

#### DETERMINANTS OF FACTORS AFFECTING CAPITAL STRUCTURE DECISION OF

#### LISTED INSURANCE COMPANIES IN KENYA

<sup>1*</sup> Juliet Wanjugu Karanja	<sup>2**</sup> Barbar Nambuya	<sup>3***</sup> Elizabeth Were
julietkaranja17@gmail.com	babranambuya@yahoo.com	jsheke@gmail.com

<sup>1,2,3</sup> School of Business Department of Business Administration, Kenya Methodist University P.O. Box 45240 - 00100 Nairobi, Kenya

#### Abstract

This study focused on the factors affecting capital structure decision of listed insurance companies quoted at the Nairobi Stock Exchange, by studying four variables that is size, customer base, corporate governance and Profitability (earnings per share). This study focused on the factors affecting capital structure decision of listed insurance companies quoted at the Nairobi Stock Exchange between 2011 and 2014. The study adopted a descriptive research design. The target population was employees of the 6 listed insurance companies at the NSE. Primary data was gathered using semi-structured questionnaires. Secondary data was gathered from past published scholarly articles explaining theoretical and empirical information on employee issues. The study used descriptive statistics and integrated both qualitative techniques in the data analysis and the data will be edited, coded and classified so as to present the results of the data analysis in a systematic and clear way. This was done by the use E-Views software. Both qualitative and quantitative data were analyzed. Qualitative data was analyzed by reading the questionnaire. Descriptive statistics (frequencies and percentages) was computed for all the five objectives. Quantitative data was computed for inferential statistics (Pearson moment correlations) with a 0.05 test significance level. Pearson correlation was used to compare the variables, where two sets of the variable was compared to see the extent to which they are related and if they can be used to predict each other. The correlation between the two sets of variables was indicated by means of correlation coefficients. A positive coefficient ranges from 0 to 1.0 while a negative coefficient ranges from -0 to -1.0. 1 will be a perfect correlation and 0 indicates that there is no correlation between two sets of variables. This shall help in obtaining a meaningful conclusion. Inferential statistics (such as correlation, ANOVA, Bivariate modelling, backward forward stepwise modelling and coefficient of determination) on the other hand was be used because such an approach enables distribution of free data handling and enables the researcher to draw inferences from population using the selected sample. The study objective was to assess whether size, profitability, corporate governance and customer base influence capital structure decision in the listed insurance companies in the Nairobi Stock Exchange.

#### Keywords: Firm Size, Profitability, Corporate governance, Customer base & Capital Structure

## **1.1 Introduction**

An important financial decision facing firms is the choice between debt and equity capital (Chen, 2004). Capital structure, which is defined as total debt to total assets at book value, influences both the profitability and riskiness of the firm (Myers, 2001). Capital structure has stirred debates in the

financial management literature. Debates such as whether a combination of debt and equity capital will maximize the value of the firm and factors affecting capital structure have been common debate in the capital structure literature. However, research in capital structure has been having various challenges. For instance, empirical works on capital structure have been proven to be inconclusive and capital structure being examined in international context.

The existing literature and research on capital structure literature has been mainly based in developed countries where organizations have similar characteristics. However, there has been less research in underdeveloped countries. The greater the gearing a firm exhibits, the higher the potential for failure if cash flows fall short of those necessary to service the debts. Modigliani and Miller (1958) showed, however, that in an idealized world without taxes, the value of a firm is independent of the debt-equity mix. In short capital structure is irrelevant to the value of firm. However, these conclusions are at variance with what one sees in the real world, where capital structure matters and banks would be extremely unwilling to finance a project entirely with debt capital.

Myers, (2001) pointed out that financial economists have not hesitated to give advice on capital structure, even though how firms actually chose their capital structures remains a puzzle as the theories developed did not seem to explain fully actual financing behaviour. This view is supported by Harris and Raviv, (2001) who pointed out that numerous attempts to explain capital structure have proved to be inconclusive. The capital structure decision is even more complicated when it is examined in an international context, particularly in developing countries where markets are characterized by controls and institutional constraints. Since the seminal work of Modigliani and Miller (1958), much subsequent research has been devoted to task of finding a coherent explanation for what influences the choice of capital structure. Traditional corporate finance models suggest that firms choose optimal capital structures by trading off various tax and incentive benefits of debt financing against financial distress costs.

Capital structure decision is very important for insurance companies. This is because of the need to maximize return to shareholders and other stakeholders. Also the impact on the organization cost of capital and its ability to deal with its competitive environment. Abeysekera, (2010) discusses that organization in the non-financial sector need capital mainly to acquire operational assets, securities or pursue new areas of business. While this is also true for insurance companies, their main focus is to provide protection to policy holders in time of accident through the minimization of loss. As a result of this, insurance companies have always been concerned with both solvency and liquidity. Kamau, (2010) explains that in order to manage risk, insurance firms must have effective ways to determine the appropriate amount of capital that is necessary to absorb unexpected loss arising from insurance claims and other operational risk exposure.

## 1.1.1 Profile of insurance companies in Kenya

Kenya has more than 40 insurance companies. The industry is regulated by the Insurance Regulatory Authority (IRA), a semi-autonomous regulator, set up in 2008. IRA is expected to improve regulation and stability of the industry. At the apex of the insurance sector are two reinsurance companies, the quasi-public Kenya Reinsurance Corporation (Kenya Re) and East African Reinsurance Company. By 2010, short and long-term underwriters were 44, of which 21 provide medical insurance. Others are 3,788 insurance agents and 158 insurance brokers. The creation of the Insurance Regulatory Authority (IRA) to replace the office of the Commissioner of Insurance under the Ministry of Finance

has not only instilled a sense of confidence in the regulatory framework in the industry but has also injected new approaches to ethics, management and growth of the insurance investments in Kenya.

In Kenya, one hundred and fifty eight companies are listed in the Nairobi Securities Exchange (NSE), which is the only stock exchange firm in the country (Nairobi Securities Exchange, 2012). Currently there are six Insurance companies listed in the Nairobi Stock Exchange, which are British American Investment Company, CIC insurance group, Liberty Kenya Holdings limited formally CFC Insurance, Jubilee Holdings limited, Kenya-Reinsurance Corporation and Pan Africa insurance holdings.

# 1.2 Statement of the problem

Capital structure decision is very important for insurance companies. This is because of the need to maximize return to shareholders and other stakeholders. Also the impact on the organization cost of capital and its ability to deal with its competitive environment. An insurance company is in the business of transferring risk. It does this by accepting premium from policyholders and paying claims. Kamau, (2010) sometimes the premium collected is less than the total amount paid for claims. The insurance company are concerned with return of their investment. The insurance regulator ensures that insurance companies have enough money to fulfill its obligation to the policyholders. Kamau, (2010) literatures recognizes that the capital structure of insurance companies is still a relatively under-explored area in the insurance literature. It recognizes that there is lack of clear understanding on how the insurance companies choose their capital structure and what factors influence their corporate financing behavior. It further recognizes the unique product-market environment insurance companies operate within and therefore the justification of a separate study on the capital structure determinants of insurance companies.

Studies indicate that a firm's capital structure decisions are affected by several firm related characteristics such as future growth options, earnings volatility, profitability and control (Titman and Wessels, 2001; Glen and Pinto, 2001). Research Studies such as Jensen and Meckling (1976); Williamson (2002); Harris and Raviv (2003); Rajan and Zingales (2001) have explained factors influencing capital structure from the perspective of asymmetric information and agency cost theory. In order to manage risk, insurance firms must have effective ways to determine the appropriate amount of capital that is necessary to absorb unexpected loss arising from insurance claims and other operational risk exposure. As a result of the unique characteristics of insurance firms and the environment in which they operate, there is a strong ground for a separate study on determinants of capital structure of insurance companies in Kenya.

## **1.3.** General objective

The main objective of the study will be to investigate factors influencing capital structure decisions of listed insurance companies in Kenya.

# **1.3.1** Specific objectives

i. To determine how size of the firm influences capital structure decision of listed insurance companies in Kenya.

Vol IV Issue IX, September 2018

- ii. To find out how profitability influence capital structure decision of listed insurance companies in Kenya.
- iii. To determine how corporate governance influences capital structure decision of listed insurance companies in Kenya
- iv. To assess how customer base influence capital structure decision of listed insurance companies in Kenya.

#### **1.4 Research question**

- i. How does the size of the firm influences capital structure decision of listed insurance companies in Kenya?
- ii. To what extent does Profitability influence capital structure decision of listed insurance companies in Kenya?
- iii. How does corporate governance of the firm influence capital structure decision of listed insurance companies in Kenya?
- iv. How does customer base influence capital structure decision of listed insurance companies in Kenya?

## 1.5 Scope of the study

This study will focus on the listed insurance companies in the Nairobi Stock Exchange which are British American Investment Company, CIC insurance group, Liberty Kenya Holdings limited formally CFC Insurance, Jubilee Holdings limited, Kenya-Reinsurance Corporation and Pan Africa insurance holdings.

# **2.1 LITERATURE REVIEW**

# 2.2 Theoretical Literature Review

Capital structure puts into perspective the way in which a firm finances its operations (Brigham, 2004), this can either be through debtor equity capital or a combination of both (David, 1979).Capital structure theory as attributed to Modigliani and Miller concluded that it does not matter how a firm finances its' operations and that the value of a firm is independent of its' capital structure making capital structure irrelevant. The study was based on the assumption that there were no brokerage costs, earnings before interest and tax were not affected by the use of debt and that investors could borrow at the same rate as corporations and lastly there was no information asymmetry. A number of theories were from then onward advanced to explain capital structure notable among which are the pecking order theory and trade off theory which have been often than not a centre of debate.

# 2.2.1 Modigliani-Miller Theorem (Modigiliani et al 1980)

The Modigliani-Miller Theorem is a cornerstone of modern corporate finance. At its heart, the theorem is an irrelevance proposition: The Modigliani-Miller Theorem provides conditions under which a firm's financial decisions do not affect its value. Modigliani, (1980) explains the Theorem as follows: with well-functioning markets (and neutral taxes) and rational investors, who can 'undo' the corporate financial structure by holding positive or negative amounts of debt, the market value of the firm – debt plus equity – depends only on the income stream generated by its assets. It follows,

in particular, that the value of the firm should not be affected by the share of debt in its financial structure or by what will be done with the returns – paid out as dividends or reinvested (profitably).

# 2.2.2 Traditional Approach to capital structure (Huang and Ritter, 2009)

Traditional approaches to capital structure suggest that there is an existence of an optimal debt to equity ratio where the total cost of capital is minimum and the value of the firm is the maximum Brav (2009). Traditional approach to capital structure advocates that there is a right combination of equity and debt of a capital structure at which the market value of a firm is maximum. This means that should a debt exist in the capital structure to a specific point, beyond this, any increase in leverage would result to the reduction of the firm value Graham and Leary (2011). Therefore, there is an existence optimum value of debt to equity ratio at which the W.A.C.C is the lowest and the market value of the firm is the highest. If the firm crosses that optimum value of debt to equity ratio, the cost of equity rises to give a detrimental effect to the W.A.C.C. above the threshold, the W.A.C.C increases and the market value of the firm starts to decrease Huang and Ritter (2009)

# 2.2.3 Trade-off theory of Capital Structure (Myers, 2001)

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.

Tradeoff 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, *et al* 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 ex post bargaining power, the desired level of debt tax shields can be achieved using only bank debt (Hackbarth *et al.*, 2007).

# 2.2.4 Agency cost Theory (Jensen et al., 1976)

Separation of ownership and management does not come without costs. Berle, *et al.*, (1932) introduced the canonical agency problem by suggesting that dispersed ownership leads to less corporate monitoring. Jensen further spurred the interest in the theoretical and empirical aspects of the modern theory of corporate finance by formalizing agency costs as a conflict of interest between managers and shareholders1. Habib *et al.* (2005) find that the average firm underperforms its best-performing peers by approximately \$1,432 million. They attribute the performance difference to agency costs in US corporations. The corporate finance literature suggests several techniques by which agency conflict can be reduced, thereby reducing agency costs.

# 2.2.5 Pecking Order Theory (Myers, 1984)

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.

# 2.3 Empirical Literature Review

# 2.3.1 Capital structure

The capital structure is how a firm finances its overall operations and growth by using different sources of funds. Components of capital structure include a mix of a company's long-term debt, specific short-term debt, common equity and preferred equity. Capital structure decision however, is whereby a firm faces a choice between debt and equity. If a firm doesn't use debt financing, it's referred to as an unlevered firm (Brigham, 2004). This brings about what is referred to as business risk which is defined as riskiness inherent in the firm's operations if it doesn't use debt. If a firm doesn't use debt then its return on invested capital shall be measured by return on equity which is denoted by net income to common stock holders divided by common equity. ROE = Net income to common stock holders/ Common equity. This simply means that the business risk of a leverage free firm will be measured by the standard deviation of its Return on equity (Brigham & Houston, 2007). The question is if a firm's Return on capital is measured using Return on equity in the absence of debt will the efficiency ratios exert a significant effect on leverage.

When a firm decides to use debt financing for its operations it's faced with a financial risk and it's referred to as a levered firm. Brigham & Houston, (2007) defined financial risk as that additional risk placed on common stock holders as a result of the decision to finance using debt. Financing risk is the probability that the earnings of the firm will not be as projected because of the method of financing. He also continues by saying that financing risk arises because debt has a fixed financing obligation usually in the form of interest which must be met when the obligation falls due before the shareholders can share in the retained earnings.

# 2.3.2 Size of the firm and capital structure

Size of a company plays an important role in determining the key relationship a company will enjoy internally and externally in its operating environment. As the popularity of business environment, more attentions are being pushed to its real effects on the internal structure of corporations and the specific impact on the relationship between the firm and its key stakeholders (Abor, 2005). Emerging issue in the whole debate suggest that the impact of size on financial leverage may actually depend on the level of financial markets developed in a particular country. Corporate size seems to be one of the most theorized determinants of financial leverage. In effect, the relationship between size and financial leverage has been explained in capital structure theories. Pecking-order hypothesis upholds the negative linearity between size and leverage, the trade off theory seems to have proposed otherwise.

Firm size has been found to be a factor in determining capital structure (Booth *et al.*, 2001). In a study of factors influencing capital structure in developed countries, Gaud, *et al.*, (2005) reported that an

increase debt ratio is associated with the firm size in all the G-7 (U.S., Japan, France, Germany, Italy, U.K. and Canada) countries with the exception of Germany. It is thus argued that large firms tend to be well diversified and hence are less likely to go bankrupt. Therefore, lower expected bankruptcy costs enable large firms to take on more debts. However, other studies such as Boquest *et al* (2011) did not find firm size to be a contributory factor. In same, the empirical efforts of multiple investigators have found size effects to be present in varying degrees.

# 2.3.3 Profitability of the Firm and Capital Structure

Corporate performance has been identified as a potential determinant of capital structure. The tax trade-off models show that profitable firms will employ more debt since they are more likely to have a high tax burden and low bankruptcy risk (Ooi, 2004). However, Myers (1984) prescribes a negative relationship between debt and profitability on the basis that successful companies do not need to depend so much on external funding. They, instead, rely on their internal reserves accumulated from past profits. Berk, *et al* .(2010). Agree that firms with high profit rates, all things being equal, would maintain relatively lower debt ratio since they are able to generate such funds from internal sources. Empirical evidence from previous studies (Al-Sakran, 2001) appears to be consistent with the pecking order theory. Most studies found a negative relationship between profitability and debt financing.

Large firms face lower bankruptcy cost since they are more diversified. Studies have also shown that due to high information asymmetries, the cost of issuing equity for small firms is relatively high this further creates Information asymmetries between inside managers and external capital market. Since it is costly for small firms to acquire equity, to reduce issuance cost they may issue more debts. Myer (1984) points that information asymmetry when issuing new shares will cause an agency cost hence issuing new share should be the last resort. Firms which have high profitability will not depend on external funding for its expansion and development because profitability has a negative relationship with leverage (Huang *et al.*, 2006). Depending on internal funding will not be an issue cost ad will prevent double taxation. For these reasons, using internal fund is better than relying external funds.

# 2.3.4 Corporate Governance of the firm and capital structure

The internal governance of a corporation is largely determined the board of directors and the corporation's charter/bylaws, which also influences the ability of shareholders and outsiders to influence the internal governance of the firm. We take these features to be captured by the size of the board, its composition, and the corporation's charter and bylaws. The question that we address is: how do these governance features influence a corporation's capital structure decisions (Myers, 2001).

Corporate governance influences a firm's capital structure by allowing managers to protect themselves from either internal or external discipline and so follow their preferences. Jensen (1986) argues that managers who are not subject to either external market discipline or internal monitoring have incentives to waste their firm's free cash flows on dissipative investments. Jensen contends that by levering up the firm, these agency costs are reduced by forcing such managers to distribute the excess cash flow. Nevertheless, the key point is that governance structures that tend to insulate managers from either internal or external control changes allow such managers to reduce their firms' use of leverage.

Corporate governance does matter, in that weak governance structures are offset by capital structures that limit managers ability to misuse corporate resources (e.g., increased use of debt). Jensen (1986)

claims that the use of leverage forces managers to distribute the firm's free cash flows to investors and so increased leverage could be used to limit the dissipation of shareholder wealth by entrenched managers. Ostensibly, if a corporation's governance structure limits shareholders' monitoring or impedes potential acquirers, then such corporations should use more debt to restrain managers from misusing the corporation's free cash flows. Dann (2003) reports evidence that increased leverage reduces managerial discretion over investment. Further, David *et al.*, (2004) report evidence that the incremental benefits of debt are greatest when managerial agency costs are highest

# 2.3.5 Customer base of the firm and capital structure

With the increased globalization of markets, competition among market players has become more intense. In this competitive market, one of the most important factors is the achievement of customer satisfaction and excellence in service. Although the concept of customer satisfaction in customer oriented management is not new, the relationship between customers and corporations has been changing almost daily (Malhotra, 2004). Customers are becoming the absolute entity for corporations as the final decision makers for business deals and purchases of products. Successful organizations of the future will be those that can provide goods and services to the customers who want it, where they want it and in the quantity and at the price they want it, thereby delighting rather than merely satisfying customers (Parker *et al.*, 2001). Customer delight will lead to loyalty, which is one of the critical indicators used to measure the success of a financing strategy.

Insurance firms have been trying hard to show that they are different and are one step further in competition. The top insurance institutions in this competition are those not only welcome customers' demands but also they always go beyond what their customers' request (Pantouvakis, 2010). Overcoming customers' needs that may always change and improve necessitates that the institutions should consider continuous change and improvement. The greatest responsibility in realization of this change depends on employee of the organization.

# 2.4 Conceptual framework

## **INDEPENDENT VARIABLES**







# **3.1 RESEARCH METHODOLOGY**

The study used a descriptive study approach in collecting data from the respondents. Descriptive study research portrays an accurate profile of persons, events, or account of the characteristics,

for example behavior, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group (Cooper and Schindler, 2008). There are currently 44 operational insurance companies in Kenya, however, for the purpose of this study the researcher shall use the six selected insurance companies in NSE. This will include CIC Insurance Group Limited, Pan Africa Insurance Holdings Limited, Jubilee Holdings limited, CFC liberty Kenya Holdings Limited, Britam investments company, and Liberty Kenya Holdings Limited. In order to get adequate information on factors affecting capital structure, the researcher will target the finance managers, marketing managers and finance staffs of the selected six insurance companies who are 411. The researcher used Stratified random sampling to select sample size from a complete list of the target population. The study applied stratified sampling While deciding on the sample size, the researcher has determined the desired precision of being listed in the Nairobi stock exchange in addition to acceptable confidence level of the estimate. From the strata the researcher selected a sample size of every finance manager and assistant, marketing manager and assistant and ten finance staffs of each participating insurance companies as they were just enough to give objective picture of what is on the ground. This totaled to 84 employees of the companies. This ensured a true representation of all the Kenyan insurance companies

This research study used structured developed questionnaires to collect primary data from respondents. Questionnaires was used because each respondent is capable to receive the same set of questions in exactly the same way. The questionnaire had both open and closed ended questions to allow respondents to express their opinions. Data was analysed using both descriptive and inferential statistics. The E-Views 05 was used because it is favored for it gives quantitative results. Descriptive statistics (frequencies and percentages) was computed for all the five objectives. Inferential statistics (such as correlation, ANOVA, Bivariate modelling, backward forward stepwise modelling and coefficient of determination) on the other hand was be used because such an approach enables distribution of free data handling and enables the researcher to draw inferences from population using the selected sample. The study findings were then presented using graphs, histograms, bar charts and pie charts. Data presentation made use of percentages, tabulations, means and other means of central tendencies. Tables were used to summarise respondents for further analysis and facilitate comparison.

The Determinants of capital structure are X (independent variables) and dependent variable is Y.

The regression equation to be used will be:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$ 

Where Y is the dependent variable (capital structure),  $\beta_0$  is the regression coefficient,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$  and  $\beta_5$  are the slopes of the regression equation,  $X_1$  is the size of firm independent variable,  $X_2$  is the profitability independent variable,  $X_3$  is customer base independent variable,  $X_4$  is the corporate governance independent variable, while E is an error term normally distributed about a mean of 0 and for purposes of computation, the  $\alpha$  will be assumed to be 0.

## 4.1 DATA ANALYSIS AND INTERPRETATION OF FINDINGS

## 4.2 Presentation of Data Analysis

# 4.2.1 Response Rate

The study sampled 84 respondents from the six NSE listed insurance companies in Kenya. However, out of the 84 questionnaires distributed, 73 respondents completely filled in and returned the questionnaires which comprised 87% of the respondents. This is a reliable response rate for data

analysis. Mugenda & Mugenda pointed that a response rate of 60% is good and a response rate of 70% and over is excellent.

The response rate was achieved because of the collection procedure of drop and pick later method. The research assistant also was involved in administering of questionnaires and he kept reminding the respondents thru phone calls to fill the questionnaires, besides, additional clarifications needed by the respondents were accorded. However, 13% of the respondents were either reluctant to participate or misplaced the questionnaires.



# Figure 4.1: Response Rate

## 4.2.3 Debt to equity ratio of the company

The study sought to establish the debt to equity ratio of the respective insurance companies and the results were as below;

Measure	Frequency	Percent			
0.0 - 0.25	0	0			
0.26 - 0.5	03	04			
0.6 - 1.0	07	08			
1.1 - 2.0	54	88			
> 2.0	09	0			
Total	73	100			

Table	4.1:	Debt	to	equity	ratio
			•••		

## Source (Author, 2015)

The findings show that most of the respondents (88%) were of the opinion that the debt to equity ratio is 1.1-2. 8% selected 0.6-1 while 4% selected 0.26-0.5. This implied listed insurance companies preferred financing their businesses with debt as compared to equity. This will help to determine the choice between debt and equity.

## 4.2.4 Debt to capital ratio

The study also sought to determine the debt to capital ratio of the respective insurance companies, and the findings were as below;

Vol IV Issue IX, September 2018



# Figure: 4.2 Debt to Capital Ratio of the Company

Most of the respondents (72%) were of the view that the debt to capital ratio of their companies were between 1.1 - 2.0, while 14% were of the view that it is >2.0; 7% selected 0.26 - 0.5 and 0.55 -1.00. This implied listed insurance companies preferred financing their businesses with debt as compared to equity. This will help to determine the choice between debt and equity.

# 4.2.5 Number of employees in the organization.

The study also sought information on the number of employees in the selected insurance companies, and the findings were as below;



# Figure 4.3: Number of Employees in the Insurance Companies

Most of the respondents (64%) selected the bracket of >400 while 34% selected 301-400 and 2% were of the opinion of 201-300. This implies that the companies that can support a large number of employees were big companies in terms of size. Number of employees helped to determine the size of the company in terms of growth and the number of employees.

# 4.2.6 Number of branches

The study also sought to establish the number of branches each insurance company had and the findings were as follows;

Measure	Frequency	Percentage
1-3	0	0
4-6	07	10
7-9	22	30
10-12	44	60
Total	73	100

#### Table 4.2: Number of branches

#### Source (Author, 2015)

The findings show that most of the respondents (60%) stated that their organizations had between 10-12 branches while 30% selected the option of between 7-9 branches. 10% of the respondents selected the option of between 4-6 branches. This implies that the companies that can support a large number of employees were big companies in terms of size.

## 4.2.7 Sales per day

The study also sought information on the average sales per day of the selected insurance companies;



## Figure 4.4: Average Sales per Day

Most of the respondent (74%) selected the option of >500000 while 24% selected  $\leq$ 500000. This implies that most of the listed insurance companies were profitable having sales of more than 500000 per day.

# **4.3 Influence of the size of the firm on capital structure decision of listed insurance companies in Kenya**.

To establish how firm size influenced capital structure decision on the listed firms, a Pearson moment correlation analysis was conducted. The result showed that there was no significant relationship between the firm size and the capital structure decision, r = -0.042, P = 0.727. However, the negative correlation value indicated that, smaller firm sizes had a higher capital structure decision although the relationship was not significant since P > 0.05 when tested at 95% confidence interval. This

implies that although size affects capital structure decision making in most companies. Size of Insurance companies listed in the Nairobi stock exchange had no significance to their choice in their capital structure. Emerging issue in the whole debate suggest that the impact of size on financial leverage may actually depend on the level of financial markets developed in a particular country. This is in the case of the smaller insurance companies listed in the Nairobi stock exchange. Smaller firms may find it relatively more costly to resolve informational asymmetries with lender and financiers, which discourages the use of outside financing. The finding also concurred with Kovach, (2004) who indicated that management has been recognized as a component of organizational commitment. Smaller firms may find it relatively more costly to resolve informational asymmetries with lender and financiers, which discourages the use of outside financing Titman (2001) and should increase the preference of smaller firms for equity relative to debt (Gaud, et al. 2005).

		0 4 1			0 1	
		Capital			Corporate	~
		structur		Profitabili	governanc	Custom
		e	Size	ty	e	er base
Capital structure	Pearson	1				
	Correlation	1				
	Sig. (2-tailed)					
	N	73				
Size	Pearson	0.40				
	Correlation	042	1			
	Sig. (2-tailed)	.727				
	N	73	73			
Profitability	Pearson	10	10			
Tomuomity	Correlation	.412(**)	072	1		
	Sig (2-tailed)	000	546			
	N	.000 73	.340 73	73		
Comonata	Deerson	15	15	15		
Corporate	Completion	.353(**)	019	.162	1	
governance	Correlation $C_{i} = (2 + i)$	003	075	181		
	Sig. (2-tailed)	.002	.8/5	.1/1		
	Ν	73	73	73	73	
Customer base	Pearson	257(*)	- 129	101	- 012	1
	Correlation	.237()	-,12/	.101	012	1
	Sig. (2-tailed)	.028	.276	.396	.917	
	Ν	73	73	73	73	73

Table 4.3: Correlation table on the influence of size, profitability, corporate governance and customer base on capital structure decision

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

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

# 4.4 Influence of profitability on capital structure decision of listed insurance companies in Kenya

Profitability was found to be positive and significantly influencing capital structure, r = 0.412, P = 0.0001. This implies that listed insurance companies capital structure was greatly influenced by the profits they made. Profitability is greatly influenced by the number of customer they have. Zeithaml

et al., (2006) suggested that complex combination of strategies for delivering financial services was needed to ensure that insurance employees were willing and able to deliver quality services and that they stay motivated to perform in customer-oriented, service-minded ways in order to increase profitability of the company. The benefit of issuing debt comes from both tax shield and non tax shield. The first benefit is saving tax especially on interest and the second is decrease in tax derived from non-debt elements such as depreciation and investment tax credit.

# 4.4.1 Regression analysis on the influence of profitability on capital structure

Using a linear regression analysis, the result showed that profitability on its own had a positive influence on capital structure by;  $Y = \beta_1 + \beta_2 X_2 + \epsilon$ 

Y-capital structure, X2-profitability, e-error term

Hence the influence equation is; Capital structure =  $0.593 + 0.412X_2$ . The regression R-square of 0.169 indicated that 16.9% of the influence is accounted for in the regression model.

				Std. Error
Mode			Adjusted	of the
1	R	R Square	R Square	Estimate
1	.412(a)	.169	.158	.47630

# **Model Summary**

a Predictors: (Constant), Profitability

# ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regressi on	3.286	1	3.286	14.485	.000(a)
	Residual	16.107	71	.227		
	Total	19.393	72			

a Predictors: (Constant), Profitability

b Dependent Variable: Capital structure

Table 4.4: Regression ta	ble showing relation	nship between prof	fitability with (	Capital structure
--------------------------	----------------------	--------------------	-------------------	-------------------

Model		Unstan Coeffic	dardized vients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant	.593	.097		6.110	.000

> Profitabili ty .229 .060 .412 3.806 .000

a Dependent Variable: Capital structure

# **4.5.** Influence of corporate governance on capital structure decision of listed insurance companies in Kenya.

In this objective, the relationship between corporate governance and capital structure decision was established. The result showed that there was a significant influence of corporate governance on capital structure decision, r = 0.353, P = 0.002. Increase in corporate governance resulted into a positive increase in capital structure decision of listed insurance company. This implies that manager aimed at increasing the value of the firm. They placed the interest of the firm and its stakeholders firms influenced by the capital structure decisions they made. Listed insurance company focuses on management welfare and emphasized on Work life quality, providing effective working environment for the staff and ensure which is tremendous benefit to companies as managers sought to stay loyal, and were more likely to increase the value of the firm. Jensen (1986) argues that managers who are not subject to either external market discipline or internal monitoring have incentives to waste their firm's free cash flows on dissipative investments. Jensen contends that by levering up the firm, these agency costs are reduced by forcing such managers to distribute the excess cash flow. Nevertheless, governance structures that tend to insulate managers from either internal or external control changes allow such managers to reduce their firms' use of leverage. Hall et al. (2001) report only 30% of CEO's received new options grants in 1980 with mean salary of \$655,000 and mean options grants of \$155,000. The percentage grew to 70% in2001 with mean cash pay of \$1.3 million and mean options grants of \$1.2 million. However, whether the objective is met and agency costs are reduced still remains open for at least three reasons.

## 4.5.1 Regression analysis on the influence of corporate governance on capital structure

A linear regression analysis result showed that corporate governance had a positive influence on capital structure by;  $Y = \beta_1 + \beta_3 X_3 + \epsilon$ 

Y-capital structure,  $\beta_1$  - constant, X<sub>3</sub>- corporate governance and  $\epsilon$  -error term

Hence the influence equation is; Capital structure =  $0.623 + 0.353X_3$ . The regression R-square of 0.125 indicated that 12.5% of the influence is accounted for in the regression model.

				Std. Error
Mode			Adjusted	of the
1	R	R Square	R Square	Estimate
1	.353(a)	.125	.112	.48894

Model Summary
---------------

a Predictors: (Constant), Corporate governance

## ANOVA(b)

		Sum	of	Df	Mean	Б	<b>C</b> :-
Model		Squares		DI	Square	Г	51g.
1	Regression	2.420		1	2.420	10.122	.002(a)
	Residual	16.974		71	.239		
	Total	19.393		72			

a Predictors: (Constant), Corporate governance

b Dependent Variable: Capital structure

 Table 4.5: Regression table showing relationship between corporate governance with Capital structure

		Unstand Coeffic	dardized ients	Standardized Coefficients		
			Std.		_	
Model		В	Error	Beta	Т	Sig.
1	(Constant)	.623	.103		6.049	.000
	Corporate governance	.249	.078	.353	3.181	.002

A Dependent Variable: Capital Structure

# 4.6 Influence of customer base on capital structure decision of listed insurance companies in Kenya.

In this objective, the influence of customer base on capital structure decision of listed insurance companies was established. Using a Pearson moment correlation coefficient analysis, the result showed that there was a significant and positive influence of customer base on capital structure, r = 0.257, P = 0.028. When the customer base increased, the firm capital structure decision significantly increased. This implies that listed insurance companies capital structure was greatly influenced by the profits they made. Profitability is greatly influenced by the number of customer they have. Profitable firms will employ more debt since they are more likely to have a high tax burden and low bankruptcy risk. The study further found that treating of customer as valued customers and clarity of information or advice provided by insurance staff influence employee's satisfaction to a great extent. Providing insurance services with speed, timely and valuing the company customer to empowerment and effective interactive with the management make them more loyal and committed to offering better and high quality service.

## 4.6.1 Regression analysis on the influence of customer base on capital structure

A linear regression analysis result showed that customer base had a positive influence on capital structure by;  $Y = \beta_1 + \beta_1 X_1 + \epsilon$ 

Y-capital structure,  $\beta_{1}$  - constant, X1- Customer base and  $\epsilon$  -error term

Hence the influence equation is; Capital structure =  $0.638 + 0.257X_1$ . The regression R-square of 0.066 indicated that 6.6% of the influence is accounted for in the regression model.

#### **Model Summary**

				Std. Error
Mode			Adjusted	of the
1	R	R Square	R Square	Estimate
1	.257(a)	.066	.053	.50509

a Predictors: (Constant), Customer base

## ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regressi on	1.280	1	1.280	5.018	.028(a)
	Residual	18.113	71	.255		
	Total	19.393	72			

a Predictors: (Constant), Customer base

b Dependent Variable: Capital structure

Table 4.6: Regression table showing relationship between customer base with Capital structure

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			Std.		_	
		В	Error	Beta		
1	(Constant)	.638	.129		4.941	.000
	Customer base	.236	.105	.257	2.240	.028

a Dependent Variable: Capital structure

## 4.7 Model of the study

To establish the most influential factor to capital structure decision of the listed insurance companies, stepwise regression analysis was conducted in the three significantly influencing factors i.e profitability, corporate governance and capital base. The model tested was;

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

Vol IV Issue IX, September 2018

Where:

Y = capital structure decision

 $X_1$ = Profitability  $X_2$  = Corporate Governance  $X_3$  = Customer base

The final model therefore comprises profitability (X<sub>1</sub>), corporate Governance (X<sub>2</sub>) and customer base (X<sub>3</sub>) because they were the only ones significant to capital structure. Size was found insignificant and so excluded from the model. Hence using standardized beta coefficient the model equation;  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$  becomes;

 $Y = 0.189 + 0.340X_1 + 0.301X_2 + 0.226X_3$ 

The model infers that capital structure (Y) of the listed insurance companies is influenced by profitability (X<sub>1</sub>), corporate Governance (X<sub>2</sub>) and customer Base (X<sub>3</sub>) at a constant value of 0.189. In the presence of the three factors therefore, capital structure was found to be more influenced by profitability, t = 3.325, followed by the corporate governance, t = 2.958 and customer base, t = 2.242.

#### **Model Summary**

				Std. Error
Mode			Adjusted	of the
1	R	R Square	R Square	Estimate
1	.412(a)	.169	.158	.47630
2	.504(b)	.254	.232	.45468
3	.552(c)	.304	.274	.44214

a Predictors: (Constant), Profitability

b Predictors: (Constant), Profitability, Corporate governance

c Predictors: (Constant), Profitability, Corporate governance, Customer base

## ANOVA(d)

		Sum of		Mean		
Model		Squares	Df	Square	F	Sig.
1	Regression	3.286	1	3.286	14.485	.000(a)
	Residual	16.107	71	.227		
	Total	19.393	72			
2	Regression	4.922	2	2.461	11.905	.000(b)
	Residual	14.471	70	.207		
	Total	19.393	72			
3	Regression	5.905	3	1.968	10.069	.000(c)
	Residual	13.488	69	.195		
	Total	19.393	72			

a Predictors: (Constant), Profitability

b Predictors: (Constant), Profitability, Corporate governance

c Predictors: (Constant), Profitability, Corporate governance, Customer base

d Dependent Variable: Capital structure

		Unstandardized		Standardized		
Model		Coefficients		Coefficients	Т	Sig.
			Std.			
		В	Error	Beta		
1	(Constant)	.593	.097		6.110	.000
	Profitability	.229	.060	.412	3.806	.000
2	(Constant)	.401	.115		3.486	.001
	Profitability	.202	.058	.364	3.479	.001
	Corporate governance	.207	.074	.294	2.813	.006
3	(Constant)	.187	.147		1.271	.208
	Profitability	.189	.057	.340	3.325	.001
	Corporate governance	.212	.072	.301	2.958	.004
_	Customer base	.208	.093	.226	2.242	.028

**Table 4.7**: Regression table showing relationship between profitability, corporate governance and customer base with Capital structure

## A Dependent Variable: Capital Structure

From the table above, the independent variables (profitability, corporate governance and customer base) of the study explain 34.0% of the changes in the dependent variable (capital structure). Other variables not in the study contribute to the remaining 69.6% of the changes in capital structure in the six selected insurance companies listed in the NSE. Further research is therefore recommended to investigate the significance of other variables (e.g growth, asset tangibility, liquidity, financial distress, tax rate, debt serving capacity, age of the company among others) to capital structure. Profitable firms will employ more debt since they are more likely to have a high tax burden and low bankruptcy risk.

## 5.1 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

## 5.2 Summary of findings

The purpose of this study was to find out factors influencing capital structure decisions in NSE listed insurance companies by assessing the role of size, profitability, corporate governance and customer base on capital structure decisions of the respective insurance companies.

The study revealed that size of the company plays an important role in determining capital structure decisions. Size of Insurance companies listed in the Nairobi stock exchange had little significance to their choice in their capital structure. The study revealed that profitability has been identified as a potential determinant of capital structure. Profitability is greatly influenced by the number of customer they have. Profitable firms will employ more debt since they are more likely to have a high tax burden and low bankruptcy risk.

Corporate governance has little relevance to capital structure decisions. Management placed the interest of the firm and its stakeholders firms evident by the capital structure decisions they made. Listed insurance company focuses on management welfare and emphasized on Work life quality, providing effective working environment for the staff and ensure which is tremendous benefit to

companies as managers sought to stay loyal, and were more likely to increase the value of the firm. Corporate governance influences a firm's capital structure by allowing managers to protect themselves from either internal or external discipline and so follow their preferences managers who are not subject to either external market discipline or internal monitoring have incentives to waste their firm's free cash flows on dissipative investments listed insurance companies levering up the firm, to reduce agency costs by forcing such managers to distribute the excess cash flow.

Customers are becoming absolute entity for corporations as the final decisions makes for business deals and purchase products. Customer delight will lead to loyalty. This however has little relevance in capital structure decision. The study further found that treating of customer as valued customers and clarity of information or advice provided by insurance staff influence employee's satisfaction to a great extent.

## 5.4 Conclusion

The study concluded that profitability, corporate governance and customer base affect capital structure decision. The study also concluded corporate governance which postulates that debt mitigates against agency problem is applicable to listed insurance companies in Kenya. The study further found that treating of customer as valued customers and clarity of information or advice provided by insurance staff influence employee's satisfaction to a great extent. Large firms face lower bankruptcy cost since they are more diversified. Due to high information asymmetries, the cost of issuing equity for small firms is relatively high this further creates Information asymmetries between inside managers and external capital market.

## 5.5 Recommendation of the study

The results of this study have significant policy implications at the firm, industry, and macro levels. Firstly, this study found out the factors affecting capital structure decision of insurance companies listed in the Nairobi stock exchange. This study further recommends that the government should regulate the financial sector through various monetary and fiscal policies in order to reduce the cost of borrowing given that many companies rely on external borrowing to finance their cash requirements. Secondly, the management of insurance companies should adopt aggressive financing policy in order to improve its capital structure as measured by debt to equity ratio. This means that the managers of insurance companies listed in the NSE, should concentrate on using more current liabilities to finance assets.

Insurance employees should be willing and able to deliver quality services and that they stay motivated to perform in customer-oriented, service-minded ways in order to increase profitability of the company

The study recommends for further research be undertaken to compare the financings decisions of non-financial companies listed on the NSE and those not listed and the effects of these decisions on performance. In addition, future studies could be extended to analyse financial decisions and their effect on capital structure decision across the countries especially those in the East African.

# REFERENCES

Abeysekera, I. (2010). The influence of board size on intellectual capital disclosure by Kenyan listed firms. Journal of Intellectual Capital, 11(4), 504-518.

- Adekunle, A.O & Sunday, O.K. (2010) Capital Structure and Firm Performance: Evidence from Nigeria. European Journal of Economics, Finance and Administrative Sciences, 25, 71-80
- Afza, T. & Nazir, M. S. (2007). Is it Better to be Aggressive or Conservative in Managing Working Capital, Journal of Quality and Technology Management, 3(2), 11-21.
- Afza, T. & Nazir, M. S. (2008). "Working Capital Management Policies of Firms: Empirical Evidence from Pakistan", Pakistan Journal of Commerce and Social Sciences, 1(1) 25- 36.
- Ajibolade, O.S. and Sankay, C.O.(2013). Working Capital Management and Financing Decision: Synergetic Effect on Corporate Profitability. International Journal of Management, Economics and Social Sciences, 2(4), 233–251.
- Akhtar. S, & Oliver, B. (2009). Determinants of Capital Structure for Japanese Multinational and Domestic Corporations. International Review of Finance, 9(1–2), 1–26
- Akintoye, I. R. (2008). Sensitivity of Performance to Capital Structure. European journal of social sciences 7(1)
- Almajali .Y.A., Alamro. A.S. & Al-Soub.Z.Y. (2012). Factors Affecting the Financial
- Ashcraft, A. B., & Santos, J. A. (2009). Has the CDS market lowered the cost of corporate debt?. Journal of Monetary Economics, 56(4), 514-523.
- Berger, P. G., Ofek, E., & Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. The Journal of Finance, 52(4), 1411-1438.
- Booth, L., Aivazian, V. Demirguc-Kunt, A. & Maksimovic, V. (2001) Capital structures in developing countries. Journal of Finance, 56, 87–130.
- Bouquet, A., Venot, E., Laloë, D., Forabosco, F., Fogh, A., Pabiou, T., ... & Phocas, F. (2011). Captial structure Journal of leverage, 89(6), 1719-1730.
- Brav, O. (2009). Access to capital, capital structure, and the funding of the firm. The Journal of Finance, 64(1), 263-308
- Breusch, T. S., & Pagan, A. R. (1980). The Lagrange Multiplier Test and its Applications to Model Specification in Econometrics. The Review of Economic Studies, 47(1), 239-253.
- Brigham, E. F. & Ehrhardt, M. C. (2004. Financial Management: Theory and Practice, 11th Edition, South-Western College Publishers, New York.
- Bryman, A. (1984). The Debate about Quantitative and Qualitative Research A Question of Method or Epistemology. British Journal of Sociology 35(1), 75-92.
- Bryman, A. and E. Bell (2003). Business Research Methods. Oxford, Oxford University Press.
- Graham, J. R., & Leary, M. T. (2011). A review of empirical capital structure research and directions for the future. Annu. Rev. Finance. Econ., 3(1), 309-345.

- Huang, R., & Ritter, J. R. (2009). Testing theories of capital structure and estimating the speed of adjustment. Journal of Financial and Quantitative analysis, 44(02), 237-271.
- Kamau, J. N. (2010). The relationship between capital structure and financial performance of insurance companies in Kenya (Doctoral dissertation, University of Nairobi, Kenya).
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. The American economic review, 261-297.
- *Myers, S. C.* (1984). *The capital structure puzzle. The journal of finance, 39(3), 574-592.*
- Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange; Journal of Management Research, 4(2), 226-289
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. The Journal of finance, 43(1), 1-19.
- Wen, Y., Rwegasira, K., & Bilderbeek, J. (2002). Corporate governance and capital structure decisions of the Chinese listed firms. Corporate Governance: An International Review, 10(2), 75-83.