

**THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND  
PROFITABILITY OF MANUFACTURING COMPANIES LISTED  
AT THE NAIROBI SECURITIES EXCHANGE**

**BY  
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## **DECLARATION**

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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This research project has been submitted for examination with my approval as the University Supervisor.

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## **DEDICATION**

I dedicate this work to my family and friends for all the assistance they have given me through the research project writing period

## ABSTRACT

For the companies to grow the decisions of the capital structure are very critical in any business enterprise because they influence the company's value. Capital structure or financing decision forms critical decision in finance management that will affect the wealth of shareholders wealth and risk. The major challenge facing manufacturing companies listed at Nairobi Securities of Exchanges is structuring finance and its impacts on financial performance. The main objective of the study will seek to determine the relationship between the capital structure and profitability of manufacturing companies listed at NSE. The research study will utilize the research design descriptive. The target population was manufacturing companies listed in the Nairobi security exchange. Since the population was small the study used census to collect data. The study used secondary data from Nairobi security exchange for a period of 2013 -2017. The study regressed return on equity and debt ratio, liquidity and size of the firm. The findings revealed long term debt and liquidity influence profitability of manufacturing companies listed at the NSE. This clearly shows that capital structure of manufacturing companies profitability, is positively related to profitability of manufacturing companies listed at NSE, this is attributed to the fact that the long term debt is utilized to run the operations of these companies and by doing so reduce the losses that the firm would have undergone if there was shortage of the long term funds. The study concluded that long term debt of manufacturing firms listed in the NSE is positively related to profitability of manufacturing companies listed at NSE. The more the long term debt the higher the profitability in term of return on equity as well as increase shareholders wealth which indicates a need to increase more debt. The total debt in these companies could lead to higher interest tax benefit hence increasing the profitability of the manufacturing companies. The research study recommends and encourage the companies to increase their size by considering growing their assets by ploughing back their earnings. The size of the firm has also concluded of having a negative effect on the profitability of the Manufacturing companies. The study recommends the companies should come up with the finance corporate strategy that would increase their wealth and size in the long run.

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## LIST OF ABBREVIATIONS

<b>CAPM</b>	Capital Asset Pricing Model
<b>CMA</b>	Capital Markets Authority
<b>CS</b>	Capital Structure
<b>DPS</b>	Dividends per Share
<b>EMH</b>	Efficient Market Hypothesis
<b>FDI</b>	Foreign Direct Investments
<b>FMI</b>	Financial Markets Infrastructure
<b>GDP</b>	Gross Domestic Product
<b>MM</b>	Modigliani and Miller
<b>MPT</b>	Modern Portfolio Theory
<b>NASI</b>	NSE All Share Index
<b>NSE</b>	Nairobi Securities Exchange
<b>ROA</b>	Return on Assets ratio
<b>ROE</b>	Return on Equity ratio
<b>WACC</b>	Weighted Average Cost of Capital

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

For us to appreciate the way firms have been financing their business operations activities. It will be very important for us to examine the capital structure decisions or the determinants of the financing. The company financing decision involves quite a wide range of finance policies and has been viewed as critical decisions that finance managers make, since it has got great impact on the company's value and its ability to cope up with competitive financial environment.

According to Coleman (2007) argued that the firm capital structure is the proportion of either debt, equity or both that the companies its being financed operation. It can also be refers to be the means by which company raises capital for their business operations. Brigham and Houston (2013) argue that company financing decisions involve various policy decisions, such as the transaction cost, tax rates and cost of capital in term of dividend policy and interest rate, they are one of the major finance leverage determinants of various companies.

The Modigliani-Miller theory has defined the capital structure background and suggested that under a certain market pricing process the company's value is unaffected under the following assumption: absence of corporate taxes, efficient, cost of bankruptcy, efficient market and asymmetric information (Modigliani & Miller, 1963) argued that the attractiveness of the debt increase the with increase of income tax on the interest debt income. The company face financial crisis or distress whenever it's unable to fulfil debt holders' obligations, thus becoming insolvency.

Rafuse (1996) argued that most of the business failures are due to poor financial management decisions. The success of the companies heavily relies on how frequent companies is able to generate more cash. Companies such as Mumias Sugar and Eveready Limited have been seriously facing financial distress for the last decade due to poor financing policies.

Meckling and Jensen (1976) argued that conflicts of interest arise whenever goals and desires of the principal and agent are diverted. This therefore causes conflict of interest since principal is unable to verify whatever the agent are pursuing. Alistair et al. (2005) argue that conflicts of interest can be mitigated by having more debt as the monitoring and measures device control misuse of cash flows by managements or can either through the take-over threats thus encouraging them to generate sufficient returns to settle the debt obligations. There the long term debt will contribute to a positive financial leverage of the company thus maximizing shareholders wealth. Capital structure financing decision has effects on the earnings, survival and growth of the company (Short et al, 2002).

At the government level, proper planning and efficient allocation of resources in terms of capital investments enhances the general growth of the economy.

### **1.1.1 Capital Structure**

The capital structure of a company can be defined as the finance capital proportion levels of the debt and shareholders equity that firms utilized to run their business operation. Various companies tend to use different proportion of the finance capital structure.

Booth et al (2001) argued that the company may decide to use entire equity or debt to finances its operations. The company may decide to finance their business operation by the use of mix of debt and equity at different proportion ratio to maximized the shareholder wealth. Abor (2007) argued that the financial management should focuss on achieving the optimal capital structure to maximize the shareholders wealth.

Onaolapo and Kajola (2010)investigate the imapacts of capital structure on the non-financials companies profitability quoted at the Nigeria stock Exchange from (2001-2007), various profitability and solvency ratio was used to assess the impacts of capital structure on ROE, ROA and debt ratio and found out that capital structure has negative relationship with companie's profitability and solvency. Alternatively, firms that have experienced increase in share price over time can attract more equity than debt financing and may consider repurchasing debt. This study will focused on analyzing the relationship between capital structure on the profitability of manufacturing companies listed at the Nairobi Securities Exchange, size and liquidity of the companies will also be investigated.

### **1.1.2 Profitability of Firm**

Profitability can be defined as the companies rate of returns from their committment investment and measure the company's financial performances.Profit is one of the major goal for business to exist. Without profit company cannot survive in the long

run. Thus assessing the past, current and future projection of profitability is very important to companies.

Hofstrand and Don (1999) pointed out that, companies's profitability are measured by both external and internal factors. The internal profitability determinants are specific while the external factors are related with the industry. Internal factors involves liquidity, company size, financial asset of the company and leverages and has influence on the firm profitability. Khawaja (2013) argue that as long as the long-term investment decision is considered the firm should also focus on short-term investment to meets daily operation activities.

Arnold (2008) further argue that whenever company invest heavily on capital projects for profit generation while forgetting the capital needs of short-term obligations will experience bankruptcy. The firm profitability is determined by the Return on Asset (ROA) not only does it measure profitability but also the related assets used or employed in profit generation. On breaking down ROA, we get two important measures, that is, profitability ratio and asset turnover ratio. ROA determines the ability of the company to generate enough returns on its assets.

For Return on Equity (ROE), it does not show how a firm uses its resources but a firm can manage to deliver a very impressive ROE without necessarily being effective at asset utilization to grow the firm. The other measure that can be used is the market which is a future oriented and focus more on the market performance and less vulnerable to different accounting policies and procedures. It is a representation of investor's evaluation of companies's ability to generate sufficient earnings. This measure is able to determine the company's future earnings rather than looking at the past profitability of the company.

### **1.1.3 Effect of Capital structure on the firm profitability**

The company capital structure has a great impact on firm's profitability. Mesquita and Lara (2003) argue rate of return is negatively relates with debt of long-term financing. John and Roni (2005) carried out research on debt financing of overinvestment and underinvestment model and confirmed that debt have both a negative and a positive impact on company profitability performance.

Ross (1977) suggested that financial positive indicator to the external potential investors about the company's future performance. This will suggest the company has stable and smooth flow of income and able to pay periodic debt installments, therefore the higher debt suggest managers has confidence on the sufficient smooth flow of income. Therefore by the company maximizing shareholder well wealth will attracts and instill confidences of shareholders by increasing the the value of equity by using more debt in the capital structure. The capital structure trade-off theory emphasizes that companies capital structure should balance the benefits and costs of debt. The offer theory has argued that the optimal of the capital structure of a company has the blend of finance funding that equates marginal benefits and marginal costs of debt. Michalak (2014) noted that efficient company stand higher chances of earning higher returns from a certain capital structure.

Tailab (2014) established that attractive profitable firms have a higher equity and lower debt in their capital structures. Kajanathan and Nimalthasan (2013) suggested that, capital structure decisions are crucial because such decisions directly affect a firm's profitability, optimal selection of mix of equity and debt is one of the crucial elements of business enterprises' financial strategy. To achieve this, the study will

assess the elements of capital structure employed by company and the impacts on company profitability.

#### **1.1.4 Listed Manufacturing companies at Nairobi Securities Exchange**

Over the past years the Manufacturing companies have continued playing a very critical role in Kenya economy. Empirical evidence concluded that manufacturing sector has the highest employment multipliers effect in the economy of Kenya. For instance, study by Bivens (2003) revealed that for every 100 jobs in the manufacturing industries support more than 291 jobs in other sectors of the economy.

Manufacturing company stocks have shown positive outlook growth over the last five years and are projected to continue growing. The Manufacturing company has been ranked as the been rank in economy sector as the fourth largest after transport ,agriculture and communications respectively. Kenya has nine manufacturing and allied companies that has been listed at the Nairobi Securities Exchange these are: Eveready Limited, Mumias Sugar Company ,BOC Kenya, British America Tobacco, Carbacid Investment, East Africa breweries, Unga Group, Kenya Orchards and Flame tree group. Kenya Association of Manufacturers (2018) argued that the manufacturing sector plays a crucial role in Kenya economy growth, therefore this sector need depth industry as well as company analysis. This is because it contributed about 9.2% of Kenya's GDP, and expected to grow to 15% by the year 2022 this will enhance through increase value and volume of exports, Consumer benefit manufacturing products and exports diversification in the creation of value addition and new products. The final products can either be sold as finished product or be used as an intermediate product for further processing of other products



(Lawrence & Gitman, 2012). The fact that the Kenya Manufacturing industries are tend to be small has emerged to be the most sophisticated in Africa region. The sector has been growing over the last decade. The manufacturing companies in Kenya are relatively diverse as well, this is because Kenya has shown a positive outlook on manufacturing sector which has attracted foreign and local investors, since it has the best work-force in East Africa region and better improved infrastructure thus lowering production and manufacturing cost. Various measure a goals and target has been established to facilitate the sustainability and growth of this industry also the Kenyan government has promoted small and medium scale manufacturing companies over the past decade.

## **1.2 Research Problem**

Capital structure decisions are critical in any business enterprise because influence the firm's value (Tongkong, 2012). Decision of the capital structures or financing decision forms a crucial finance managerial decision that has influence on the shareholders wealth and risk. Structuring finance is the major challenge facing many manufacturing companies listed at Nairobi Securities of Exchanges. (Modigliani & Miller, 1958) argue that the management has the option for the type of the finance decisions that would maximizes the company's value as well as the finance determinants that influence the optimal capital structure. The market share price also is affected by the capital structure decision.

The study of capital structure has become a subject of interest to many researchers.

Modigliani and Miller (1958) investigated factors that influences the firm's choice of capital structure. Brigham and Gapenski (1996) argue that the the company can

only achieved the optimal capital structure only if there is existence of tax shield benefits, provided an increase in debt level is equal to the bankruptcy costs. Most of the manufacturing companies have been experiencing a decline in financial performance and some have been delisted and suspended trading at the NSE.

Most of the challenges experienced by Kenya's companies that has been under the statutory management has been attributed by poor financing decision. This scenario has contributed to the investor's losing their wealth and confidence of the securities market. No sufficient exploitation study has been done on relationship capital structure and profitability of Manufacturing companies listed at the Nairobi Securities Exchange. Therefore this study we seeks to fill this gap by investigating the relationship between capital structure on profitability of Manufacturing companies listed firms at the Nairobi Securities Exchange.

This research aims at determining how the finance management of the manufacturing companies listed at the Nairobi Securities Exchanges combines various finance sources for funding companies, given the vibrants of Kenyan economy and to investigates whether there an existence relationship of the capital structure on the profitability of manufacturing companies listed at NSE. Also analyzing how longterm debt affect the return on equity, and also how companies' net asset warranties the longterm borrowing of debt. Maniagi and Gilbert (2013) study the relationship between firms capital structure and performance of companies listed at Nairobi Securities Exchange (2007- 2011) concluded that small firms prefer less debt compared to large firms. The small firm tend to adopt the pecking order theory since it has underdeveloped financial debt market and has to tie to a strict

covenants associated with the longterm debt borrowing thus making the debt borrowings to be very costly thus making them to borrow less.

### **1.3 Objective of the Study**

The focus of this research study will be to determine the relationship between capital structure and profitability of manufacturing companies listed at the Nairobi Securities of Exchange.

### **1.4 Value of the Study**

The study findings would be useful for future researchers, scholars and academicians in establishing areas knowledge of capital structure, It also provides basis for further research study on the capital structures theories and also focused on developing nations. The study will be beneficial for investment decisions by both local and foreigner's investors. The study is useful to finance managers and investments analyst in making insightful investments decision that may enhance investors wealth creation and economy sustainability.

The findings of this research would provide sufficient information for the regulatory authorities such as the Capital Market Authorities, Nairobi Securities Exchange and Retirement Benefit Authority in Kenya.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Chapter two will focus on theoretical framework and review the studies has been previous carried out relating to capital structure of firms listed in Kenya. It will focus on the theoretical framework. Theory of the capital structure, profitability determinants, empirical review, conceptual framework and the summary of the literature review

#### **2.2 Theoretical Review**

The theoretical framework focus on various knowledge that has been study and therefore forms the blueprint of the study results to be analysis and interpreted findings to overcoming the challenges of the previous research. This section will address on various theories such as capital structures,pecking order and trade of theory.

##### **2.2.1 Capital Structure Theory**

The capital structure theory was greatly done by scholar Modiglian and Miller (1963) argue that the firm finance decisions tend to irrelevant to the company value. The assumptions suggest the value of a firm is the same regardless of whether it has been financed by equity or debt. The weighted average cost of capital is constant, theory suggest the firm operates in frictionless and perfect market, no default risk, no taxation, no transaction cost constant dividend policy,firms borrows at the same

interest rate, the risk and return are homogeneous, and they both are to access entire relevant market information,

The equity return (ROE) is positive relates to the structure of debt ratio thus suggesting the lower the debt equity ratio the lower the return on equity. Firm leverage on debt financing, firm should only consider investments whose expected return are almost equal to the capital cost regardless to the source of the finance Mahrt (2005). Thus, the marginal cost capital must be equal to average cost capital financed. The theory concluded that the value of the firms is irrelevant regardless whether it has been financed by equity or debt, as long as the company does not incur corporate tax and the value of the firm will be remain same.

### **2.2.2 Trade-off Theory of Capital Structure**

This theory argue that that company achieve optimum capital structure level based on the trade-off between the costs and benefits of the firm being financed by debt, this theory is an extension of the Modigliani and Miller. The theory suggest that company's capital optimal structure are influences personal taxes, agency costs and bankruptcy costs,

Fama (2002) trade-off theory suggest that company should focus on debt level that will maximize the shareholders wealth, and also through the leverage trade-off theory suggests benefits of company would benefit from optimum capital structure financing. The theory suggest tax benefit or debt interest is tax deductible. Thus reducing the impact of tax obligation hence increasing benefit of tax shield.

The higher the company debt proportions makes it more risky for investment by Therefore, the investors demand high premium for their investment,

Popescu (2009) urge that the company's optimal ratio of debt its mainly determine by impacts of trade-off between the cost of bankruptcy and tax shield of financing by debt .

### **2.2.3 Pecking Order Theory**

The pecking order theory by Modiglian and Myers (1984) states that firms prefers internal financing over the financing from external source, and whenever the external finance is needed, firms should consider issuing the first debt then equity as a last option solution. However, the pecking order try to explain why most successful profitable companies' low debt ratios have: This happens since the management they don't prefer obtaining external financing regardless of having low target debt ratios, thus the pecking order theory can explain why various companies in various industries have differences capital structures, then whenever we have insufficient funds from internal to fund new opportunities investments. (1984) suggest the company will focus on the financing hierarchy sources and will give internal financing priority, firm will only acquire external financing from external at a minimized additional cost, Vera and Nganso (2012) carried study on 104 Canadian firms and 74 Colombian firms concluded that small Colombian firms did not follow the pecking order theory, but large companies did. In Canada, all firms follow the pecking order. However, the relationship is much higher in smaller firms compared to large firms. This can be explained by the existence of information asymmetry between small firms in a developed country compared to a developing country. It further suggests that capital market in Canada is more developed as in Colombia. Therefore, small and medium size firms in developing countries cannot access the capital markets whereas the reverse is true in the case of developed countries. Scherr (1993) suggest that small

and medium sizes company are suitable for the pecking order theory as opposed to the largest firm since small and medium companies are being owned by the managers and are not willing to lose their firm control of ownership and also argues that companies tend to considered financing from financing source over to the external funds thus it's the only last resort. and in case they must seek external funding, they will prefer debt over the equity, since they are not willing to lose their firm ownership, there the pecking order theory prefers the companies to adhere to financing hierarchy to facilitate the information asymmetry within various finance parties.

### **2.3 Determinants of Firm Profitability**

Profit can be defined as the excess of income over expenses. Profit is the major goal of all companies. Without profit firm cannot survive in the long run. The companies that are highly profitable rewards their shareholders with higher returns therefore this attracts the company to trade their shares at a premium, this result to a higher valuation of the company Hovakimian (2004). Listed Manufacturing companies in Kenya have recently witnessed a lot challenges in the economics this has been attributed by the increase price of oil and the manufacturing raw materials, fluctuation of foreign exchange rate, Inflations and high interest rate and stiff competition from foreign market,

#### **2.3.1 Capital Structure of the firm**

The management should consider capital structure decision is critical for the firm profitability and the shareholders wealth creation and risks, since it adversely affects the company's market share, the capital structure mix have effect of cost of obtaining capital for a business and hence its value.

Therefore, the firm managers must plan its capital structure and by making critical cost benefit analysis since these decisions will have impacts of firm profitability. Shareholder wealth maximization require perfect capital structure since capital cost is negatively correlated to profitability therefore for it to be minimized Carpentier (2006), Ong (2011), Investigates the impacts of the capital structure on profitability of constructions firms in Malaysia from 2005-2008. The ROE was used examine the performance of the companies while the debt ratios debt to equity ratio, debt to asset ratio, long term debt to were used as the for the independent values of variables. The study suggests that there positive relation between capital structure and companie's profitability. In Jordan (2007) investigated capital structure impacts on the firm's performance of the 167 Companies listed in Jordan from 1989 to 2003. They find a negative relationship exist between capital structures and financial performance.

### **2.3.2 Inflation Rates**

Inflation refers to the general rise of prices of products and the service of a given economy over a given period, thus increasing cost of living, with this general rise of price, the country currency will buy less products and services thus the money purchasing power will be reduced. The real value of a country currency will have reduced or decline along with inflation Smith & Anderson(1996).

During high inflation period, it makes difficult for firms to predict accurate future projections prices and returns from investments. Therefore, undermines business and investors' confidence. Whenever a country is it experiencing high rate of inflation than that of the competitive country, the country exports will be least affordable compared to the other counterpart country. Therefore, there will be sales decline both



domestic and foreign market thus creating the trade deficit. Davidson (1995) argue that Inflation weakens the country competitive advantages in the foreign market.

### **2.3.3 Exchange Rates**

The fluctuation of foreign exchange rate has much effects on locally manufactured goods in Kenya profitability. Government economy fiscal and monetary policy which influences the real exchange rate, will be only beneficial to those manufacturing companies which export their product abroad such as Orchard Limited and will also undermine the profitability of manufacturing firms which are more intensive users of imported materials such as Eveready Limited and B.O.C limited, In terms of macro fluctuations.

Calvo (1993) found that the foreign factors contributes to 30 to 60 per cent of the difference in currency real exchange rates and the Latin America countries reserves, which may help explain why Montiel (2004) Concluded that developing countries faces more fluctuation challenges of real exchange rate compared to the, Fernandez and Arias (1994) suggested that the external factors contributes more half of the entire portfolio inflows to more than 13 of the developing countries during periods of 1990s.

### **2.3.4 Firm Size**

Its measured by the total market value or the total asset, its being believed there is always high correlation between company size and profitability which is the only best way of computing the market capitalization Majumdar (2009) argue that the firm size influences financial profitability because larger firms have advantages of economies of scales to lower their production cost thus maximizing profit.

Large manufacturing firms like East Africa Breweries Limited can access funds at lower cost capital rate. Thus, able to maximizes returns, (ROE).

### **2.3.5 Firm Growth**

The growth of a company can be defined as an increase in future prospects for shareholders. Country economic growth helps a firm to grow in the markets, the company's future profitability is influenced by growth (Rajan, 2008). Hence, a good competitive advantage against its competitors. Growth prospects may be regarded as a firm's increase in assets. Based on Pecking order theory, firms may utilize internal funds as their initial financing instead of borrowing externally to fund their operations (Watson and Head, 2010). It therefore suggests that firms with high growth prospects will prefer using internally generated funds which are less risky compared to debt and equity. Raising external finance is costly to the firm which might hinder future growth prospects and reduce future earnings.

### **2.4 Empirical Review**

We have numerous empirical reviews and studies for both internationally and locally on the relationship between capital structure and financial performance of various companies, but most of these studies have not done research on the impacts of capital structures on profitability performances of listed Manufacturing companies at NSE.

We have several international studies done relating to the impacts of capital structure on a company's profitability. Abor (2004) studied the impacts of capital structure on the profitability of firms quoted at the Ghana Stock Exchange for the period of five years from 1998 to 2002. Abor used Multiple regression analysis to estimate the model that connected ROE to capital structures. He concluded that a positive relationship exists between short-term debt ratio and the ratios of Total Asset and

return on equity. Also, there was a negative relationship of long-term debt to the ratio of the total asset.

Almad did a research on the impacts of the capital structure on company profitability performance of consumers and industrial listed companies in Malaysia, from 2005 to 2010, The company's performance was measured by return on equity and return on asset while the capital structure was determined by the long-term debt and short-term debt. It was concluded that the level of the debt has a negative significant impact with return on equity and return on asset, return on asset has appositive significant with both short-term debt and total debt.

Garcia, T, M. (2007) investigates the effects of short-term debt on the profitability concluded that the Short-term debt has a positively correlation with the company's growth investments opportunities. Since there was no previous study or the empirical review evidence regarding to the financing of the short-term debt, the prediction was rendered tentative. Thus, the relationship was concluded to be null there since then no research has been done on the impacts of short term debt on financial performance of a company

Titman. (1988) study on the relation between firm tangibility and financial leverage. With view that company with high levels of asset especially the tangible will have much more collateral for the debt financing. Since if the company default its asset will be seized and the firm may also avoid the expected bankruptcy. Thus, the firm with more tangible asset are less likely to be in a default situation thus will considered more debt regarding to the positive relation of the tangibility of its asset to the financial leverage.

Roden, L. (1995) study on the impacts of the capital structures on profitability of 48 companies based in United State of America which had been buy out on leveraged

1981 to 1990, by using of the multinational logit models. They concluded apposite impacts between company's financial performance and leverage policy regarding to the tax considerations, the result was consistent with the previous trade-off theory. Policy regarding to the tax considerations, the result was consistent with the previous trade-off theory.

Mwangi (2010) research on the effects of the capital structure on firm profitability quoted at the NSE, concluded a positive impact of leverage on ROE, ROI and liquidity existed.

Maniagi (2013) researched on the impacts of company capital structure and financial performance of firms listed at NSE from 2007 to 2011. concluded that small firms listed at NSE prefer less debt compared to large firms, they have consistent to peck order theory due to lack of developed market and tough covenants regarding to the long-term financing this has made external finance to be more expensive thus small firm are unable to borrow much,

## **2.5 Conceptual Framework**

The conceptual framework gives blue print of how variables are related with dependent variable. The factors characterized here are capital structure, Cost of production, economy growth, firm size, exchange rate and inflation. The independent variable short-term debt and long-term debt to asset ratio. Profit performance is the dependent variable research seek to elaborate, and it will be assessed based with the impacts of capital structure on profitability of Manufacturing firm listed at the NSE such as Mumias Sugar Company and Eveready Limited have been serious facing financial distress for the last five years due to poor financing

## 2.5 Conceptual Framework

The framework will give a portrayal of how the factors identified are related to each other. The factors characterized here are capital structure, Cost of production, economy growth, firm size, exchange rate and inflation. The Capital Structure is independent variable and comprise of short debt to asset ratio and long-term debt to asset ratio. Profitability is the dependent variable and measured by Return on Equity, Return on Asset and the Market price to book ratio. The study seeks to explain the impacts of capital structure on profitability of manufacturing companies listed at Nairobi Securities of Exchange.

### The Conceptual Model

#### Independent Variable

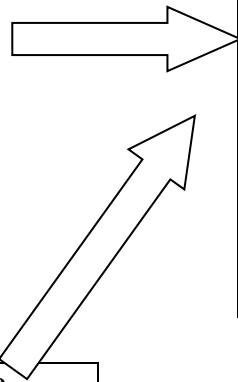
<b>Capital Structure</b>
Longterm Debt Ratio
Equity to Asset Ratio

#### Dependent variable

<b>Profitability</b>
Return on Equity (ROE)
Return on Asset (ROA)
Market Price to Book Ratio (BPR)

<b>Firm size</b>
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#### Control Variable



## **Figure 2.1: Conceptual Framework**

### **2.6 Summary of the Literature Review**

Various theoretical frameworks seek to explain the concept of capital structure on the profitability of listed Manufacturing companies at the NSE. The following theories have been discussed in this theoretical review, namely: Capital structure, Pecking order and Trade-off Theory. Some of the key determinants of profitability have also been discussed in this section. Various empirical studies and research have been done both at local and international level. The findings of these studies have also been discussed in this chapter. From the foregoing, it is notable that there is no study done to establish the relationship of capital structure on profitability of manufacturing companies listed at Nairobi Securities of exchange. This study will address the researchers objective.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter will focus on the research methods that the researcher will apply to achieve the research objectives to determine the relationship between capital structure and profitability of listed manufacturing companies at the NSE. The research methodology will focus on design research on the following areas as follows, Research design, data collection methods and data analysis.

#### 3.2 Research Design

Research design is the conceptual structure within which the research is conducted, it constitutes the blue print for the collection, measurement and analysis of data. Research design is also defined as the determination and statement of the general research approach or strategy adopted by the project to adhere to the research objective, and ensures that the client's need was served (Cooper & Schindler, 2008).

Descriptive design was adopted for the study. It involves description of all the elements of the population and allows estimates to be part of population that has been attributed. The identification of relationship of various variables to establish how they are relating. The study will adopt the descriptive design. This method is a scientific approach that involves observing and describing the behavior of various subjects without influencing it. The design puts more emphasis on the problem and explains the relationship between the variables (Saunders & Adrian, 2009).



Churchil (1991) argued the suitability of the descriptive design for the study that seek to describe the certain characteristics of a groups, estimate the proportions and make predictions of the past data and analyze to come up with a model on the relationship between the firms' capital structure and profitability, which will be adopted by researcher for testing the relationship exist between the dependent and independent variables.

### **3.3 Target Population**

The population of nine listed manufacturing companies at the (NSE) as at December 2017 will be reviewed and analyzed. The census approach method will be used in the study where entire nine manufacturing companies listed at the Nairobi Securities Exchange will be selected without sampling since the population is manageable.

### **3.4 Data Collection**

The secondary source of data will be utilized. The data will comprise from from annually audited published financial report of manufacturing company listed at Nairobi Securities Exchange from 2013 to 2017. This period was selected since it represents recent various economic conditions in Kenya and the availability of audited financial statements. In addition, other sources of secondary data was used from journals, newspaper and books.

### **3.5 Data Analysis**

The data will be classified analyzed by using both descriptives and inferential statistics. The data will be analyzed by use of the SPSS and examined using descriptive, regression and correlation analyses. For the descriptive statiostic the

study will focus on the mean, standard deviation . In inferential statistics the study will adopt the multivariate regression analysis to determine the relationship exist between profitability as dependent variable and capital structure as independent variable.

### **3.5.1 Diagnostic Tests**

The research assess the coefficient of correlation to determine the strength of the linear regression model between the profitability in term of return on equity and the independent variables in terms of the debt ratio,liquidity and the size of the firms.The Coefficients of Determination will be used to measure the predictable variable from other independent variable. The normality tested will be also determined as well as the analysis of variance (ANOVA) will be used to measure the the effect of the capital structure.

### **3.5.2 Analytical Model**

The collected secondary data will be encoded in Statistical Package Social Scientific (SPSS) version 22 and analysed to generate the descriptive statistic .The regression model will be used to determine the the relationship between the dependent and independent variables. This model will be also used to determine the strength, direction and correlations relationship of the various variables.The following regression model will be used.

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

Where: Y = Profitability determined by Return on Equity,ROE

$\alpha$  =y regression equation intercept.

$\beta_1, \beta_2, \beta_3$  =are the slope of the regression.

$X_1$  =Debt ratio given as long term debt / (shareholders equity + longterm debt)

$X_2$  =Liquidity, given as the (current asset divided by current liabilities)

$X_3$  =Size, as given by; Total value of net asset.

$\epsilon$  =error term.

### **3.5.3 Tests of Significance**

The test of significance will be tested by the F- test and t-test the statistical significant will be tested by F-test while the coefficients confidence s at 95% will be determined by the t-test. The F-test of statistic will be also used to determine the significant of the regression equation.

## CHAPTER FOUR

### RESULTS AND DISCUSION

#### 4.1 Introduction

This chapter will focused on the collections, analysis and discussion of the result as follow. The 4.2 section will highlights the summary of the statistics and section 4.3 will discusses the results of diagnostic tests while 4.4m section will highlight the inferential statistics.

#### 4.2 Descriptive

**Table 4.1: Descriptive**

	N	Minimum	Maximum	Mean	Standardd Deviation
ROE	45	-7.91	7.82	1.9771	3.70860
Debt ratio	45	.00	7.79	3.0238	3.38190
Liquidity	45	.00	8.00	2.9534	3.50352
Size of the firm	45	5.88	8.86	7.2328	.79566
Valid N (listwise)	45				

As shown in table 4.2 , the result revealed that ROE 1.9771 mean and 3.708 standard deviation .Meaning there was a spread of 3.023 mean and 3.38 standard deviation of which implies there was a wide spread of return..

The result also revealed that the mean of Return on equity for the manufacturing companies listed at the NSE was (1.97). The minimum reported return on equity was (-7.91 while the maximum was (7.89). The return on equity of manufacturing

companies was spread within a standard deviation of (3.708) and this implies that there was a wide spread of profitability.

The result also revealed that the mean of debt ratio for the manufacturing companies listed at the NSE was (3.02). The minimum reported debt ratio was 0.00 while the maximum was 7.79. The manufacturing firms debt ratio was spread within a standard deviation of 3. and this implies that there was a wide spread of debt ratio. The result also revealed that the mean of Liquidity for the manufacturing companies listed at the NSE was 2.95, The minimum reported liquidity was 0.00 while the maximum was 8.00. The manufacturing companies liquidity was spread within a standard deviation of 3.50 and this suggest that there was a wide spread of liquidity of various manufacturing firms

The result finding concludes that the mean for size of the manufacturing companies listed at the NSE was 7.23. The minimum reported size of the firm was 5.88 while the maximum was 8.86. The manufacturing companies size of the firm had a spread of a standard deviation of 0.795 and of which implies there was a wide spread of debt ratio.

### **4.3 Diagnostic test**

#### **4.3.1 Multicollineality**

The result in table 4.3 below, shows that the Debt ratio , liquidity, and firm size had a variance inflation factor of (2.469, 1.0, 2.083, 1.352).The rule of thumb is that if the VIF value lies between 1-10, then there is no multicollineality.In addition if the value is less than one or more than 10 then there is multicollinearity.The data indicated absence of multicollinearity hence further analysis could be conducted.

As indicated the table below.

**Table 4.2: Multicollinearity**

Model		Collinearity Statistics	
		Tolerance	VIF
1	<b>X<sub>1</sub></b> Debt ratio	.405	2.469
	<b>X<sub>2</sub></b> Liquidity	.480	2.083
	<b>X<sub>3</sub></b> Size of the firm	.740	1.352

### 4.3.2 Normality Testing

Normality of data was tested by use of the Shapiro -wilk test. This normality test was developed 1965 by Shapiro and Wilk and has been the most powerful normality test. This test is not computed when the frequency variables is specified. It used to determine the assumption of the univariate normality by taking the observed cumulative distributions of the scores and compares with the theoretical cumulative distribution for the normally distributed variables. The alternative and null hypotheses were stated as follows:

alternative hypotheses were stated as follows:

**H<sub>0</sub>**:Data has not distributed normally

**H<sub>1</sub>**: Distribution of data is normally.

The rule is that if the p-value is greater than 0.05, H<sub>0</sub> is not rejected, if the p -value is less than 0.05, H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. Here the two normality test are run. Shapiro-Wilk test are used for the data with set smaller than 100 elements,

Kolmogorov -Smirnov test will be used in our case since we have 45 elements elements, the Shapiro –wilk test is used.

**Table 4.3:Normality test**

	Kolmogorov - Smirnov <sup>a</sup>			Shapiro - Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ROE	.286	45	.220*	.785	45	.200*
Debt ratio	.352	45	.210*	.684	45	.200*
Liquidity	.270	45	.200*	.697	45	.200*
Size of the firm	.109	45	.200*	.937	45	.201*

The Kolmogorov-Smirnova results for the variables (Return on equity, debt ratio ,liquidity and firm siz) were 0.220, 0.210, 0.200, and 0.200 respectively. The Shapiro wilk results for the variables return on equity, Debt ratio, liquidity and size of the firm,0.200. The results indicated that the data was normally distributed for all the variables

#### 4.4 Correlation analysis

**Table 4.4: Collineality**

		ROE	Debt ratio	Liquidity	Size of the firm
ROE	Pearson Correlation	1	.625**	.652**	.164
	Sig. (2- tailed)		.000	.000	.282
Debt ratio	Pearson Correlation	.625**	1	.721**	.510**
	Sig. (2-tailed)	.000		.000	.000
Liquidity	Pearson Correlation	.652**	.721**	1	.350*
	Sig. (2- tailed)	.000	.000		.018
Size of the firm	Pearson Correlation	.164	.510**	.350*	1
	Sig. (2-tailed)	.282	.000	.018	

The correlations of the variables of the model were calculated and the findings are shown on the above table 4.3 above. The findings in table 4.3 indicate a strong positive correlation exists between equity and debt ratio ( $r = 0.625$ ). The findings indicate that the correlation is significant at (Pvalue < 0.01) level of significance as given, p-value (0.000). The result indicated that there were also strong positive correlation between return on equity and liquidity ( $r=0.652$ ). The findings indicate that the correlation is insignificant at 0.01 level of significance since the p-value (0.00) is less than alpha (0.01).

The result revealed that there is strong positive correlation between debt ratio and liquidity ( $r=0.721$ ). The findings indicate that the correlation is insignificant at 1% significance level given that p-value (0.00) is less than alpha (0.01).



The result also showed strong correlation of the size of the firm and debt ratio ( $r=0.510$ ). The findings indicate that the correlation is insignificant at 5% significance level given that p-value (0.00). Finally the result revealed that there is a strong positive correlation of the firm and liquidity ( $r=0.350$ ). The findings indicate that the correlation is significant at 5% significance level given that p-value (0.018). This implies that debt ratio and liquidity are positive determinants of return on equity with a significant association.

#### 4.5 Regression analysis

In Addition to descriptive the study conducted multiple regression analysis to determine the extent to which independent variable, Debt ratio, liquidity and size of the firm determine the ROE.

The findings are presented in the table 4.5.1 below.

**Table 4.5: Regression Analysis**

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.710 <sup>a</sup>	.505	.468	2.56625

As shown in table 4.5 Model of summary of the regression analysis between independent variables (debt ratio, liquidity and size of the firm) and the dependent variable (Return on equity). From the analysis R Square was 50.5%, while Adjusted R Square 46.8%. From the findings it was established there was 50.5% of variations in return on equity of manufacturing companies listed in NSE. The Positive value of R shows that the model summary was significant.

**Table 4.6: Analysis of variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	274.921	3	91.640	13.915	.000 <sup>b</sup>
	Residual	270.011	41	6.586		
	Total	544.931	44			

a. Dependent Variable: ROE

b. Predictors: (Constant), Size of the firm, Liquidity, Debt ratio

From the analysis of variance as shown in table 4.5 above, the processed data which was the population parameter, had a significant ( $P < 0.05$ ) and a calculated F 13.915 and the F critical at 5% significance levels was,  $F_{0.05, 4, 157} = 2.43$ . Since F was greater than the F critical ( $13.915 > 2.43$ ) this indicated the overall model was significant and the results can be used to make inferences of the study.

**Table 4.7: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std Error	Beta			
1	(Constant)	.612	3.941		2.504	.015
	Debt ratio	.456	.184	.429	2.483	.017
	Liquidity	.411	.158	.413	2.602	.013
	Size of the firm	-.883	.565	-.200	-1.561	.126

a. Dependent Variable: ROE

As shown in coefficient table 4.6 the model equation will be ,

$$Y = 0.612 + 0.456 X_1 + 0.411 X_2 - 0.883 X_3$$

As shown in the table of coefficients it was established at 5% significance level ,Debt ratio had (P value = 0.17) significance level,Liquidity had a (P value = 0.013) significance level and Size of the firm had a (P value = 0.126) which was not significant. Further in taking all independent variables ( Debt ratio ,Liquidity and Size of the firm) constant at zero , return on equity will be 0.612. Further findings showed when other independent variables have been hold constants an increase in one unit of debt ratio will lead to 0.456 increase on the return on equity while one unit increase in the liquidity will lead to 0.411 increase in return on equity,while a unit increase in Size of the firm will lead to -0.883 decrease in return on equity. The findings indicate that Debt ratio and Liquidity have a positive effect on ROE, the firm size had a negative influence on return on equity

#### **4.5 Discuss findings**

The manufacturing companies' capital structure was determined by the debt. The debt ratio was used and was computed by dividing the longterm debt by the shareholders owners equity and long term debt . From the data analysis findings the adjusted R squares concludes there is variation of of profitability of manufacturing companies listed at the Nairobi Securities Exchange resulting to variation of the long term debt, liquidity and the companies size.

Therefore the variation of the manufacturing companies' profitability listed at the Nairobi Securities Exchange has been attributed by the Longterm debt, liquidity and the company size in terms of the total asset value. The study concludes the return on equity had positive relationship with the debt ratio. Debt ratio ( $X_1=0.456$ ) suggest that one

percent increase on debt ratio leads to 0.456 percent increase in profitability of manufacturing companies in term of return on equity as indicated coefficients table this result is quite consistent with the finding done by Mwangi (2010) study on the effects of the capital structure on the companies profitability listed at the Nairobi Securities Exchange, there was strong relationship between the debt ratio and the financial performance on the return on investment and the and also liquidity. This can also be explained by companies enjoys financial leverage by having more debts, From the study it was established that at 5% significance level the independent debt ratio variable had a significant values ( $P < 0.017$ ), since the probability of debt ratio was less than 0.05 indicating the statistical theory model was significant for this study. This model was significant at 5% level thus the finding is accepted.

The findings indicate that debt ratio and liquidity have a positive effect on return on equity while Size of the firm had a negative influence on ROE of listed the manufacturing companies at NSE.

The result was also found not in a greement with findings by study done by Zeitun (2007) study on the effect capital structure on firm profitability and concluded that the capital structure had negative significant impacts on the companie's financial performances.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The following recommendation and conclusion was concluded. The response was based on the core objective of the study. The data was collected from the secondary source and analyzed. The main objective was to determine the relationship between the capital structure on the profitability of Manufacturing companies quoted at the NSE from December 2013 to December 2017.

#### **5.2 Summary**

The research objective was to determine the existence of the capital structure relationship on the profitability of manufacturing companies listed at NSE. The objective of the study was achieved by analyzing the audited published financial statements of nine listed manufacturing companies at the NSE and also the Nairobi Securities Exchange handbook.

The secondary source of data was utilized in this study. The data was collected and reviewed from a span period of December 2013 to December. The Adjusted R squared, established that there was profitability variation of Manufacturing companies due to the difference of the company structure and variations of long term debt, firm size and liquidity. From the study analysis the debt ratio and liquidity were the major variables influencing the profitability of manufacturing companies listed in the Nairobi Securities of Exchange. In the finding revealed that the existence of the correlation of the debt ratio and profitability was strong of the manufacturing companies.

The secondary analyzed data was suitable for conclusion on how debt ratio, liquidity and size of the affects the manufacturing firm's profitability that has been at the Nairobi Securities Exchange.

The study revealed that the coefficients of both liquidity and the long-term debt were positive an indication that a unit change in these variables would lead to an increase in profitability of manufacturing companies listed in the Nairobi Securities of Exchange. There was a strong relationship between liquidity and debt ratio manufacturing companies profitability listed at the NSE. The coefficient on total debt ratio was positive an indication that there was existence of the increase in the debt would result to an increase of profitability of the manufacturing companies listed at the NSE. Exchange.

### **5.3 Conclusion**

The finding has revealed that debt and liquidity influence financial performances of the manufacturing allied companies listed at NSE, study definitely shows that capital structure affect the Manufacturing companies profitability .The study concludes that long term debt of manufacturing companies listed in at the Nairobi Securities Exchange is positively related to profitability.This has been attributed that the fact that the long term debt is utilized to run the companies operations by reducing the losses that the firm would have undergone if there was shortage of the long term funds.

The study concludes that total debt affects the profitability of Manufacturing companies listed at the NSE. The higher the longterm debt higher profitability in term of return on equity as well as increase shareholders wealth which reveals that there is a need to increase longterm debt as source of financing. The total debt in

these companies could lead to higher interest tax benefit hence increasing the returns of the manufacturing companies. The companies should therefore consider financing their potential investments projects from the external sources to enhance their profitability.

#### **5.4 Recommendations for Policy**

This study is will be be more beneficial for the senior finance managers in the manufacturing companies, this will broaden their insightful understanding of the impacts of the capital structure on the general financial performances of the companies and the implications on companies returns.

Companies quoted at the NSE should think of having optimal capital structure which will enables them to withstands the finance risk as well as the financial crises that would offer the shareholders better returns on their committed investmentss. In addition, the capital market analysts as well, investment analysts should advise the fund managers companies on the optimal capital structure.

The study stongly encourage Manufacturing companies quoted at NSE to consider increasing their asset base by accumulating maximizing shareholder wealth. The study also suggest the need of the companies to embraces the finance strategies that would increase the size base of the companies and also utilize earnings generated from their operations to acquire more assets and improve their profitability .

The study will also be appropriate for the controlling ownerships of the companies.this will enable the shareholders to monitor and controlling their wealth by using debt to to monitors the activities of the management.The study recommend the management the companies to maintain the optimal capital structure which will

enables them maximize the shareholder wealth this can only be achieved by acquiring finance at lower cost but achieving higher returns for the shareholders.

The capital structure will also enable the organization to plan their financial obligations such as taking advantage of the tax planning which will reduce their corporate tax income liability thus enhancing the companies efficiency.

## **5.5 Limitations of the Study**

During the data collection the researcher encountered many challenges. There were delays in collection of the data since the target data was from the Nairobi Securities Exchange handbook for the period of 2013 to 2017 but unfortunately the Nairobi Securities Exchange had not yet published the handbook for 2017.

Mumias Sugar Companies financial statements were reinstated for 2015 thus the financial statement data was not much reliable for the study. Flame Tree Company was listed in the Nairobi Securities Exchange in 2014 therefore we did not have their actually audited financial statements for 2013 of which it was reinstated in the year 2014. Since it was in the process of going for Initial public offer in 2013 there is high possibility their financial statements for the year 2013 were altered.

Eveready Company limited whose shares have been underperforming at the NSE attributed several years consecutive losses and also the decline of the net book value in the year 2014 and 2016 has led to its shares declining.

Therefore the data collected might not draw accurate results and conclusions therefore. Some of the listed manufacturing firms had been financed by debt such as BOC Limited therefore it was quite impossible to assess the impact of the debt financing on its profitability also the conclusion drawn on this might be misleading.



therefore further research should be done on impacts on equity on the financial performances of other industries sectors.

Different disclosure of financial information in the financial statements, Most of the manufacturing had not clearly classified debts in term of the longterm borrowing and short term borrowing therefore it was not easy to ascertain the actual value of the amount to be classified either as the longterm debt nor the short term debt thus our conclusion may not drawn clear conclusion of the study. In the year 2017 there was prolong election period of which adversely affect most manufacturing earning therefore the research could not able to assess extend in which election influence the profitability of the manufacturing firm this might other variable of which the research did real focused.

Fluctuation of foreign exchange rate the fact Kenya government has been experience currency fluctuation the research could not assess the extend in which this fluctuation affected profitability of the manufacturing sector the fact that most of raw material of this manufacturing sector are imported and therefore the production cost is adversely affected the profitability of the manufacturing companies listed in Kenya.

The listed manufacturing companies have different market for their products and there is demand are unique therefore the there profitability would not only be influenced by the capital structure but also the nature and demands of there products such as the Unga Group Limited and East Africa breweries Limited have been making profit for the last five years as opposed to companies such as the Mumias Sugar and Eveready Limited which has been making losses for the last five years therefore capital structure might not be sufficient enough to determine the profitability of the listed manufacturing companies in Kenya.

There was limitation of scope of the data collection since the researcher could not managed to ascertain the cost of capital in each and every data collected because of the nature of data that was available therefore rendering limited analysis which might influenced the actual results of the findings.

The study covered only five years from 2013 to 2017 this might not have been enough to potray clear pictures of the relationship between the capital structure and the profitability of listed manufacturing companies in Kenya.

Different accouting period various companies have different reporting accounting period therefore the capital structure analysis could not determine the extent in which the profit was attributed, since the study was carried out under assumptions that all manufacturing companies had the similar reporting accounting period as the end of year.

## **5.6 Areas for Further Research**

The study recommends further research to be be undertaken oo this field of the capital structure.The fact that the study covered nine manufacturing listed at the NSE, more research should also be undertaken on the rest of the companies listed at the Nairobi Securities Exchanges in various sectors of Agriculture, Automobile, Banking, Commercial, Insurance,Investments, Constructions,Telecommunication,Real Estates and other Emerging enterprises in Nairobi Securities of Exchanges. More reserchers can also be done on the non listed companies at the NSE.

The researcher study focused on capital structure impacts on profitability of manufacturing companies therefore more research can be one on the impacts of the capitals structure on corporates performances, liquidity, return on assets and sales turnovers.

The size of the firm was determined by assessing the book value therefore researcher recommend further assessing the size of the firm by either the current market prices in term of the market capitalizations or future cashflows discounting methods approaches. Since the value of industries such as telecommunication sectors are prone to volatile due to ever emerging changing in technologies therefore researchers should consider other suitable methods of valuing the companies.

From the research done concluded negative relationship between the company size and the profitability there further recommendation for other research to be done on the impacts of the companies size on the profitability since various industries they enjoys the economies of scales and this could be most area of the further researchers. The secondary data was only used in this research therefore the future researcher should consider using both primary and secondary data this will gain this research more worth. The future researcher should consider determining the cost of capital on various capital structure and assessing the cost benefit analysis of various sources.

for companies. Few statistics methods was used to test the significants of this study the researcher therefore encourage further research to analysis this data by use of other methods such the correlation matrixs.

The study focused on two independent variables debt ratio and liquidity ratio ,but too many factors or measures have impact on financial performance of companies therefore this research will be of great values whenever researcher will focus on various measures such as the inflation rate and interest rates.

The companies that has been financed by longterm debt has great financial leverage risk in case of failure to meet their loan obligation the company will put under statutory there the further research should also be done on the impacts of the structure on the solvency position companies listed at the NSE.

Further research should also be done to establish the relationship between the capital structure and the companies that has been put under liquidation. Future researchers should also consider the research on the impacts of the interest capping on the capital structure of financial investments companies such as the fund managers, banks and insurance firms. The researcher are also encourage to do a research on impacts of tax rate on capital structures of various multinational firm to determine whether the tax has impacts on how firms structure there capital structures.

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## APPENDICES

### APPENDIX I: DATA COLLECTION FORM

Company Name:.....

Variable	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017
Net Turnover					
Profit Before Taxation					
Taxation					
Net Profit					
Current Ratio					
Earnings Per Share (Kshs)					
Price-to-Earnings Ratio					
Net Asset Value Per share					
Price-to-Book Value					

Share Price as at 31 Dec.					
Number of shares in Issue					
Market Capitalization(Kshs)					
Non-Current Liabilities					
Shareholders' funds					
Total Net Asset					
ROE					
Longterm Debit Ratio					
Liquidity					

**APPENDICES II: MANUFACTURING COMPANIES LISTED AT  
NAIROBI SECURITIES EXCHANGE AS AT 31<sup>ST</sup> DECEMBER  
2017.**

1. BOC Kenya
2. British America Tobacco Limited
3. Carbacid Investment Limited
4. East Africa Breweries Limited
5. Eveready East African Limited
6. Flames Tree Group Holding Limited
7. Kenya Orchards Limited
8. Mumias Sugar Company Limited
9. Unga Group Limited

*Source: Nairobi Securities Exchange handbook and Published audited financial statements.*



<b>ROE</b>	<b>DEBT RATIO</b>	<b>LIQUIDITY</b>	<b>SIZE OF THE FIRM</b>
-0.10642	0.157896	0.84	7.126536928
-6.18195	0.972061	0.41	7.027015297
-0.86876	0.13563	0.19	6.783301793
-7.91046	1	0.18	6.878519727
1.224863	1	0.109292	5.878854857
0.105066	1.1185	2.69	6.773492868
6.87852	7.126537	7.027015	6.783301793
6.87852	7.126537	7.027015	6.783301793
6.87852	7.126537	7.027015	6.783301793
6.87852	7.126537	7.027015	6.783301793
4.798838	1.1185	2.08	7.794470465
0.819581	7.126537	7.528164	7.794470465
7.819	0.126537	7.528164	7.794470465
0.819581	0.126537	7.528164	7.794470465
7.819581	7.126537	7.528164	7.794470465
0.608937	7.79447	1.21	8.482327891
7.59059	7.79447	7.623342	7.528621074
7.59059	7.79447	7.623342	7.528621074

7.59059	7.79447	7.623342	7.528621074
7.59059	7.549068	7.623342	7.528621074
0.073291	0.358351	0.358351	8.482327891
1.275472	7.050332	7.050332	8.864190673
61012.29	7.050332	7.050332	8.864190673
1.005755	7.050332	7.050332	8.864190673
1.005755	7.050332	7.050332	8.864190673
0.244128	0.742688	0.70	7.492950487
0.199362	0.648032	0.72	7.549068193
0.389682	1	0.62	7.623342437
0.382513	1	0.54	7.528621074
0.218561	0.692275	0.668083	7.590590031
0.096998	0	2.23	6.319955487
0.186782	0	2.14	6.242339638
0.172009	0	2.06	6.234037675
0.150961	0	2.28	6.227745086
0.024443	0	1.23	6.207189075
0.491797	0.149326	1.26	7.008805391



0.519916	0.182926	1.25	7.044171355
0.562087	0.242838	1.45	7.082084227
0.48135	0.248982	1.41	7.084713515
0.426812	0.269997	1.32	7.050331722
0.247108	0.149326	7.09	6.325510943
0.227477	0.182926	6.30	6.376103354
0.306066	0.242838	4.51	6.434824456
0.267128	0.248982	7.09	6.464509816
0.120482	0.269997	8	6.478651615