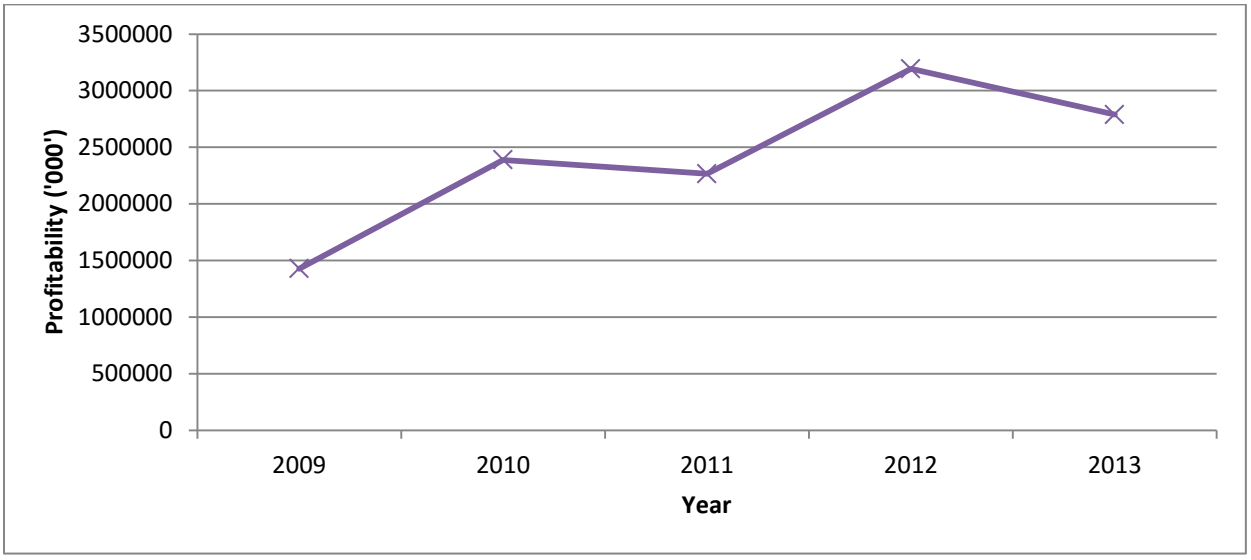
Figure 3 Trend Analysis of Total Assets



4.2.4 Trend Analysis of Profitability

The figure 4 below shows the profitability of firms listed at NSE for the period 2009 to 2013. The figure indicates that profitability for the 62 companies used in the study over the 5 year period was linear in nature between 2009 to 2012 where there was a decline in the year 2013. This implies that the profitability increased as a result of increase in firm size and also decrease in the gearing ratio.

Figure 4 Trend Analysis of Profitability



4.3 Inferential Data Analysis

This section provides the analysis of relationship among the independent variables to the dependent variable. As well as determining the significance of the variables under study.

4.3.1 Regression Analysis

The regression equation took the following form.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$

Where;

Y = Gearing Ratio (Dependent Variable)

X_1 = Interest Rate (Interest Expense) (Independent Variable)

X_2 = Firm Size (control variable) (Independent Variable)

X_3 = Profitability (control variable) (Independent Variable)

β_0 = the constant term

$\beta_i i$= 1….3 measure of the sensitivity of the dependent variable (Y) to unit change in the predictor variables X_1, $X_2$and X_3.

μ = is the error term which captures the unexplained variations in the model.

Table 2 shows the fitness of the model identified above in determine the relationship between interest rates and gearing ratio of firms listed in the Nairobi Securities Exchange. The coefficient of determination also called the R square was 34.7%. This means that the combined effect of the predictor variables (interest expense, firm size, profitability) explains 34.7% gearing ratio.

Table 2: Model of Fitness

Indicator	Co-efficient
R	0.589

R Square	0.347
Adjusted R Square	0.338
Std. Error of the Estimate	1.84518

The results on analysis of variance in Table 3 indicate that the overall model was significant. This shows that the combined effect of interest expense, firm size and profitability were statistically significant in explaining gearing ratio. This was demonstrated by a p value of 0.000 which is less that the acceptance critical value of 0.05.

Table 3: Analysis of Variance (ANOVA)

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	412.106	3	137.369	40.347	0.000
Residual	776.269	228	3.405		
Total	1188.375	231			

The results in Table 4 present the regression of coefficients of the study. These results shows that there is a negative relationship between gearing ratio and interest expense and profitability as supported by beta coefficients of -0.486 and -0.129 respectively. This means an increase in interest expense or profitability will decrease the gearing ratio. Firm size had a positive correlation (0.275), which means that an increase in firm size causes an increase in the gearing ratio. The analysis also yields results that show interest expense, firm size and profitability were statistically significant as the probability (p) values were 0.003, 0.000 and 0.002 respectively which were lower than the conventional value of 0.05.

Table 4: Regression of Coefficients

Indicator	B	Std. Error	t	Sig.
(Constant)	0.721	0.144	5.011	0.000
Interest Expense (‘000’)	-0.486	0.111	-4.378	0.003
Firm Size (‘000’)	0.275	0.042	6.548	0.000
Profitability (‘000’)	-0.129	0.112	-1.152	0.002

Gearing Ratio = 0.721 – 0.486 Interest Expense + 0.275 Firm size – 0.129 Profitability

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Findings

Regression analysis was carried out to determine the relationship between interest rates and gearing ratio. Results indicated that there is a negative relationship between interest expense,

profitability and gearing ratio. On the other hand, results indicated that there is a positive relationship between the firm size and gearing ratio.

An Analysis of Variance (ANOVA) results indicated that the overall model was significant. This was supported by an f statistic of 40.347 (p value = 0.000). The ANOVA results demonstrated that the independent variable (interest rates) is a good predictor of gearing ratio. Regression results indicated that the interest expense is negatively related to gearing ratio. This was evidence by a regression coefficient of -0.486 (p value = 0.003). The relationship was significant at 0.05 critical value since the reported of (p value 0.003) was less that the critical value of 0.05. An increase in interest expense by one unit leads to a decrease in gearing ratio by 0.486 units.

Regression results indicated that profitability was negatively related to gearing ratio. This was evidence by a regression coefficient of -0.129 (p value = 0.002) respectively. The relationship was significant at 0.05 critical value since the reported of (p value 0.002) was less that the critical value of 0.05. An increase in profitability by one unit leads to a decrease in gearing ratio by 0.129 units. Further, results indicated that the firm size was positively related to gearing ratio. This was evidence by a regression coefficient of 0.275 (p value = 0.000). The relationships were significant at 0.05 critical value since the reported of (p value 0.000) was less that the critical value of 0.05. An increase in firm size by one unit leads to an increase in gearing ratio by 0.275 units.

5.2 Conclusions

The study concluded that the gearing ratio for the sixty two firms have gradually decreased since year two thousand and nine. However, the trend also indicates that there was a drop was drastic in the year two thousand and twelve. This may be explained by the rise of interest rates in the year two thousand and twelve.

The study concluded that the interest expense for the sixty two firms have gradually increased since year two thousand and nine. However, the trend also indicates that the increase was greater in the year two thousand and twelve. This may be explained by the rise of interest rates in the year two thousand and twelve.

The study concluded that the firm size for the sixty two firms have gradually increased since year two thousand and nine. This can be explained by the argument that have been embrasing diversification and coming up with new ventures thus causing increase in their portfolios.

The study concluded that the profitability for the sixty two firms have gradually increased since year two thousand and nine. This can be explaine by the increase in firm size and also decrease in the gearing ratio.

5.3 Recommendations

From the findings discussed above, given that the firm size was significant it is recommended that the firms should adopt strategies that increase their firm size resulting to a scenario whereby they increase their collateral and thus granting them the ability to access more debt.

Secondly, given that profitability was also significant in explaining the gearing ratio it was recommended that firms should ensure that they optimize their profits so as to reduce their gearing ratio and thus cause growth.

Thirdly, it was recommended that despite the fact that interest expense by firms does not influence its gearing ratio at that period, they should seek to adopt other ways of financing their activities since interest expense had a negative relationship with gearing ratio.

Fourthly, the study recommend that firms (both highly and lowly geared) should take into cognizance the amount of leverage incurred because it is a major determinant of firm's performance/profitability, this is important for all the firms whether highly geared and lowly geared firms.

Fifthly, it was recommended that the government should create an enabling business friendly environment so that the firms can thrive and thus increase firm's performance level. This in turn would increase the firm's profitability. The government creates a good business environment by regulating the levels of interest rates and thus making it easy for firms to access debt finance. This is evident in the fact that macroeconomic variables positively affect the performances.

5.4 Suggestions for Further Studies

The study suggests further studies on the influence of interest rates on the gearing ratio (debt to equity ratio) of companies listed in the NSE per industry. Investigating the influence of interest rates on gearing ratio per industry may yield more feasible results as different industries encounter different challenges and have different structures. Therefore, future models should take into account the influence of interest rates on gearing ratio per industry. The study suggests further studies on the influence of voluntary financial disclosure on the gearing ratio (debt to equity ratio). High voluntary financial disclosure may results to increased accessibility of debt financing by firms. Therefore, future models should take into account the influence of voluntary financial disclosure on gearing ratio.

The study suggests further studies on the influence of inflation on the gearing ratio (debt to equity ratio). High levels of inflation may result to banks withholding loans from the firms and thus the debt ratio may decrease. Therefore, future models should take into account the influence of inflation on gearing ratio. The study suggests further studies on the influence of money supply in the economy on the gearing ratio (debt to equity ratio). High levels of money supply may result to firms accessing debt finance easily and thus the gearing ratio would increase. Therefore, future models should take into account the influence of money supply on gearing ratio.

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