CAPITAL STRUCTURE AND THE PERFORMANCE OF PRIVATE SUGAR MANUFACTURING COMPANIES IN KENYA

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THIS RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTERS OF BUSINESS ADMINISTRATION (FINANCE) OF KENYATTA UNIVERSITY

APRIL, 2019
DECLARATION

This research proposal is my original work prepared with no other than the indicated sources and support and has not been presented elsewhere for a degree or any other award.

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NICHOLAS KIPKOECH KOSKEI
D53/KER/PT/26971/2013

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

Signed: __________________________ Date: ______________________

DR. CHARLES TIBBS

School of Business

Kenyatta University
DEDICATION

This research project is dedicated to my family for their great support.
ACKNOWLEDGEMENT

My acknowledgement goes directly to the almighty God for without whom I would not have come this far. My most extreme appreciation is likewise reached out to my family and companions for their persistent help and consolation to point higher even from miles away. My genuine gratefulness goes to my lecturers whose help towards the accomplishment of the course can't be overemphasized. I thank my project supervisor Dr. Charles Y. Tibbs for his guidance, direction and useful help all through the project. I am appreciative to everyone who in their unique ways made this research a success.
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OPERATION DEFINITION OF TERMS

**Capital Structure**

The extent of a variety of long term sources of capital in the financing of an organization (debt/equity ratio, debt/asset ratio and long term debt).

**Debt Ratio**

is a ratio that indicates the proportion of a company's debt to its total assets. It shows how much the company relies on debt to finance assets (Debt ratio = Liabilities / Assets)

**Debt to Equity Ratio**

is a financial ratio indicating the relative proportion of entity's equity and debt used to finance an entity's assets (Debt-to-equity ratio = Liabilities / Equity).

**Financial Performance**

Financial performance is monetary measure based on Return on equity (ROE) of the firm.

**Long Term Debt Ratio to Total Assets:** Ratio is the ratio that represents the financial position of the company and the company’s ability to meet all its financial requirements (Long Term debt to Total Assets Ratio = Long Term Debt / Total Assets).
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CS</td>
<td>Capital Structure</td>
</tr>
<tr>
<td>DAR</td>
<td>Debt Ratio</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GoK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>IAS1</td>
<td>International Accounting Standard 1</td>
</tr>
<tr>
<td>IASB</td>
<td>International Accounting Standard Board</td>
</tr>
<tr>
<td>KEBS</td>
<td>Kenya Bureau of Standards</td>
</tr>
<tr>
<td>KSB</td>
<td>Kenya Sugar Board</td>
</tr>
<tr>
<td>KSPWU</td>
<td>Kenya Sugar Plantation Workers Union</td>
</tr>
<tr>
<td>KSST</td>
<td>Kenya Society of Sugar Technologies</td>
</tr>
<tr>
<td>LTDR</td>
<td>Long Term Debt Ratio</td>
</tr>
<tr>
<td>MM</td>
<td>Modigliani and Miller</td>
</tr>
<tr>
<td>ROCE</td>
<td>Return on Capital Employed</td>
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<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>SAT</td>
<td>Sugar Arbitration Tribunal</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
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</table>
The sugar industry contributes extensively to the economy of Kenya. Despite this, in the recent past, the sector has faced a myriad of problems and challenges which led to a decline in financial performance. The study aim is to analyze the relationship between capital structure and financial performance of private firms. It is then directed by the following specific objective; to examine the relationship between debt to equity ratio and financial performance, to establish the relationship between debt to asset ratio and financial performance, to determine the relationship between long-term debt ratio and the financial performance, and finally to investigate whether the size of the organization affect the financial performance of private sugar manufacturing organizations in Kenya. The study utilized capital structure irrelevance theory, trade-off theory of capital structure and taxes and pecking order theory. The study adopted cross-section survey research design. A target of six sugar companies was used. The study used census of all the six private sugar firms in Kenya that have been in operation since the year 2010-2015. It relied on secondary data which was collected through secondary data collection schedule from published accounts of the participating firms. The study adopted content validity index and used supervisors and research experts to measure the validity of the research instruments. Audited published accounts from authentic source were used to increase reliability. The study adopted both descriptive and inferential statistics. The inferential statistics utilized correlation and multiple regression models. The study findings showed that Debt to Equity Ratio had significant effect on financial performance, Debt Ratio had significant effect on financial performance, long term Debt to Equity Ratio had a significant effect on financial performance and moderating factor of firm size had effect on financial performance. In conclusion capital structure has effect on financial performance of private manufacturing sugar companies. Where debt/equity and debt/asset ratio affected negatively the performance of the firm while long term debt ratio attracted positive effect to the organization performance. The study recommends that the long term debt ratio be considered in financial performance of the firm, Firms should consider borrowing provided they are able to repay. Larger amount of short term debts has negative effect on the financial performance. It important to check the level of short term debt and encourage long term debt as long as they are lower than the return of equity.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Capital structure (CS) alludes to a blend of an array of enduring sources of resources and equity shares including assets and retain earnings of an organization. They uncovered the circumstances or conditions under which CS is significant or inappropriate to the fiscal presentation of the quoted companies. Brigham and Ehrhardt (2004) bear witness to that capital structure reflects how an enterprise funds its strategies that may both be through commitment, esteem capital or the combination of both. As indicated by Myers (2001), there was no standard hypothesis on the debt to equity decision however noticed that there were a few speculations that attempted to clarify the capital structure blend. Myers (2001) referred to the tradeoff hypothesis which expresses that organization look for obligation levels that adjust the tax cuts of extra obligation against the expenses of conceivable money related trouble.

The greater part of the basic leadership forms identified with the CS are main elements while deciding the CS. A few variables, for example, cost, levy collection and fee, interest rates projected to clarify the variety in Financial Leverage across over firms (Titman and Wessels, 1998). These variables proposed that relying upon properties that caused the cost of different wellsprings of capital the organization's select CS and advantages identified with obligation and value financing. Diverse expenses of capital and their advantages specifically influence a definitive objective of the firm. The benefit of financing choices cannot be overemphasized given that a hefty segment of the components that add to company malfunction can be directed to
using techniques and wealth associated judgments promoting development and the accomplishment of authoritative targets. The economics sector being source of money related misery. Financing judgments lead to a specified capital structure, moreover, faulty speculation decisions that can impact company distress. The point of all undertaking alternatives is maximization of wealth, and the direct technique for evaluating the character of any financing preference is to think of the impact of such pastime at the agency's execution (Myers, 2001).

The connection linking capital structure and financial performance has gotten impressive acknowledgment in the economic research field. Noteworthy, grouping control of an organization performance or experts in the financial field to applying that control is questions that creators have endeavored to respond in due order regarding quite a while. Previous investigations reveal that capital structure has an association with firm execution which is a basic issue in associations.

1.1.1 Capital Structure and Firm Performance Conceptualization

Several studies conducted globally focusing on capital structure. Hutchinson (1995) contended that fiscal utilize emphatically influenced the affiliation's landing on esteem gave that pay's vitality of the organization's focal points outperforms the medium premium charge commitment in an association. Taub (1975) likewise established fundamentally affirmative connection linking obligation proportion and measures of productivity. Majumdar and Chubbier (1999) in India which demonstrated that leverage negatively affects performance. The specialist utilized board information examination to research the association between add up to
obligation and creation and also between various wellsprings of obligation to be specific, bank advances, and exchange credits and firms' execution scaled by gainfulness. The outcomes demonstrated a vital and unfriendly impact for generally nations. The analyst discovered that the kind of obligation, bank advances or exchange credit is not of essential significance, what makes a difference is obligation when all is said and done. The review of literature likewise completely portrayed the different endeavors to show organization debt/equity policy. In any case, the ideal blend of securities that an organization should issue remains unknown.

Debt-to-equity ratio is the key financial ratio and is used as a standard for judging a company's financial standing. It is also a measure of a company's ability to repay its obligations. When examining the health of a company, it is critical to pay attention to the debt/equity ratio. If the ratio is increasing, the company is being financed by creditors rather than from its own financial sources which may be a dangerous trend. Lenders and investors usually prefer low debt-to-equity ratios because their interests are better protected in the event of a business decline. Thus, companies with high debt-to-equity ratios may not be able to attract additional lending capital (IFRS, 2018).

Debt ratio is a ratio that indicates the proportion of a company's debt to its total assets. It shows how much the company relies on debt to finance assets. The debt ratio gives users a quick measure of the amount of debt that the company has on its balance sheets compared to its assets. The higher the ratio, the greater the risk associated with
the firm's operation. A low debt ratio indicates conservative financing with an opportunity to borrow in the future at no significant risk (IFRS, ibid).

Long Term Debt to Total Asset Ratio is the ratio that represents the financial position of the company and the company’s ability to meet all its financial requirements. It shows the percentage of a company’s assets that are financed with loans and other financial obligations that last over a year. As this ratio is calculated yearly, decrease in the ratio would denote that the company is faring well, and is less dependent on debts for their business needs (IFRS, ibid).

The size of the firm acts as moderating factor since different firms has different ability. Small firms have less chance of paying debt making large firms to have leverage in acquisition of debt finance than their counterparts. Hence the variable are measured on the financial performance of the organization where Return on Equity.

1.1.2 The Sugar Industry in Kenya

According to Kenyan sugar industry reports (GOK, 2008 & KSB, 2010) the dominant firms in the sugar value chain comprise the sugar manufacturing companies, the molasses processor companies, farmers’ out growers’ firms and the fixed-crusher artisanal jaggeries. The Kenyan sugar industry is preferred as a background study for several reasons. The sugar sub-sector has an enormous dormant for affecting in general the wealth of Kenya. It is amongst the greatest grantors to the farming Gross Domestic Product (GDP), supporting at least 25% of the Kenyans population, generates over 520,000 metric tons of sugar for domestic consumption (saving the
economy in excess of US$ 250 million or Kshs 20 billion in foreign exchange annually, (GOK, 2008 & KSB, 2010).

In the sugar industry there are some issues with the deteriorating working conditions. Most of the sugar companies have resulted to privatization. The sugar market has then been liberalized which has encouraged low priced sugar to enter Kenya market. Kenya is struggling with high cost of production, mismanagement of the sugar companies and corruption. Due to liberalization government have stop paying farmers and most parastatal based sugar companies has been set for privatization. Liberalizing the sugar industry will result to cheap importation of sugar killing the local sugar. Finally, this study focused on private sugar firms in Kenya while excluding publicly owned companies since the management and ownership are different, they operate in the different economic environment and the regulations governing them is different.

1.1.3 Financial performance of sugar companies in Kenya

The general trend of private sugar companies in West Kenya; Sukari, Butali, Transmara and Kibos are seen to have a poor fluctuating financial performance as opposed to Soin. This may be attributed to several factors including poor financial management as result of capital structure, inefficient enterprise management or an incapable arrangement of debt management (table 1.1). It is important to investigate the effect of the capital structure if indeed has effect on the sugar companies. Firms performance is important the research hypothesis that the trend and change in the financial performance may be attributed to changes in the capital structure. It is also very important to establish changes in return on equity to understand the trend of the
organization over a longer-time period of development. The returns of an organization can then be measured through return on equity, return on assets or profitability.

Table 1.1 Percentage change in ROE

<table>
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<th></th>
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<tbody>
<tr>
<td>West Kenya</td>
<td>28%</td>
<td>12%</td>
<td>8%</td>
<td>17%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Soin</td>
<td>15%</td>
<td>30%</td>
<td>35%</td>
<td>40%</td>
<td>42%</td>
<td>45%</td>
</tr>
<tr>
<td>Kibos</td>
<td>13%</td>
<td>12%</td>
<td>10%</td>
<td>15%</td>
<td>22%</td>
<td>15%</td>
</tr>
<tr>
<td>Butali</td>
<td>11%</td>
<td>5%</td>
<td>18%</td>
<td>15%</td>
<td>30%</td>
<td>18%</td>
</tr>
<tr>
<td>Transmara</td>
<td>12%</td>
<td>28%</td>
<td>32%</td>
<td>40%</td>
<td>42%</td>
<td>21%</td>
</tr>
<tr>
<td>Sukari</td>
<td>16%</td>
<td>16%</td>
<td>30%</td>
<td>11%</td>
<td>5%</td>
<td>18%</td>
</tr>
<tr>
<td>Kwale Internation Sugar Ltd</td>
<td>18%</td>
<td>22%</td>
<td>30%</td>
<td>13%</td>
<td>12%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: KSB (2015)

The table 1.1 shows significant variation in rate of equity with minimum of 5% to a maximum of 42% indicating high level of financial risk. To assess the fluctuation there is need to investigate on the relationship between different capital structures in these sugar industries in relation to the financial performance. Currently the sugar industry is struggling with reforms through the government that will enable Sony, Nzoia, Chemilil, Miwani, Muhoroni and Mumias to clear debts owed to farmers. The public sugar industries have been facing high debt especially in clearing short term debt owed to farmers (Star, January 19\textsuperscript{th} 2019).
1.2 Statement of the Problem

Sugar companies in Kenya has been facing myriad of issue in financial performance. Private miller has sunk into huge debts as large as Sh 100 billion based on mismanagement and alleged corruption (Business Daily, 23 October 2018). This has led to support from the government of Kenya where they have been bailed severally. Other challenges include cheap sugar from COMESA and East Africa Community which has created unfair market competition. “In the period January to July 2014, the market had experienced declining sugar prices to a low of Ksh3,200 ($35.6) for a 50Kg bag against an average industry break-even of Ksh3,800 ($42.2),” (Otieno, 2015). Dues to these factors financial performance has been fluctuating showing a high risk factors. There is need to investigate on the capital structure despite other internal management and cost of production problems. Private companies in Western Kenya hardly own any nucleus and the reason for the downward trend of sugar production. Also Kenya government has tried to revive the sugar industry due to high debts to farmers and high debts to suppliers (Star, January, 19th 2019).

Previous research that focused on the organizational performance of sugar firms in Kenya is limited. All these issues contributed to the need and challenge of studying the performance privately owned sugar companies in Kenya. The trend of sugar companies shows high variation in financial performance indicating high risk. The sugar industries including the major large one has been straggling it financial management that has seen Kenya importing cheaper sugar from foreign countries like Brazil. The alarming problem has also seen companies like Mumias among other
close and open their operation based on the management of their capital structure and financial performance. Most of the sugar companies’ woes farmers’ large debts and it reaches time where the close down their operation. The measurement of the performance impact of strategies has been reported to be problematic in rising economies; Kenya included (Hoskisson, Edan, Lau & Wright, 2000). Such researchers attribute the situation to original financial reporting that make comparisons over time and across firms difficult. This problem is by compounded unethical financial reporting practices (Shama & Merrell, 1997).

There exists literature gap both theoretical and empirical in solving the problem at hand. Most of theoretical gap are found in the earlier theorist Modigliani and Mill administrator (1958) and (1963), much research occurred in corporate store to choose the effect of an association's choice of capital structure on execution. The inconvenience dealing with institutions at the same time as arranging their gain is to choose CS effect on execution. Supervisors have various chances to practice their carefulness concerning capital structure selections. Kenya Sugar sector has in the recent past faced several financial challenges, leading to the closure of some factories and failure to pay their creditors.

Empirical gap from various studies carried on capital structure, and financial performance includes: Rutto (2011) looked at how change on capital structure affect shared prices for firms listed at the NSE whereas Lokong (2010) looked at the connection linking capital structure and profitability of microfinance establishments in Kenya. Kitony (2007) tried the connection between capital structure and
organization costs. The Findings seemed to propose that there is a huge effect of capital structure on organization achievement in the wake of controlling for organization particular attributes, for example, group size and age of the firm. This study, in this manner, explored on capital structure on financial performance focusing private sugar producing firms in Kenya.

1.3 Objectives of the Study

The main objective of the study was to analyze the relationship of capital structure on financial performance of the private sugar firms.

1.3.1 Specific Objectives

i. To examine the effect of Debt to Equity Ratio on financial performance of private sugar manufacturing companies in Kenya.

ii. To establish the effect of Debt Ratio on financial performance of private sugar manufacturing companies in Kenya.

iii. To determine the effect long term-debt ratio on financial performance of private sugar manufacturing companies in Kenya.

iv. To investigate the moderating effect of the firm size of the firm on the relationship between capital structure and the financial performance of private sugar manufacturing companies in Kenya.

1.4 Hypothesis of the Study

The study adopted the following null hypothesis;
\textbf{H}_{01}: There is no significant effect of Debt to Equity Ratio on financial performance.

\textbf{H}_{02}: There is no significant effect of Debt Ratio on financial performance.

\textbf{H}_{03}: There is no significant effect of long term-debt ratio and the financial performance.

\textbf{H}_{04}: Firm size is no significantly affect the relationship between capital structure and the financial performance.

\textbf{1.5 Significance of the Study}

The findings would be significant to financial institution. Commercial banks, microfinance institution and cooperative society would benefit by understanding the healthy loan or debt finance the can give to organization. The research investigates on effect of finance ratio on performance of the organization.

This would also benefit the sugar companies since there are myriads of challenge especially most of them are been privatized based on large debt that have affected the financial performance. Sugar companies are also facing other challenges that require resource hence would provide more information on the issues in the industry.

It would be also important in policy making process in major companies as well as government institutions. The government would also use the result in legislation and policy formulation. It important in reduction of financial problem facing major
organization. The finding would be used by the academic fraternity in establishing new knowledge and filling the gaps in research.

1.6 Scope of the Study

This study focused on the capital structure and financial performance of private sugar firms in the production and marketing of sugar and sugar by-products in Kenya. The companies in the industry comprised a total of six (6) private sugar manufacturing firms. The study focused on sugar firms which were in operation by the year 2010-2015. The financial analysis for the year 2010 – 2015 provide correct records of recent undertaking that are readily available. The study investigated the correlation between the capital structure of the private sugar organizations and financial performance.

1.7 Limitation of the study

The research was limited to the six sugar companies; this companies were selected to represent the other companies. Base on randomization the result can be generalized statistically to allow clear view of the relationship between capital structure and financial performance. It also found that the result would be limitation sugar companies which is manufacturing industry. The sugar companies was found appropriate since there has been many issue in financial structure and performance with immense competition from cheap exported sugar.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter examined the literature relevant to the study. This section includes; the theoretical review, empirical review, conceptual framework and research gap. The section concentrate on capital structure and financial performance.

2.2 Theoretical Review

This study was based on the following theories; capital structure irrelevance theory, trade-off theory of capital structure and taxes and pecking order theory. The theoretical concept is based on capital structure theories found to support financial performance.

2.2.1 Capital Structure Irrelevance Theory

Capital structure places into prospect the path wherein a company funds its operations which may be via dedication, esteem capital or a mixture of each (Brigham, 2004). Capital structure concept as ascribed by Modigliani and miller proposed that it is far unessential how a business enterprise funds its daily activities and that the estimation of a business enterprise is self-sufficient of its capital structure making capital structure beside the point (Modigliani & miller, 1958). The findings relied upon the doubt that there have been no lender charges, benefit earlier than top class and obligation had been not impacted by way of the use of commitment and that theorists should get at a doubtful charge from corporations’ charge and in the end there was no information asymmetry. As indicated by using Modigliani & Miller (1958), the
requirement for obligation brings down with the character assessment at the intrigue salary. At the off danger that the firm keeps on lacking in making installments to the obligation holders, the company can even be demolished. The hypothesis can be clarified by expenses of monetary pain and organization costs (Modigliani & Miller, 1958).

This theory is a cornerstone of finance that it is substantive and stems from its nature of irrelevance proposition. The plan helps understand when the decisions might have an effect on firms’ financial performance and why. As a result, the whole consequent improvement of corporate back might be portrayed fundamentally as investigating the outcomes of unwinding the MM suppositions. In conclusion, MM theory states that whether a firm is funded through debt or equity, its value stands equal. This theory supports the factor that debt based ratio are used it is irrelevant to the financial performance. The debt based ratio that are supported by the theory include debt ratio, debt to equity ratio and long term debt to total asset ratio.

2.2.2 Trade-off theory of Capital Structure and Taxes

Myers (2001) study on capital structure attributed from Modigliani and Miller which was based on perfect market. Myers wanted a theory of real market situation where there are taxes, cost of transaction and competition. Tradeoff theory iterates that a weak organization is depends totally on financial institution for running of there organization. In sugar companies most companies have been working on loan and grants from the Kenya government in order to revive their operation. There is need to fix their capital structure since most farmer owe most these companies large debts.
Youth organization entering into the market according to the theory must be able to weigh on the capital structure to avoid bankruptcy. Hence should mix their capital structure keeping in mid the banks obligation to pay off debt or any credit facility they sought in the process of their business. Inside the tradeoff hypothesis, there is an obligation "pecking-order" with bank obligation being linked to the market risk because of the lower inferred liquidation costs. Precisely while the financial institution holds all ex-post bargaining power, the pined for level of dedication examine shields may be talented the use of in reality financial institution commitment (Modigliani & Miller, 1958).

In conclusion, this theory was relevant in that it foretells that firms with more substantial resources and more payable revenue ought to have soaring liability ratio and companies through new intangible assets, whose purpose will fade away in case of bankruptcy, ought to depend more on value financing. Under exchange off hypothesis, the organizations with high development potential outcomes ought to obtain less on the grounds that they will probably lose an incentive in money related misery. Debt ratio, debt to equity ratio and long term to total assets are provided by the theory as explained by Myers.

2.2.3 Pecking Order Theory

The pecking order theory as cutting edge by Myers (1984) expressed that organizations lean toward inside wellsprings of back; they modify their objective profit payout proportions to their venture openings despite the fact that profits and payout proportions are acclimated to shifts in the degree of significant venture
opportunities. Moreover, Myers (1984) expressed that if external investment is required, companies are destined to problem the comfiest safety to start with, in different phrases, they begin with obligation then conceivably convertible duty then cost comes if all else fails. Should outside financing be required, obligation would be favored over value. Be that as it may; the theory did not completely clarify the capital structure contrasts between enterprises.

Scherr, Sugrue and Ward (1993) considered the hypothesis as a fitting portrayal of middle organizations' funding rehearses considering duty with the aid of a protracted shot the most important wellspring of financing and that little and medium enterprise chiefs have a tendency to be owners of the business who could decide upon greater frequently than now not to weaken their ownership. Likewise, they agreed that organizations thusly have a tendency to lean toward inward financing to outside financing of any kind and in the event that they should acquire outer subsidizing, they have an inclination of obligation over value.

Cosh and Hughes (1994) demonstrated that inside the general pecking order theory, Small and Medium Sized Enterprises' has different capital structure depending on the asset base and ability to meet their debt. The pecking order concept would way between internal and external finance where internal finance is more preferred than the external finance. Hypothetically in case of loans, credit, leasing and overdraft it’s important to consider them later after considering ploughing back of profits and internal equity contributors by the owner of the business. Most of sugar companies are under receivership or privatization after most parastatal owned sugar companies given
to contraction and liberalization agreement. The writer also proposed a refinement of the idea because of its nonattendance of statistics to check threat both at the person and collective precept. There is no expansive delineation at the most capable method to quantity those financing mixes to get a perfect capital structure (Santos, 2003). The pecking order theory explain the debt ratio used in capital structure. Depending on financing within rather that debt finances. The debt to equity ratio, debt ratio and long term to total asset ratios are of consideration in organization’s capital structure.

2.3 Theoretical Literature on Components of Capital Structure
Several measures have been suggested to measure capital structure. This aspect includes; financial leverage (Hutchinson 1995; Taub 1975 and Baker 1973). Another measure is debt ratio (Fama and French 1998; Majumdar and Chhibber 1999; Gleason and Mathur, 2000). The literature additionally totally portrays the different endeavors to demonstrate organization obligation/value arrangement. In any case, what ideal blend of securities should an organization issue stay obscure? On the off chance that existent capital structure hypothetical writing has so far positively spoke to an expansive amount of possible cause of capital structure decision, Gleason and Mathur (2000), observational research has too wavered in discovering clear and convincing approved logical hugeness of such models.

Pandey (2005) identifies several procedures of capital structure. The author further argues that these determining factors of capital structure are naturally fixed and indicate the level of acquiring money for the business at an instant of time. Although the procedures are criticized for their failure to be a sign of the point of economic
hazard essential for company’s capacity to pay interest and debt, these measures are considered suitable for a study seeking to measure the capital structure of a company.

2.4 Review of past studies

The review of capital structure and financial performance provides literature on the capital structure, financial performance and capital structure component.

2.4.1 Capital Structure

Capital structure relates to the dedication and esteem utilized through an affiliation in funding crucial factors. Its decision is at the factor of convergence of numerous exceptional choices within the locale of association subsidize. Those represent benefit approach, develop financing, the difficulty of complete deal securities, financing of mergers, buyouts and so forth.

Foundation of test capital structure ask about central examination by Majumdar and Chhibber (1999) who shows that under the restrictive critiques of best cash related markets and not using a arbitrage, no responsibilities or trade expenses and identical exhilaration on dedication and esteem, the estimation of an affiliation is sovereign of the administration's money related alternatives. In the event that these sentiments are casual through the incorporation of organization charges, exchange costs, the uniqueness of loan fee for obligation and value and data asymmetry, the subject of what decides capital structures winds up plainly multifaceted.

Despite the way that a portion of the basic suspicions of the hypothesis can be expected unlikely according to speculators and other monetary operators, the
immateriality hypothesis was acknowledged, and ensuing exploration concentrated on loosening up a number of its assumptions to expand a more practical approach. Modigliani and Miller (1958) allowed for a segment of the responses or insufficiencies of their theory and free the supposition that there was no association expense (Majumdar & Chhibber, 1999).

Um (2001), in any case, proposes that if an organization's level of substantial resources is low, the administration for watching cost reasons may pick an abnormal state of obligation to relieve value office costs. An ill-disposed connection amongst obligation and substantial quality is reliable with a value office cost clarification, Um (2001). The author likewise contends that organization size may intermediary for the obligation office costs (observing expense) emerging from clashes amongst directors and financial specialists. Um (2001) underscores that the checking cost is bring down for huge organizations than for little organizations. In this way, more real organizations will be actuated to utilize more obligation than small ones.

Berk, Jonathan, and Zechner, (2009) drives an association's most favorable capital structure and regulatory reward agreement when delegates are hesitant to bearing their human capital peril. The speculation passes on precisely unsurprising perfect commitment levels and proposes a tenacious unconventional qualification being used across finished associations and what's more a positive association among utilize and official pay. Berk, Jonathan, and Zechner, (2009) also on investigations on the influence of capital structure decisions for organizations within G-7 nations and observed organization are comparative over nations.
Additionally, study was done from a universal viewpoint; Fan, Joseph, Sheridan, and Garry (2008) observed a more grounded association among earnings and use in international locations with weaker shareholder affirmations. In countries with more suitable valid warranty for budgetary petitioners, institutions tend to hold much less general dedication and extra entire deal commitment as a degree of overall dedication. Additionally, organizations that cross run down tend to make use of greater significance and obligation of a long period. The cross-sectional influences vary across the nations. As experimental capital structure look into has developed quick finished the years, the writing audit does not claim to be comprehensive.

Hardly any research gives prove from creating nations. For instance, Booth, Laurence, Aivazian, Kunt and Maksimovic (2001) broke down information from ten creating nations that utilizes information from other developed nations. Of the capital structure thinks about, some have utilized crosscountry examinations in view of information from the specific district. For instance, Deesomsak, Paudyal, and Pescetto, (2004) investigate information from the Asia Pacific district. Regardless of some huge commitments to the general view of the different complexities of organization capital structure, examine created so far did not bear the cost of yet a sound reason for working, in a definitive manner, the experimental legitimacy of the diverse hypothetical models.

Such examinations are treasured in support of an unrivaled appreciation characteristic results and behavioral additives on capital structure alternatives, and thusly bringing to enlarging the illustrative and really appropriate energy of the hypothesis. Positive
stuns to benefit prompt an expansion in value and abatements paying off debtors. Since organizations don't change capital structures instantly post-quake tremors because of exchange costs, a negative relationship can be distinguished amongst productivity and leverage (Deesomsak, Paudyal, & Pescetto, 2004).

2.4.2 Performance

Organizational performance and its improvement have been a dominant theme in management and practice. Walker and Ruekert (1987) assert that proper firms’ performance scope must include efficiency, competence, and flexibility, suggesting the existence of vital linkages connecting strategic control, strategic orientations and organizational performance.

Performance measurement impact of strategies has, however, been reported to be problematic in rising economy, Kenya included (Hoskisson, Edan, Lau & Wright, 2000). Such researchers attribute the situation to unconventional financial reporting that make comparisons over time and across firms difficult. This problem is by compounded unethical financial reporting practices (Shama & Merrell, 1997). Previous research that focuses on the organizational performance of sugar firms in Kenya is limited.

A firm’s financial performance, is set apart by how more joyful the shareholder is toward the complete of a period, than he was toward the beginning and this can be settled using extents gained from fiscal announcements; generally, the advantage report and pay clarification (Berger & de Patti, 2002). Those extents deliver a repercussion of whether or not the company achieves the proprietors' objectives of
making them wealthier and can be used to differentiate a company's extents and
distinctive corporations or to find examples of execution after some time. Charreaux
(1997), observe that an agreeable execution degree should give a record of the
considerable number of outcomes of speculations, on the abundance of shareholders.

2.4.3 Components of Capital Structure

The capital structure of a corporation is characterized through special inward and
outer factors. The attributes of a one's organization, which are named small scale
additives (inward), likewise exchange the capital structure of undertakings. This
investigation displayed how the small scale elements impact the capital structure of an
organization concerning the pertinent capital structure hypotheses expressed before.

2.5 Empirical review

This study focused on capital structure measures and financial performances.

2.5.1 Debt Ratio and Financial Performance

There is only handful of studies measuring capital structure by debt assets ratio. One
notable study was that of Ebaid (2009) who did a research to look at the effects of
decision of capital structure towards execution of firms in Egypt. Capital structure
was calculated by short-term and long-term debt to equity ratio, long term debt to
asset ratio, and total debt to assets. Different relapse examination was utilized to
gauge the connection linking the use level and execution. The investigation showed
that capital structure has practically zero effect on a company performance. These
outcomes are contrary with other observational examinations, for example, Ebaid
(2009)) and Ghosh, Nag and Sirmans (2000), which uncovered a positive connection
between money related use and decision of capital structure. Different examinations demonstrated a negative relationship, for example, whereby bring down value capital proportion is related with more noteworthy firm execution. The repudiating comes about give space for incorporating extra factors in new studies (Ebaid, 2009).

Mwangi, Anyango and Ameny (2014), sought to establish significance of Debt Ratio on firm performance. The study confirmed fulfillment of the company enhanced by utilizing to a greater extent current liabilities to finance assets. This is likely in light of the fact that present commitments are less exorbitant than non-current obligation.

2.5.2 Debt to Equity Ratio and Financial Performance

Hutchinson (1995) in his research discussed that budgetary utilize definitely influenced the affiliation's landing on esteem gave that wage's vitality of the wander's advantages outperforms the typical interest cost of firm’s commitment. Dough puncher (1973) additionally distinguished a clear relationship amongst obligation and benefit however for enterprises. In any case, a couple of examinations have shown that commitment adversely influences firm efficiency. Petersen and Rajan (1994), clear up that the use of over the top commitment makes association issues among shareholders and loan specialists and that could end in a negative association among utilize and advantage. In a Polish report, Gleason et al. (2000) likewise found a negative connection amongst obligation and company's productivity.

In another examination, Gleason et al. (2000) utilized board information examination to look at the connection between total debt and performance and in addition between different leverage of debt in particular, bank overdraft and exchange credits and firms'
performance measured by profitability. His outcomes demonstrate a significant and opposite impact for generally nations. He found that the kind of obligation, bank advances or exchange credit is not of essential significance, what is important is obligation as a rule. To realize MM hypothesis in Kenya, Kaumbuthu (2011) utilized relapse examination and found a negative connection between obligation value proportion and ROE

2.5.3 Long-Term Debt Ratio and Financial Performance

Mwangi (2010) distinguished that a solid positive connection amongst use and profit for value, liquidity, and degree of profitability existed. Mesquita and Lara (2003) revealed that the connection linking rates of return and obligation demonstrates an opposite association for long haul financing and established a connection for short term financing and value. Capital structure was measured by means of current and fixed obligation to resource share, long haul obligation to useful resource proportion, and mixture duty to feature up to resources. Extraordinary relapse examination linked to evaluate the relationship between the use level and execution. These consequences are incongruent with other experimental examinations, as an instance, Hadlock and James (2002) which exposed a decisive connection between budgetary use and decision of capital structure.

2.5.4 Sugar Firms Factors

The majority of the investigations evaluating the effect the size of firm on benefit have revealed results with an affirmative link between size of the firm and gainfulness. In agreement with this, an affirmative connection linking size of the firm
and growth was ascertained by Jonsson (2007). The creators utilized different measures of size (deals and aggregate resources) and cost-viability whereas using the model on an example of fifteen organizations running in South India. In their examination, depended on a straightforward semi-log math determination of the model. The part of the firm size in productivity was inspected by Jonsson (2007) who utilized settled impact dynamic board information demonstrate and performed investigation on a specimen of 7000 US openly held firms. The examination demonstrated that total firm size assumes an amazing part in clarifying benefit. Jonsson (2007) observation displayed that more corporations have higher productivity while contrasted with smaller firms.

The size-benefit association of an association running on budgetary administrations part was tried by Amato (2007). They attempted each direct and cubic form of the relationship. Regardless of the reality that a bad effect of firm size on productivity was appeared with the straight specific in agency measure. Becker, Kaen, Etebari and Baumann (2010) revealed a negative and statistically large affiliation among general belongings, overall revenues and number of workers of the organization and their surpluses.

Kipesha (2013) showed that both firm size and age affect Microfinance performance in Tanzania with respect to productivity, sustainability, benefit and income creation ability. Ehi- Oshio, Adeyemi and Enofe (2013) conducted a research entitled “determinants of corporate profitability in developing economies”. The outcomes
demonstrated a positive relationship subsist connecting firm size and corporate productivity, and budgetary use and corporate benefit.

Akbas and Karaduman (2012) investigated the effect of company duration and age on profitability on the organization and found that firm size decidedly influences profitability. Dogan (2013) demonstrated a helpful result of both the size and the liquidity on the benefit in like manner it found a negative impact of age and use on the profitability.

Coad, Segarra, and Mercedes (2010) inspected the effect of age on company's performance in Spanish assembling firms in the period in the vicinity of 1998 and 2006. They found that organizations enhance with age, and contend that maturing firms are seen to have relentlessly expanding levels of profitability, higher benefits, bigger size, bring down obligation proportions, and higher value proportions. Moreover, more established firms are better ready to change over deals development into resulting development of benefits and profitability.

2.6 Summary of Literature and research gap
The conceptual literature review has point by point a few speculations that clarify the capital structure and money related execution of the organizations and thusly a few hypotheses can be applied to foresee the viable impacts of capital systems on budgetary execution. The precise literature place noted the exceptional pertinent observational studies carried out on capital shape, the effects of the investigations lastly an explanation of the result. This study looked to fill the gap by researching
capital structure on monetary execution with particular reference to private sugar producing organizations in Kenya.

Table 2.1 Research Gap

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Focus</th>
<th>Findings</th>
<th>Research Gaps</th>
<th>Focus of Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ebaid (2009)</td>
<td>Effects of decision of capital structure towards execution of firms in Egypt</td>
<td>Found that capital structure has practically zero effect on a company's execution.</td>
<td>Researched on Egypt with different feature with Kenya.</td>
<td>It will focus on Kenya’s economy and concentrate on Private manufacturing firms.</td>
</tr>
<tr>
<td>Mwangi, Anyango and Amenya (2014)</td>
<td>Debt ratio on firm’s performance</td>
<td>Found that companies enhance by using current liabilities to enhance company assets.</td>
<td>Concentrated on Current liabilities and financial assets.</td>
<td>It focused on debt ratio, debt to equity ratio and Long term debt ratio.</td>
</tr>
<tr>
<td>Adeyemi and Enofe (2013)</td>
<td>Determinants of Corporate Profitability in Developing Economies</td>
<td>There was positive relationship between firm size and corporate productivity.</td>
<td>Concentrated on corporate profitability on economic development.</td>
<td>It focused on capital structure on financial performance.</td>
</tr>
<tr>
<td>Akbas and Karaduman (2012)</td>
<td>Company Length and age on profitability of the organization.</td>
<td>Company size affect the profitability of the organization. Both size and liquidity had negative influence to the age and use on the profitability.</td>
<td>The research was the age and length of the organization on profitability.</td>
<td>This focused on capital structure and performance of firm.</td>
</tr>
</tbody>
</table>
2.7 Conceptual Framework

In order to measure the study’s variables effectively, the following conceptual framework and associated hypotheses to the study was used.
The conceptual framework showed a relationship between capital structure and financial performance of private sugar firms in which the capital structure is the predictor (independent) variable, and the performance of the private sugar firms is the dependent variable. The performance of the firm is measured by Return on Equity (ROE). The main indicators of capital structure are Debt to Equity Ratio, Debt to Asset ratio and Long Term Debt ratio.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Research Design

A research design is an overall framework, a preparation, structure, investigation strategy and logical model that is conceived to provide means of obtaining responses to the research hypotheses and questions. The research design suitability relies on study idea and the research objects (Mugenda, 2008). This study adopted descriptive cross-section survey research design. Cross-section survey research design was preferred because it enabled the researcher to collect secondary data in different firms for the purpose of determining the existence and extent of a phenomenon as well as established the relationship between variables.

3.2 Target Population

This characteristic is a census study of all the six private sugar firms which were in existence by 2010 and are currently in operation. The census approach was applicable on account of the modest number of the sugar fabricating organizations in Kenya. A complete list of (population frame) of the sugar manufacturing firms is provided in Appendix II and summary of the population each year was shown in Table 3.1

Table 3.1: Summary of the sugar manufacturing companies in Kenya

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of sugar companies</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>30</td>
</tr>
</tbody>
</table>

3.3 Sampling Design
Census was used since the population size was small.

3.3 Research Instruments and Data Collection Methods
The study used secondary data which was obtained from the published accounts of the participating firms. The data was sourced from the registrar of companies and the individual sugar firms. Secondary data collection schedule (Appendix III) was used to capture data collected from the firm’s published accounts.

3.4 Validity and Reliability of Instruments
Data reliability and validity were conducted as follows;

3.4.1 Validity
White (2005) depicts validity as the conformity linking the analyst's decision and the real reality. The study looked at the substance legitimacy file to quantify the legitimacy of the instruments to be utilized. Content validity empowered information being gathered to be dependable in speaking to the particular substance of a specific idea. Supervisors and the research specialists at the School of Post Graduate of Kenyatta University were consulted to assess the relevance and fittingness of the substance, clearness, and ampleness of the optional information gathering plan from an examination point of view. Borg and Gall (1989) calls attention to that legitimacy of an instrument is enhanced through expert judgment.
3.4.2 Reliability

To ensure reliability audited published accounts from an authentic source, the Registrar of Companies in Kenya was used. Scrutiny of audited financial statements was done to ensure consistency of reporting system. Reliability measured the relevance and correctness of the instruments. To establish the reliability, Cronbach’s alpha, KR-20 was used to check the internal consistency of measurements. The Cronbach’s constant from the data collected from the six companies was 0.767. The study was accepted the results value of between Cronbach’s alpha 0.75-1 reliability of the instrument (Punch, 1998).

3.5 Data collection Procedure

Data analysis is looking at the unprocessed data gathered amid research examination (Kombo and Tromp, 2006). This point of view includes extricating of fundamental factors and investigation of gathered data to build up truths. Secondary data was utilized; it sorted, coded to Statistical Package for Social Sciences (Version 22) statistics. Data was examined by utilizing panel data analysis based on the nature of the research design which is based on records from the past five years that can be acquired only from secondary data which are audited.

3.6 Data Analysis and Presentations

Data was analyzed in both descriptive and inferential statistics. Descriptive statistics were presented in frequency tables where mean and standard deviation were utilized. Inferential statistics used were Pearson correlation coefficient and multiple linear
regression to examine the relationship between capital structure and performance of sugar manufacturing companies.

3.6.1 Specification of the Model

Multiple regression models were used to test the theoretical relationship between capital structure and the performance of sugar firms in Kenya. The following multiple linear regression models was used:

\[ Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_i \]

Where; \( \beta_0 \) = intercept, \( \beta_1 \) = parameter associated with \( X_1 \), \( \beta_2 \) = associated with \( X_2 \), and so on, \( \epsilon_i \) = the error term, \( Y_i \) = financial performance parameter, \( X_1 \) = Debt Ratio, \( X_2 \) = Debt to Equity Ratio, \( X_3 \) = long term debt ratio and \( \beta \) = coefficients of the model

Model summary with size as a moderator variable

\[ Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_i \]

\( X_4 \) = Size of the firm

Time series analysis was conducted to determine the trend effect on the capital structure and the financial performance of the sugar companies.
3.7 Diagnostic Tests

Diagnostic tests were carried out which includes: Multi-collinearity, Normality and Homoscedasticity.

3.7.1 Multi-collinearity tests

Multi-collinearity was tested using variance inflation factor (VIF) and Tolerance. VIF is the reciprocal of the tolerance calculated \((1-R^2)\) and measures the degree of linear association between a particular independent variable and the other variables in the analysis. Larger VIF values indicate a greater variance of the regression weight of that predictor. It is recommended that a VIF \(\geq 10\) is indicative of multi-collinearity (Meyers, Guarino & Gamst, 2007). According to the data collected there all the VIF are less than 10 meaning that there is no multi-collinearity in the variables given by 3.061, 1.500, 5.006 and 3.325 for DER, DAR, LDTR and Size of the organization.

3.7.2 Normality Test

One of the assumptions for parametric tests to be reliable is that data should be approximately normally distributed. The normality test was used to determine whether sample data has been drawn from a normally distributed population. Normality of the data was tested using Kolmogorov – Smirnov test. If the test is non-significant \((P > 0.05)\), the distribution of the sample is not significantly different from that of a normal distribution hence normally distributed. If the test is significant \((p < 0.05)\), the distribution of the variables is significantly different from that of a normal distribution hence it is not normally distributed violating the assumption of normality,
(Elliott & Woodward, 2007). All data were found to be significant with no extreme values (p =0.044 < 0.05).

3.7.3 Homoscedasticity Test

Homoscedasticity (homogeneity of variance) refers to the assumption that the dependent variable exhibits equal variance across the range of values for an independent variable 71 (Hair 2014). Levene’s test for equality of variance was used to test for homogeneity of variance. If Levene’s test is significant, at P< 0.05, we reject the hypothesis and if P > 0.05 is and the test insignificant, we accept the null hypothesis that the variance is equal and the assumption of homoscedasticity is fulfilled (Hair, 2014). The Darwin Watson test should contain variable between 0-4 for it to be homoscedasticity. According to the results there Darwin Watson coefficient was given by 1.745. which showed that the data was homoscedasticity.

3.8 Operationalization and measurement of Variables

The operationalized was based on how the variable was used in the study;

Table 3.2 Operationalization and measurement of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Operationalization</th>
<th>Measurement</th>
<th>Hypothesised direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Dependent</td>
<td>ROE</td>
<td>PAT/Value of Equity</td>
<td>null</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ROCE</td>
<td>PAT/Capital employed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EPS</td>
<td>PAT/No. Of shares</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital structure</td>
<td>Independent DER.</td>
<td>Total liabilities/Total equity</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
<td>-----------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DASR</td>
<td>Total debts/Total assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LDER</td>
<td>Long term debts/Total assets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.9 Ethical Consideration

Moral contemplations were important to keep up the honesty of the examination and additionally the uprightness of the specialist (Creswell, 2002). Permission was obtained before collecting the data; the targeted respondents were assured that participation was voluntary. Further, the details of the study and its benefits to the management of the industry were explained. The assurance that confidentiality for the information given in the questionnaires was given. The respondents were further assured that only requisite details that will assist in shedding light on the research questions were included.
CHAPTER FOUR
FINDINGS AND DISCUSSIONS

4.1 Introduction
This chapter covered data analysis, findings and discussions of the research. Secondary data were collected from private sugar companies’ 6 companies listed in the Kenya Sugar Board.

4.2 Descriptive Analysis
The data were collected from the firms and also from the registrar of companies. The financial statements were evaluated to produce the summaries of capital structure, size of assets and return of equity from 2010 to 2015. There means were obtained to be used for inferential statistics analysis.

Table 4.1 Mean of DER, DAR, LTDR, Company Size and ROE from 2010-2015

<table>
<thead>
<tr>
<th>Years</th>
<th>DER</th>
<th>DAR</th>
<th>LTDR</th>
<th>SIZE (Millions of Ksh)</th>
<th>R.O.E</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Kenya</td>
<td>5%</td>
<td>11%</td>
<td>2%</td>
<td>1.2</td>
<td>13%</td>
</tr>
<tr>
<td>Soin</td>
<td>4%</td>
<td>12%</td>
<td>3%</td>
<td>0.3</td>
<td>35%</td>
</tr>
<tr>
<td>Kibos</td>
<td>7%</td>
<td>17%</td>
<td>3%</td>
<td>0.9</td>
<td>15%</td>
</tr>
<tr>
<td>Butali</td>
<td>9%</td>
<td>15%</td>
<td>3%</td>
<td>0.7</td>
<td>16%</td>
</tr>
<tr>
<td>Transmara</td>
<td>10%</td>
<td>12%</td>
<td>4%</td>
<td>0.1</td>
<td>29%</td>
</tr>
<tr>
<td>Sukari</td>
<td>8%</td>
<td>15%</td>
<td>3%</td>
<td>1.4</td>
<td>16%</td>
</tr>
<tr>
<td>Kwale Internation Sugar Ltd</td>
<td>8%</td>
<td>14%</td>
<td>3%</td>
<td>1.2</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: Research Data (2017)

The means of each sugar company were obtained with the five years of operation to obtained a summary table of mean of DER, DAR, LTDR, Size in millions of shilling and return of equity with 2010 to 2015. The companies indicated fair performance to
the lowest performing (35% to 13% respectively). Transmara was the smallest with highest DER, DAR, LTDR but moderate performance of 29% in R.O.E. This contrary to West Kenya with the with lowest DER, DAR, LTDR but moderately larger firm but with the lowest 13% R.O.E. The size of the firm range from 0.3 to 1.4 million of asset investments in sugar.

Table 4.2 Trend of DER, DAR, LTDR and ROE from 2010-2015

<table>
<thead>
<tr>
<th>Years</th>
<th>DER</th>
<th>DAR</th>
<th>LTDR</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>7%</td>
<td>13%</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>2011</td>
<td>6%</td>
<td>14%</td>
<td>3%</td>
<td>18%</td>
</tr>
<tr>
<td>2012</td>
<td>8%</td>
<td>14%</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>2013</td>
<td>9%</td>
<td>14%</td>
<td>3%</td>
<td>22%</td>
</tr>
<tr>
<td>2014</td>
<td>7%</td>
<td>14%</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>2015</td>
<td>7%</td>
<td>13%</td>
<td>3%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: Research Data (2017)

The trend means of the companies from 2010 to 2015 were obtained where there was significant flaction in R.O.E. and D.E.R. Table 4.2. The mean of DER, DAR, LTDR and ROE along the 5 years were 7%, 14%, 3% and 20%. This there is sligh increase of DER between 2012 to 2013. LTDR has remained constant over the same period. ROE has higher variation over the five years.
Figure 4.1 indicate that the ROE of the companies has increased over the five years. This was also focused debt to equity ratio over the five years. The increasing trend of ROE and DER has negative influence to each variation with the increasing years. The companies have constants debt ratio and long term debt to total assets ratio (14% and 3% respectively). The mean of each variable indicate that ROE, DAR, DER and LTDR were given by (20%, 14%, 7% and 3% respectively) for all the companied over the five years. The data shows that ROE should be more than debt/asset ratio, debt/equity ratio and long term debt ratio.

4.3 Inferential statistics

The research study sought to find out the impact of capital structure on financial performance of private sugar companies in Kenya. The correlation and regression
model were used to establish the relationship between capital structure and financial performance.

4.3.1 Correlation Coefficient

The correlation between element of capital structure, size of the firm and performance. The following data were obtained to relate to the relationship of debt equity ratio, debt ratio, long term debt to total assets ratio, size of the firm and return of equity. Table 4.3 will outline the correlation between the variable as well as relationship are significant to the each other or associated with each other. Pearson moment correlation coefficient was used to evaluate the correlation within the variables (significant level of 5%).

Table 4.3 Correlation Coefficient of DER, DAR, LTDR, Size of Firm and ROE

<table>
<thead>
<tr>
<th></th>
<th>Debt Equity Ratio</th>
<th>Debt Asset Ratio</th>
<th>Long Term Debt Ratio</th>
<th>Size of Company in Millions</th>
<th>Return of Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debt Equity Ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.391</td>
<td>.628</td>
<td>-.037</td>
<td>-.163</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Debt Asset Ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.391</td>
<td>1</td>
<td>-.022</td>
<td>.410</td>
<td>-.564</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.386</td>
<td></td>
<td>963</td>
<td>.361</td>
<td>.187</td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Long Term Debt Ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.628</td>
<td>-.022</td>
<td>1</td>
<td>-.660</td>
<td>.598</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.131</td>
<td>963</td>
<td></td>
<td>.107</td>
<td>.156</td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Size of Company in Millions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.037</td>
<td>.410</td>
<td>-.660</td>
<td>1</td>
<td>-.826*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.937</td>
<td>.361</td>
<td>.107</td>
<td></td>
<td>.022</td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Return of Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.163</td>
<td>-.564</td>
<td>.598</td>
<td>-.826*</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.727</td>
<td>.187</td>
<td>.156</td>
<td>.022</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

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

Source: Research Data (2017)
Pearson moment coefficient between debt equity ratio and debt asset ratio was weak positive \((R = .391)\) that was no significant \((P > 0.05)\). There existed strong correlation between debt equity ratio to long term debt ratio \((R = .628)\) though it was not significant relationship \((P > 0.05)\). Debt equity ratio had weak negative correlation with the size of the organization and with ROE \((R = -.037\) and -.163 respectively).

Debt asset ratio had positive weak relationship with size of the company \((R = .410)\) and negative relationship with LTDR and ROE \((R = -.022\) and -.564 respectively). LTDR had negative relationship with the size of the business \((r = -.660)\) and positive relationship with ROE \((R = .598)\). Finally, the size of the organization has negative significant effect on ROE \((R = -.828, P < 0.05)\).

### 4.3.2 Regression Analysis for Capital Structure and R.O.E

The regression of model was done on capital structure without the influence of size of the organization. This was to assess the significance of DER, DAR, LTDR on ROE and the relationship between the capital structure variables and ROE.

**Table 4.4 Correlation Coefficient of DER, DAR, LTDR and ROE**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.942a</td>
<td>.887</td>
<td>.774</td>
<td>.03913499</td>
<td>.887</td>
<td>7.830</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Long Term Debt Ratio, Debt Asset Ratio, Debt Equity Ratio
b. Dependent Variable: Return of Equity

**Source: Research Data (2017)**
There was strong correlation between capital structure variable and financial performance of the firm (R = .942). The relation was representing by 88.7% of data collected meaning that 11.3% was related to other factors other than capital structure. The relationship was significant with a strong correlation (F = 7.830, P<0.042). The diagnostic test indicated that no autocorrelation since d is between 0 and 4 (d =2.128).

Table 4.5 ANOVA of DER, DAR, LTDR and ROE

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.036</td>
<td>3</td>
<td>.012</td>
<td>7.830</td>
<td>.02</td>
</tr>
<tr>
<td>Residual</td>
<td>.005</td>
<td>3</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.041</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return of Equity

b. Predictors: (Constant), Long Term Debt Ratio, Debt Asset Ratio, Debt Equity Ratio

Source: Research Data (2017)

There was significant relationship between capital structure variable (DER, DAR, LTDR) and performance of the firm (ROE) (F = 7.830, P < 0.05).

Table 4.6 Regression Model for DER, DAR, LTDR and ROE

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.162</td>
<td>.139</td>
<td>1.163</td>
<td>.329</td>
<td></td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>-3.065</td>
<td>1.256</td>
<td>-.713</td>
<td>-2.440</td>
<td>.043</td>
</tr>
<tr>
<td>Debt Asset Ratio</td>
<td>-.031</td>
<td>.891</td>
<td>-.263</td>
<td>-1.158</td>
<td>.047</td>
</tr>
<tr>
<td>Long Term Debt Ratio</td>
<td>13.000</td>
<td>3.362</td>
<td>1.040</td>
<td>3.866</td>
<td>.031</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return of Equity

Source: Research Data (2017)
The data diagnostic test indicated that the all the variable had no multiple collinearity with capital structure variable and financial performance (VIF<10). The regression model indicated that unit increase of Debt Equity Ratio had 3.065 negative impact on the ROE, unit of Debt Ratio had 1.031 negative impact on ROE and increase of LTDR had 13.000 positive impact on the ROE. Hence the company venturing in long term debt assist the organization to grow in the return of equity.

DER has significance effect on ROE (P<0.05). Hence reject the null hypothesis that debt to equity ratio has significant effect on financial performance of private sugar manufacturing companies in Kenya. The findings are in agree with the discoveries by Hutchinson (1995) who fought that cash related utilize decidedly influenced the affiliation's entry on esteem gave that benefit's impact of the organization's advantages outperforms the typical premium cost of commitment to the firm. Hutchinson (1995) additionally discovered fundamentally positive connection between obligation proportion and measures of gainfulness. Pastry specialist (1973) additionally distinguished critical effect amongst obligation and gainfulness yet for businesses.

The data from findings further indicated DAR had significant influence on the ROE of the firms (P < 0.05). Hence DAR has significant effect the financial performance of private sugar manufacturing companies in Kenya. This finding is in help of finding by Ebaid (2009)) and Ghosh, Nag and Sirmans (2000), which uncovered a positive connection between money related use and decision of capital structure. Different examinations demonstrated a negative relationship, for example, whereby bring down
value capital proportion is related with more noteworthy firm execution. Capital structure was calculated without a moment’s hesitation commitment to asset extent, whole deal commitment to asset extent, and total commitment to indicate assets.

LTDR has a significant effect on performance since P value is less than 0.05 at 0.031 (P < 0.05). It implies that the null hypothesis that long term debt ratio does not significantly affect the performance of private sugar manufacturing companies in Kenya is rejected and the alternative hypothesis is accepted. These findings are in help of the findings by Walker and Ruekert (1987) assert that proper firms’ performance scope must include efficiency, competence, and flexibility, suggesting the existence of vital linkages connecting strategic control, strategic orientations and organizational performance. Performance measurement impact of strategies has, however, been reported to be problematic in rising economy, Kenya included (Hoskisson, Edan, Lau & Wright, 2000). Such researchers attribute the situation to unconventional financial reporting that make comparisons over time and across firms difficult.

4.3.3 Regression Analysis for Capital Structure, R.O.E and Size of Company
Regression model that allows the influence of moderating variable (size of the company) on the capital structure and financial performance (table 4.7).
Table 4.7 Correlation Coefficient for DER, DAR, LTDR Firm’s Size and ROE

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adj R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.948a</td>
<td>.898</td>
<td>.694 .04548694</td>
<td>.898 4.402 4 2 .044</td>
<td>1.745</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Size of Company in Millions, Debt Equity Ratio, Debt Asset Ratio, Long Term Debt Ratio

b. Dependent Variable: Return of Equity

Source: Research Data (2017)

The correlation coefficient showed strong correlation between the variable (R = 0.948), though it was significant (F = 4.402, P<.05). The data that were used to show this variation was 89.8% and hence 10.2% was as result of other factors other than DER, DAR, LTDR or Size of Company. The diagnosis indicated there were no autocorrelation between variable based on the fact that Durbin-Watson coefficient was between 0 to 4 (d = 1.745).

Table 4.8 ANOVA Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression</td>
<td>.036</td>
<td>4</td>
<td>.009</td>
<td>4.402</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>.004</td>
<td>2</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.041</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return of Equity

b. Predictors: (Constant), Size of Company in Millions, Debt Equity Ratio, Debt Asset Ratio, Long Term Debt Ratio

Source: Research Data (2017)

The results in table 4.8 indicated the relationship between capital structure and financial performance was significant on DER, DAR, LTDR and ROE when company size is considered (F = 4.402, P< 0.05).
Table 4.9 Regression Analysis for DER, DAR, LTDR Firm’s Size and ROE

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.211</td>
<td>.193</td>
<td>1.095</td>
<td>.038</td>
<td></td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>-2.656</td>
<td>1.699</td>
<td>-.618</td>
<td>-1.563</td>
<td>.043</td>
</tr>
<tr>
<td>Debt Asset Ratio</td>
<td>-.882</td>
<td>1.084</td>
<td>-.225</td>
<td>-.814</td>
<td>.044</td>
</tr>
<tr>
<td>Long Term Debt Ratio</td>
<td>10.668</td>
<td>6.317</td>
<td>.853</td>
<td>1.689</td>
<td>.033</td>
</tr>
<tr>
<td>Size of Company in Millions</td>
<td>-.033</td>
<td>.069</td>
<td>-.193</td>
<td>-.470</td>
<td>.048</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return of Equity

Source: Research data (2017)

Results from table 4.8 indicated that the independent variables debt ratio, long term debt ratio and Debt to Equity Ratio showed that there was significant effect on the dependent variable ROE with all the p values was less than 0.05 hence it was concluded that there was statistically significant difference between capital structures and financial performance when size of the company is considered to be a moderating variable. The model that is given by $Y = 0.211 - 2.656 X_1 - 0.882 X_2 + 10.668 X_3 - 0.033 X_4 + Error$. Where $Y$ – Financial performance, $X_1$ – Debt Equity Ratio, $X_2$ – Debt Asset Ratio, $X_3$ – Long term debt ratio and $X_4$ – Size of the company.

Based on the first hypotheses, the findings debt/equity ratio has a significantly negative coefficient ($\beta_1 = -2.656$, P-Value = 0.043). The level of leverage has a negative effect on the firm’s performance which means that the use debt in private sugar factories can push the industry to financial distress. This argument is in line
with the tradeoff theory that external source of finance has a negative influence to performance.

According to hypothesis two, the exist negative significant effect of debt/asset ratio on the performance of the organization ($\beta_2 = -0.882$, P value = 0.044). In this case the debt affect increment has negative effect on profitability. There is need to cushion industries from increasing debt equity ratio since it will affect the performance negative. By regulating the debt/asset ratio the company will safeguard the performance of the organization. This contradicts with Ebaid (2009) there was positive relationship between used of capital structure on profitability of the organization which is in line with this study results.

The third hypothesis was also significant since long term loan proved to assist the long running performance of the organization ($\beta_3 = 10.688$, P value = 0.033). In showed that the level of leverage of long term loan has a positive effect on the performance of the firm. It is then advisable for sugar companies to consider long term loan rather than short time loan. The finding might be based on ability of the firm to regain the borrowed amount. Mwangi (2010) had similar findings on long term debt ratio that it is significant in determining the organization profitability.

Finally, the moderating effect of company size indicate that introductio

Finally, the moderating effect of company size indicate that introduction of company size has negative significant effect on the relationship between the capital structure and financial performance ($\beta_3 = -0.033$, P value = 0.048). It implies the bigger size company has a higher chance of getting into financial problem than small companies. It is possible since most of the sugar company’s capital structure is formed using debt
finance. There is need to consider the size of the organization in establishing the financial performance since it is an important factor. This concur with Akbas and Karaduman (2012) who found that company size affect negatively on the profitability of the organization. But differs with Coad, Segarra and Mercedes (2010) who findings showed that the bigger the size of organization the high the level of profitability.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Findings

The study aimed at establishing the effect of capital structure on financial performance of private sugar firms in Kenya. Specifically, the study was meant to examine the association linking Debt to Equity Ratio and the financial performance of private sugar manufacturing companies in Kenya. Secondly, it was to determine the association linking Debt Ratio and the financial performance of private sugar manufacturing companies in Kenya. Thirdly, it was to establish how long-term debt ratio relates to the financial performance of private sugar manufacturing companies in Kenya.

The result indicated with the influence of company size there exist significant relationship between the capital structure and financial performance. The result based on correlation there was LTDR was found to be positive correlated with ROE (R = 0.598). Also company size was had strong negative correlation with ROE (R = -.826). DER and LTDR has positive correlation (R = .628).

The regression model indicates that there was correlation between the capital structure and financial performance (R=.942). The relationship was significant (P<0.05). This was because DER, DAR and LTDR were significant on ROE. The statistics then finds that debt equity ratio, debt ratio and long term debt to asset ratio plays significant role in improving the financial performance of the organization while short term debt...
leverage has negative effect on profitable hence need to be reduce and increase long term debts.

The regression model with the moderator of company size showed that there was significant factor of capital structure on financial performance. It then means that the size of the company is good moderating factor.

5.2 Conclusion
The study concludes that there exist association linking Debt Equity Ratio, Debt ratio and LTDR on the financial performance of private sugar manufacturing companies in Kenya. Debt Equity Ratio, Debt ratio and LTDR has a significant effect on the performance of private sugar manufacturing companies in Kenya. There was significant relationship between capital structure and financial performance.

The study concluded that the intervening outcome of the size of the organization linked significantly the capital structure and financial performance of private sugar manufacturing companies in Kenya.

Finally, from the study when all variables put together it can be said that there is significant impact of capital structure on financial performance of private sugar manufacturing companies in Kenya.

5.3 Recommendations
The study recommends that the LTDR be considered since they affect the financial performance of the private sugar manufacturing firms in Kenya. Finance director and board of directors should consider borrowing long term finance so long as the firm is
able to pay; too much borrowing is dangerous to the firm since it means firm is being financed by creditors rather than its financial resources. Creditors and buyers prefers low debt ratio and debt to equity ratio due to the fact their interest are included in the occasion of enterprise decline. The debt ratio and debt to equity ratio provide significant negative effect on financial performance. Hence high debt/ Equity ratio results in additional interest expense and therefore incase the interest outweigh its return it may lead to bankruptcy which may leave shareholder with nothing. Firms should consider having an optimal debt to equity ratio as well as debt ratio in the long run.

The study recommends in any organization including the sugar subsector should consider reducing high debts which is measured using debt/equity ratio and debt/asset ratio since it has negative effect financial performance. A higher Debt equity ratio and Debt Ratio implies that there is greater financial risk. Companies should consider financing their assets with less debt to minimize financial risk and more internal financing from retained earnings and equity. Therefore, should set an optimum Debt Equity and Debt Ratio that suit the firm in the long run.

Finally, the study recommends that a private sugar manufacturing firm should consider lowering long term debt ratio for a company success that is the loan element should be lower than asset to avoid bankruptcy and takeover based on low liquidity and solvency ratio. So long as the LTDR is lower than DER, DAR and ROE their significant improvement of the firm’s financial performance.
5.3.1 Recommendation for further studies

Based on this fact among others, it is therefore, recommended that a government owned be done to determine how Capital Structure has an effect on Performance.

Similar studies to this can also be done to assess on other moderating variables such as firm ownership, age and competency of management on effect of capital structure on performances.
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Kenya. Interdisciplinary Journal of Contemporary Research in Business. 4(12)


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APPENDICES

APPENDIX I: LIST OF SUGAR FIRMS IN KENYA

1. West Kenya Sugar Company
2. Soin Sugar Company
3. Kibos Sugar and Allied Industries Limited
4. Butali Sugar Mill
5. Transmara Sugar Company
6. Sukari Industries Limited

Source: The Kenya Sugar Industry Strategic Plan (2010-2014)
APPENDIX II: MAP OF THE STUDY AREA
APPENDIX IV: INTRODUCTION LETTER

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

Our Ref: D58/KER/PT/26971/2013
DATE: 26th November, 2016

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR NICHOLAS KIPKOECH KOSKEI — REG. NO.
D58/KER/PT/26971/2013

I write to introduce Mr. Nicholas Kipkoech who is a Postgraduate Student of this University. He
is registered for M.B.A degree programme in the Department of Accounting & Finance.

Mr. Kipkoech intends to conduct research for a M.B.A Project Proposal entitled, “Capital
Structure and The Performance of Private Sugar Manufacturing Companies in Kenya”.

Any assistance given will be highly appreciated.

Yours faithfully,

MRS. LUCY N. MBAABU
FOR: DEAN, GRADUATE SCHOOL
APPENDIX V: RESEARCH AUTHORIZATION

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Ref. No. NACOSTI/P/17/51439/16136

Date: 9th March, 2017

Koskei Kipkoch Nicholas
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Capital structure and the performance of a private sugar manufacturing companies in Kenya,” I am pleased to inform you that you have been authorized to undertake research in Kericho County for the period ending 9th March, 2018.

You are advised to report to the County Commissioner and the County Director of Education, Kericho County before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kericho County.

The County Director of Education
Kericho County.
CONDITIONS
1. You must report to the County Commissioner and
   the County Education Officer of the area before
   embarking on your research. Failure to do that
   may lead to the cancellation of your permit.
2. Government Officer will not be interviewed
   without prior appointment.
3. No questionnaire will be used unless it has been
   approved.
4. Excavation, collection and collection of biological
   specimens are subject to further permission from
   the relevant Government Ministries.
5. You are required to submit at least two (2) hard
   copies and one (1) soft copy of your final report.
6. The Government of Kenya reserves the right to
   modify the conditions of this permit including
   its cancellation without notice.

National Commission for Science,
Technology and Innovation
RESEARCH CLEARANCE
PERMIT
Serial No. A13104
CONDITIONS: see back page.
THIS IS TO CERTIFY THAT:
MR. KOSKEI KIPKOECH NICHOLAS
of KENYATTA UNIVERSITY, 0-20200
Kericho, has been permitted to conduct
research in Kericho, County

on the topic: CAPITAL STRUCTURE AND
THE PERFORMANCE OF A PRIVATE
SUGAR MANUFACTURING COMPANIES IN
KENYA

for the period ending:
9th March, 2018

Applicant's
Signature

Director General
National Commission for Science,
Technology & Innovation
TO WHOM IT MAY CONCERN,

RE: RESEARCH AUTHORIZATION- KOSKEI KIPKOECH NICHOLAS.

The above named has been authorized by the National Commission for Science, Technology and Innovation to undertake research on “Capital structure and the performance of private sugar manufacturing companies in Kenya” for the period ending 9th March, 2018.

Kindly accord him the necessary assistance.

OSEWE F.M.
COUNTY DIRECTOR OF EDUCATION
KERicho.
THE PRESIDENCY
MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT

Telegrams: ------------------------
Telephone: Kericho 20132
When replying please quote kerichocc@yahoo.com

COUNTY COMMISSIONER
KERicho COUNTY
P.O. BOX 19
KERicho

REF: MISC.19 VOL.II/ (287) 30th June, 2017

All Deputy County Commissioners
KERicho COUNTY

RE: RESEARCH AUTHORIZATION —KOSKEI KIPKOECH NICHOLAS

Authorization has been granted to Koskel Kipkoech Nicholas by National Commission for Science, Technology and Innovation, as per a letter Ref: No. NACOSTI/P/17/51439/1613 dated 9th March, 2017 to carry out research on “Capital structure and the performance of a private sugar manufacturing companies in Kenya” for a period ending 9th March, 2018.

Kindly accord him the necessary assistance.

COUNTY COMMISSIONER
KERicho COUNTY

MUKTAR ABDI
COUNTY COMMISSIONER
KERicho COUNTY

CC: The County Director of Education
Kericho County