

**IMPACT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE:
A CASE STUDY OF NAIVAS SUPERMARKETS IN NAIROBI REGION**

KEN KAGO WAIRIMU

94049

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS OF A BACHELOR OF COMMERCE DEGREE AT
STRATHMORE UNIVERSITY**

STRATHMORE UNIVERSITY BUSINESS SCHOOL

STRATHMORE UNIVERSITY

NAIROBI, KENYA

AUGUST 2020

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the research proposal contains no material previously published or written by another person except where due reference is made in the research project itself.

© No part of this research project/proposal may be reproduced without the permission of the author and Strathmore University

Ken Kago Wairimu

..... [Signature]

August 2020

Approval

The research proposal of Ken Kago Wairimu was reviewed and approved by the following:

Josphat Manani

Strathmore University Business School

..... [Signature]

[Date]

TABLE OF CONTENTS

DECLARATION	1
TABLE OF CONTENTS	2
ABSTRACT	4
CHAPTER ONE: INTRODUCTION	1
1.1 Background of Study	1
1.1.1 Capital Structure	2
1.1.2. Firm performance	2
1.2. Problem Statement	3
1.3. Research Objectives	4
1.3.1. General Research Objectives	4
1.3.2. Specific Research Objectives	4
1.4. Research Questions	5
1.5 Scope of Study	5
1.6. Significance of the Study	5
CHAPTER TWO: LITERATURE REVIEW	6
2.1. Introduction	6
2.2. Review of Theories	6
2.2.1. Modigliani and Miller Capital Structure Theory	6
2.2.2. Agency Theory of Capital Structure	7
2.2.3. Pecking Order Theory of Capital Structure	7
2.2.4. The Tradeoff Theory	8
2.3 Determinants of firm performance	9
2.3.1 Firm Size	9
2.3.2 Liquidity Management	10
2.3.3 Capital structure	10
2.4 Empirical Review	10
2.5. Summary of literature review and research gaps	12
2.6.1. Operationalization of variables	14

CHAPTER 3: RESEARCH METHODOLOGY	15
3.1 Introduction	15
3.2. Research Design	15
3.3 Population and Sampling	15
3.4 Data Collection	15
3.5 Data Analysis	15
3.6 Research Quality	16
CHAPTER 4:DATA ANALYSIS, RESULTS AND DISCUSSIONS	17
4.1 Introduction	17
4.2 Descriptive statistics	17
4.3. Correlation analysis	18
4.4 Regression analysis	18
4.4.1. Regression output	18
4.5 Discussion of research findings	20
CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	22
5.1 Introduction	22
5.2 Summary of Findings	22
5.3 Conclusions	22
5.4 Policy Recommendations	22
5.5 Limitations of the study	23
5.6 Suggestions for Further Research	23
References	24
APPENDIX 1: LIST OF NAIVAS SUPERMARKETS IN NAIROBI REGION USED IN ANALYSIS	27
APPENDIX II : DATA COLLECTION SHEET	28
APPENDIX III : DATA USED IN ANALYSIS	29

ABSTRACT

Capital structure is one of the most vital topics in finance majorly on the optimal capital structure that will bring about greater financial value of a given organization. This study attempted to determine the impact of capital structure on a firm's performance in the case of Naivas Supermarkets in Nairobi County as little research on this area had been done to private limited companies and instead most works had focused on other sectors such as the banking sector, manufacturing and construction sector, non-financial sectors as well as companies listed in the Nairobi Stock Exchange. Financial performance was expressed in terms of Return on Assets whereas capital structure was expressed in terms of Long-Term liabilities to Total Asset ratio with size of a firm expressed as revenue being the control variable. Furthermore, this study addressed on the vital theories related to capital structure as well as what others have said on the same area as well as the gaps involved for further inquiry and future research. Descriptive statistics techniques such as mean, mode, median, kurtosis and the like as well as multi-regression tests were used to quantitatively analyze the data and found out that average size of firms measured by sales was 20.7089 whereas for profitability in form of Return On Assets and capital structure expressed in terms of Long-term liabilities to Total Assets ratio were 0.8363 and 1.1493 respectively.

Long-term debt had a strong negative impact on financial performance whereas revenue had a positive impact on financial performance hence a recommendation of variety of strategies to boost up firm sales as well as minimal use of debt to finance daily operations.

CHAPTER ONE: INTRODUCTION

1.1 Background of Study

Finance managers in various firms cannot ignore the impact of capital structure decisions on a firm's performance on their day-to-day activities hence need to understand the appropriate mix of equity and capital that will give them desirable results.

Modigliani and Miller (1958) work advocating for irrelevance in capital structure has since been subject to modification with the inclusion of effect of corporate taxes only as well as effect of both corporate and personal taxes on a firm's value. Furthermore, other theories have cropped up as a result of the Modigliani and Miller model such as The Pecking Order Theory entailing firms' preference of retained earnings over debt, to equity due to information asymmetry arising between managers and potential shareholders outside a business, The Trade Off theory that postulates for a low cost of capital brought in by the offsetting effect of benefits of debt financing against costs of debt financing and even The Several studies have been done and tested using different models and theories and in so doing different conclusions have come up indicating either a positive, negative, mixed or even no relationship at all.

Capital structure decisions involve an appropriate selection of a proper debt- equity mix for achievement of an optimal capital structure (Mwangi, 2016).

The retail industry is one of the most dynamic and vibrant all over the world and its developments over time have greatly increased the economic performances of the countries involved. This is clearly seen in the trends that have occurred in this industry such as home deliveries facilitated by an e-commerce platform, food market experience that is synonymous with Naivas Supermarkets as well as Quickmart stores that involve emphasis on selling of affordable and fresh quality fruits and vegetables as well as a superior interior designs that make customers have a world class shopping experience. From this we cannot ignore the fact that proper financing decisions have to

be made as well as proper funding as the retail industry is one that requires very proper financing due to their vast operations countrywide as well as investment in high quality products. Some have resorted to attract additional investment through foreign firms that provide a huge capital base to facilitate operations so as to survive in the recent times as a trend has been seen of a decline in some major retails of the past as soon as they rise and expand swiftly in a short time due to factors like unprofessionalism, family disputes for the case of family owned businesses, poor working capital management as in the case for Uchumi and Nakumatt retail chains , poor corporate governance frameworks as well as poor financial decisions.

Naivas Supermarket as a retail chain are one of the most popular retailers in Kenya apart of entry of foreign owned firms such as Shoprite, Carrefour and the like as well as local ones like Gilanis, Khetias and the like has managed to break the curse of the declining trend of retail stores via attracting foreign investment that has acquired a thirty percent stake in a Mauritius based firm known as Amethis hence deemed to have a basis for good capital structure decisions that positively impacts its performance. The fact that most of its stores are located in Nairobi has partly motivated this study as well as most scholars have not covered extensively on how capital structure affects retail chains worldwide.

This study will therefore use Return on Assets to measure financial performance whereas capital structure will be determined using long-term liabilities to total assets ratio and size of the firm expressed in form of revenue on a 5-year basis from 2015 to 2020.

1.1.1 Capital Structure

Capital structure refers to the means by which a firm combines its equity and debt in order to finance its activities (Saad, 2010). A lower cost of capital maximizes a firm's value (Gitman, 2003). However, that can only be attained via an optimum capital structure which in real life does not have a definite method for determining an optimum capital structure.

1.1.2. Firm performance

According to Omar Taouab and Issor (2019), firm performance refers to outcomes attained by management and other company stakeholders in ensuring competitiveness, efficiency and effectiveness to the firm. In this study, we will focus on profitability which is the ability of a firm

to consistently generate net income from time to time (Kumar, 2015). It is deemed that managers make choices that maximize profits while avoiding ones that tend to lead to declining profits.

Profitability can be computed by various stakeholders using various ratios such as Return On Equity ratio which shows the return shareholders earn from their funds, Return On Capital Employed determines firm's ability to generate return for the owners and markup is the ratio of gross profit in relation to cost of sales. These ratios come in handy as they greatly assist in summarizing large data volume sets into meaningful financial data for interpretation. However, it comes hand in hand with inherent limitations such as different accounting policies and standards for different firms, different company sizes, and use of historical data which in a way inhibits proper comparative performance between different companies.

1.2. Problem Statement

Studies on impact of capital structure on firm performance have been carried out in developed economies as well as developing economies in various sectors ranging from manufacturing to banking to even listed as well as unlisted corporations in the stock exchange market for such economies.

In Pakistani, Tariq, Waqar and Muhamad (2014) argued that there exist mixed relationships among capital structure and firm performance in that there was a positive relationship between capital structure and firm performance when Return On Assets was used as a dependent variable whereas long term debt over assets and when return on equity (ROE) was used as dependent variable then debt over assets ratio (DTA) showed positive impact but equity over assets ratio (EQA) and long term debts over assets ratio (LDA) revealed negative impact over dependent variable and when return on sales (ROS) was used as dependent variable then DTA and EQA showed negative link to ROS but LDA revealed positive impact over ROS.

On the other hand, in Malaysia (Tariq Javed, 2014) on the study of capital structure and firm performance using Malaysian listed companies found out that capital structure had a negative significant impact on firm performance in contrast with Frank and Goyal (2002) who found out that capital structure had a positive significant impact on a firm's performance.

Dorcas (2016) argued that short term debt to asset ratio does not significantly affect profitability of commercial banks while equity significantly affect profitability of commercial banks as it shows capital strength as well as viability and riskiness of the banks.

Lucy, Mutathe and George (2014) in their study on capital structure on Non-Financial Companies listed in the Nairobi Stock Exchange found out that increased use of current assets as well as current liabilities as measured by Return on Asset and Return on Equity greatly enhanced firm performance.

According to Oguna (2014), a similar study focusing on allied construction and manufacturing firms at the Nairobi Stock Exchange depicted a very significant relationship between capital structure and firm performance in that a correlation between Return on Equity and current debt was significant compared to the correlation between Return on Equity and long-term debts.

Short term debts and long-term debts have a positive relationship with a firm's profitability in a study on the determinants of capital structure in Ghana (Abor, 2005). This had however been disputed in a similar study using Abor (2005) model by Addai, Baasi and Hughes (2013) that indicated the relationship between total debt and a firm's profitability was negative.

From what has been said on this study, it is clear that limited study has been done in the retail sector hence forming a basis for this study.

1.3. Research Objectives

1.3.1. General Research Objectives

This study aims to determine the impact of capital structure on the performance of Naivas Supermarkets in Nairobi County.

1.3.2. Specific Research Objectives

1. Determine relationship between capital structure and financial performance of Naivas supermarkets in Nairobi Region.
2. Investigate on the effect of the size of a firm on performance of Naivas supermarket stores in Nairobi Region

3. Determine extent to which the use of long term debt affects financial performance of Naivas Supermarkets in Nairobi Region.

1.4. Research Questions

1. What is the relationship between capital structure and financial performance of Naivas Supermarkets in Nairobi Region ?
2. What is the effect of size of a firm in the financial performance of Naivas Supermarkets in Nairobi Region?
3. To what extent does use of long term debt affect the financial performance of Naivas Supermarkets in Nairobi Region?

1.5 Scope of Study

This study will cover the Naivas Supermarkets in Nairobi that have been in business since 2015 to 2020. The financial performance measure to be used will focus mainly on profitability, Return on Assets and revenue measures on a five-year basis from 2015 to 2020. In addition to that, the study will rely on audited financial statements for the respective financial years in relation to the financial data concerned to be extracted.

1.6. Significance of the Study

This study will help management of retail stores in planning on how they intend to finance their day-to-day operations as well as for them to make the right choices to prevent the firms from going into risks of not being able to pay up its debts in good time.

This study will enable existing as well as prospective investors to appreciate the need for a good mix of equity-debt that is ideal for the ventures they want to partake. This study will be an addition to the already existing knowledge based on the previous research studies done on this particular area of Capital Structure via an addition of an element of retail sectors area other than companies registered in the Nairobi Stock Exchange, manufacturing corporations and many others.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

In this chapter, various theories in relation to capital structure such as Modigliani and Miller (1958), Jensen and Meckling (1976) agency theory of capital structure, Myers (1984) theory of Pecking Order and the tradeoff theory will be captured as well as what has been said on seminal works by other authors on the same study both locally and internationally. A conceptual framework based on the variables under study will be developed.

2.2. Review of Theories

The theories that will be used to address the issue on how capital structure affects firm performance include Modigliani and Miller (1958), Jensen and Meckling (1976) agency theory of capital structure, Myers (1984) theory of Pecking order and even Trade-Off Theory.

2.2.1. Modigliani and Miller Capital Structure Theory

Modigliani and Miller (1958) argue that an optimal capital structure does not exist without the presence of corporate taxes and that the value of firm remains unchanged regardless of whether debt or equity financing has been used. Hence concluding that the more debt a firm uses in its financing, the more the financial risk it is going to engage in and vice versa.

In addition to that, a modification was done in 1963 by the same people, this time including corporate taxes hence an optimal capital structure exists. They argue that if a firm uses more debt financing, then it is expected that its value will increase as a result of tax shield mechanism to the debt available. From this, it is clearly that the value of a leveraged firm is greater than that of the unleveraged one owing to the benefit that is equal to the present value tax shield acquire on debt.

Furthermore, it holds that an optimal capital structure can be attained by using a higher percentage of debt as compared to equity to finance its operations.

Furthermore, independent studies by Miller (1977) have included the effect of both capital and personal taxes to show that the value of firm can be increased by adding debt finance at a lower rate as compared to Modigliani and Miller (1963) theory of capital structure with corporate tax only.

2.2.2. Agency Theory of Capital Structure

Jensen and Meckling (1976) argue that a conflict of interest exist between shareholders and managers pertaining to running the firm in that managers tend to pursue their own self-interests in a bid to get more bonuses at the expense of their main duty of maximizing shareholder wealth in form of more dividends paid .According to Jensen and Meckling(1976), financing through debt is a form of control measure restricting managers' opportunistic behavior for personal interests via reduction of free cash flows in making fixed interest payments hence hindering negative investments and enhancing goal congruence in meeting share holders' interests.

Agency problem can be reduced by giving managers ownership in the company so that they would consider their own interest while making decisions of choosing capital structure and then they might be able develop an optimum capital structure for the firm but when managers do not have ownership in the firm then they might not consider advantage of shareholders and might decide to invest by acquiring more debt rather than issuing new stocks.

2.2.3. Pecking Order Theory of Capital Structure

Many firms usually have a specified order of preference when it comes to funding their day-to-day operations (Myers, 1984). Firms prefer retained earnings to debt, short-term debt to long term

debt and debt over equity as a result of information asymmetry that exists between the firms and potential investors that occurs from the issuing of new securities. Hence, when retained earnings are used without issuing of new securities, they greatly solve such an information asymmetry (Myers and Majiluf, 1984)

Businesses give a first priority to their internal sources of capital while growing their asset base, revenue, liquidity and profitability and utilize less on external sources of finance (Mbugua, 2010). Hence this falls in line with the Pecking Order Theory. From this, it is evident that firms with greater internal funds will first use internal sources off finance to fund new projects while ones with a limited amount of internal funds will be compelled to use debt funding and if not possible eventually use equity funding.

Internal sources are given first priority followed debt issuance and finally equity in capital structure formulation (Sheikh, Shakeel, Iqbal and Tahir, 2012). Furthermore, in the strong market form, the theory supports that issuance of new equity will not happen, while in the weak market form, it is acceptable to issue limited amount of new equity.

The implication of this theory is that firms that tend to have a huge and steady flow of internal sources of capital tend not to use external financing hence ending up with a minimal to zero debt to equity ratio. Pecking order predicts that high growth companies have high debt ratio since they will opt for more debt than equity (Fama& French, 2002).

In the case for external funding, debt capital is preferred to equity capital (Siro. 2013).

It applies in this study as large supermarket businesses in Kenya today both locally and foreign owned such as Naivas, Carrefour, Shoprite, Tuskys and the like tend to bring in huge profits from their branches in various parts of the country hence high amount of retained earnings used in funding day to day operations as well as venture into new projects will automatically prefer retained earnings to external sources of capital hence being in line with this theory.

2.2.4. The Tradeoff Theory

A firm's optimal capital structure is achieved via a careful trade-off of benefits of debt financing against cost of debt financing which ultimately lowers the cost of capital in general (Tarek, 2013).

The end point of debt funding and utilization is at the point where the possible financial distress costs outweigh tax shields on debt borrowed (Myers, 2001).

The main benefit of using debt financing is tax shield on the debt whereas the costs of using debt are bankruptcy costs that occurs when a firm is unable to pay its debts when they fall due, transaction costs, information asymmetry where either the buyer or seller in a transaction has more information as compared to the other party and may capitalize it to their advantage and even agency costs that occur when there are differing interests between managers and stockholders of a firm as a result of information asymmetry (Jensen and Meckling, 1976).

However, this may not always be the case as according to Titman and Wessels (1988), in their study found out that highly profitable firms tend to borrow less, a finding not in agreement with the tradeoff theory. In addition to that, highly profitable and liquid firms use debt conservatively (Graham, 2000), a finding also contrary with this theory.

2.3 Determinants of firm performance

In this study, firm performance is expressed in terms of profitability hence the factors affecting profitability as per Mwangi (2016) such as size, inflation, and capital structure and liquidity management also apply here and will form part of the variables to be used in this study.

2.3.1 Firm Size

According to Mwangi (2016), firm size refers to firm's capacity and capability to provide a variety of goods and services to its clients. The larger the firm size, the greater is its financial performance hence more profitable and the vice-versa for the ones exhibiting a totally opposite feature (Jonsson, 2007).

There exists a positive correlation between firm size and profitability (Mesut, 2013).

It applies in this study as large Naivas Supermarkets in Nairobi such as Gateway mall in Syokimau, Capital Center alongside Mombasa Return On Assetsd, Ciata Mall alongside Kiambu County tend to make more profits than their small counterparts. Hence, this factor will be used as a control

variable in this study expressed as the antilogarithm of the respective sales for the particular financial year.

2.3.2 Liquidity Management

Liquidity management refers to a firm's management ability to ensure that a firm has enough current assets to meet its financial obligations as they fall due. Liquidity ratios are the key performance measures in this case (Mwangi, 2016). Every stakeholder of the firm is keenly interested in its liquidity position ranging from suppliers being keen in their payments being made, employees being concerned with their salaries and stockholder's concern in ensuring the firm attains high profitability to receive adequate cash dividends.

According to Njoroge (2015), there exists a positive relationship between liquidity and financial performance as well as a positive relationship existing between the current ratio and profitability of the firm in his study using listed construction and allied firms at the NSE.

A company should maintain adequate liquidity levels for an optimum performance (Mwangi, 2016).

2.3.3 Capital structure

For a higher performance of the firm, it must employ an appropriate mix of debt and equity. Financial performance of listed companies in Kenya is inversely proportional to the capital structure as an increase in gearing ratio generally leads to increase in debt hence a lower Return on Equity (Siro, 2013).

According to the trade-off theory, firms using debt in their capital structure tend to enjoy tax deduction on interest hence lower taxes paid and higher profitability. However, a high debt in capital structure may expose the firm to potential distress as the cost of debt may exceed the benefit of using debt.

Hence capital structure decisions should not be in conflict with the profit-making goals of a firm

2.4 Empirical Review

According to Javed, Younas and Imram (2014), the relationship between capital structure and a firm's performance is mixed in nature as from their work on companies listed in the Karachi Stock Exchange in Pakistan of 63 listed companies with data from 2007 to 2011 in that there exists a positive relationship between capital structure and a firm's performance when Return On Equity, Return On Assets and Debt Over Assets ratio are used as dependent variables whereas for Equity Over Assets ratio and Long Term Debts Over Assets depict a negative relationship. Furthermore, when return over Sales ratio is used as a dependent variable, Equity over Assets Ratio and Debt Over Assets Ratio display a negative relationship to Return over Sales whereas Long Term Debts Over Assets depict a positive relationship to Return Over Sales.

Hence, pointing towards an existence of a relationship between capital structure and a firm's performance.

In addition to that, Maina and Ishmail (2014) on the effect of capital structure on financial performance of firms listed at the Nairobi Stock Exchange depicts that there exists a negative and significant relationship between capital structure and financial performance of firms listed at the Nairobi Stock Exchange with debt and equity being major determinants of a firm's financial performance.

According to Saeedi and Mahoudi (2011) on relationship between capital structure and performance of listed firms in the Tehran Stock Exchange, there is a positive relationship between financial performance measures and capital structure while for Return On Assets has a positive relationship to capital structure, there exists no significant statistical relationship between Return On Equity and capital structure.

Debt ratio has a significant negative impact on a firm's performance when it is used as a capital structure proxy and Return on Assets and Return on Equity are used as measures of a firm's performance with the Ordinary Least Methods Squares used as a means of estimation (Akendule, 2009).

According to Ebad (2009) on his study using data of 64 Egyptian firms from 1997 to 2005 showed no impact of capital structure on Return On Assets and Return On Equity hence no impact of capital structure on firm performance.

According to Oguna (2014), a similar study focusing on allied construction and manufacturing firms at the Nairobi Stock Exchange depicted a very significant relationship between capital structure and firm performance in that a correlation between Return on Equity and current debt was significant compared to the correlation between Return on Equity and long-term debts. The study adopted a descriptive research design as well as data being collected from 2010 to 2013 and analyzed via the regression models of the SPSS. Hence, this study only focused on the manufacturing, construction and allied firms registered at the NSE in which future studies to be done to also include other sectors as well as a longer period for more reliable and accurate data.

2.5. Summary of literature review and research gaps

The literature review carried out indicates a strong relationship between capital structure and firm performance as some theories such as Modigliani and Miller, (1958), advocate for more utilization of debt finance to increase value of the firm while others such as the pecking order review advocates for preference for internal sources of capital to external sources as high debt negatively impacts firm performance. Furthermore, the tradeoff theory advocates for more use of debt due to an offsetting effect brought in by benefits of tax shielding to the costs of borrowing debt even though studies done by Titman and Wessels (1988) and Graham (2000), have produced results contrary to the theory postulated.

From the empirical review performed above, it is evident that the studies done in this area have produced an array of results ranging from a positive to negative to even mixed results due to being carried under different circumstances dealing with different variables.

Some studies have not focused on liquidity as a very vital factor when it comes to a firm's performance as they have only dealt with debt and equity only in the cases of Maina and Ishmail (2014) while others have only focused with profitability ratio aspects of Return On Equity and Return On Asset such as Akendule (2009), Saeedi and Mahoudi (2011), Maina and Ishmail (2014) and the rest hence making liquidity a very important focus in this study.

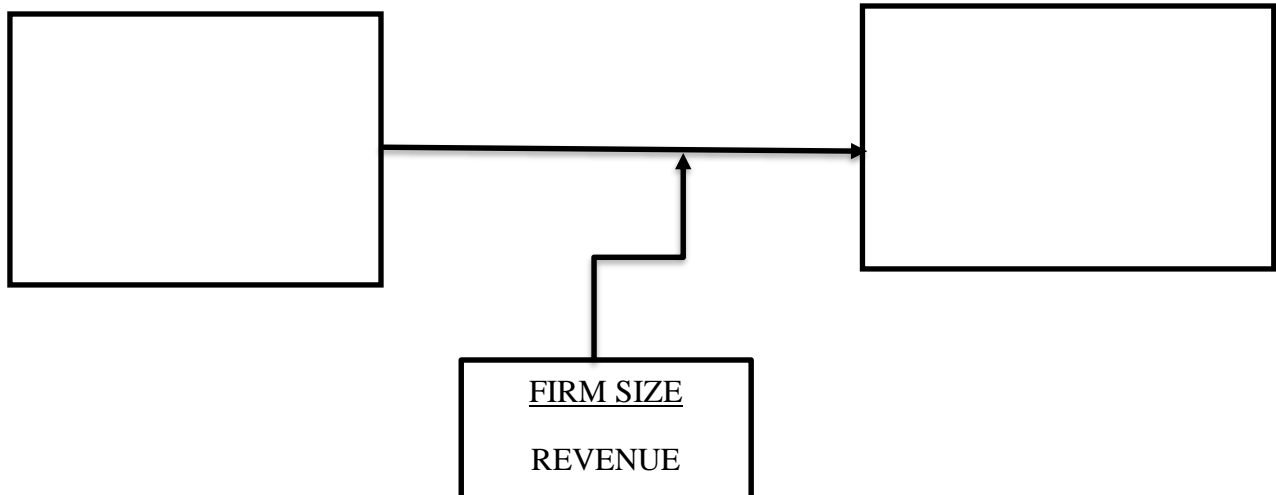
In addition to that, little studies have been carried out in the retail sector also making this a basis in which studies will be carried out.

2.6. Conceptual Framework

Independent variable

Control variable

Dependent variable



2.6.1. Operationalization of variables

	Variable	Measure
Independent	Capital structure	Long term liability to total assets
Control	Firm size	Revenue generated in a financial year
Dependent	Firm Performance	Return on Assets

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights on how the research will be carried out with an aim to establish the impact of capital structure on the performance of a firm in a case of Naivas Supermarkets branches in Nairobi County. It entails research design to be used, population, sample design, data collection techniques and data analysis methods to be used.

3.2. Research Design

The research design that will be used is case study research design as it tends to be very appropriate when you are investigating on the behavior of a particular phenomenon and trying to establish relationships that exists between such individuals hence drawing very accurate behavior about such individuals. Hence very useful in this study as it focuses on Naivas Supermarkets in Nairobi County only in terms of impact of capital structure on firm performance is concerned.

3.3 Population and Sampling

The population under study was 10 Naivas Branches in Nairobi Region as per the list in Appendix I.

3.4 Data Collection

Secondary data was be used in the study and was be extracted from audited financial statements in a 6-year span from 2015 to 2020. Aspects such as total assets, total debt and total long-term debt were extracted from the statement of financial position whereas aspects of profitability such as revenue and profit after tax were extracted from the statement of comprehensive income.

3.5 Data Analysis

Here a multi-regression model was be used as adopted from Mwangi (2016) whereby the dependent variable was be Return On Assets (RETURN ON ASSETS) and independent

variables was be Long Term debts to total assets ratio as well as size of the firm that is most times proportional to firm sales hence expressed as natural logarithm of sales. It is as follows:

RETURN ON ASSETS= $\beta_0 + \beta_1 \text{LDA} + \beta_2 \text{SIZE} + \varepsilon$ where:

RETURN ON ASSETS: Net profit after tax/Total assets

β_0 : The intercept of equation.

β : Coefficients for independent variables.

LDA: Long-term liabilities/Total assets.

SIZE: Size measured as Natural Logarithm of firm's sales –Control Variable

ε : Error term

In addition to that, descriptive statistical measures such as mean, median, range and standard deviation will be used to analyze data.

3.6 Research Quality

Research quality refers to the extent to which the study represents the general research population so that its findings are generalized to the population (Just and Roe, 2009). In order to attain this, the data collection and analysis for the Naivas Branches in Nairobi County will be done on an annual basis for each for the five years for a completer and more accurate picture of the impact of capital structure on the financial performance of a firm.

CHAPTER 4: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter entailed the data analysis for the study as well as results of the study extracted from audited financial statements from 2015 to 2020.

4.2 Descriptive statistics

This section forms a basis of discussion of results of descriptive analysis techniques for the data analyzed in the five-year period for dependent variable expressed in form of Return On Assets. independent value expressed as Long-term debt to total assets ratio and control variables expressed as 'SIZE', the natural logarithm of annual revenue generated by the Nairobi region branch as depicted in the table below.

Table 4.1 Summary of Descriptive Statistics

STATISTICAL MEASURE	SIZE	RETURN ON ASSETS	LTD/TA
Mean	20.7089	0.8368	1.1493
Median	20.7914	0.7093	0.9575
Standard Variance	0.1897	0.4511	0.8980
Standard Deviation	0.4356	0.6717	0.9477
Kurtosis	2.7912	2.7839	3.1820
Skewness	(1.7079)	1.5729	1.6403
Maximum value	21.2660	2.8711	4.1016
Minimum value	19.4251	(0.1389)	(0.1984)

From the table above, it was evident that the mean size of the Nairobi branches was 20.7089 whereas the largest value was 21.2660 and the minimum value was 19.4251 hence a small

disparity in terms of size by a range of about 1.8. Moreover, it indicated that the sales values for the branches under study were huge hence big maximum and minimum sizes.

Financial performance expressed in terms of Return On Assets had a mean of 83.68% and a standard deviation of 67.17% hence a spread of 16.51% from the mean Return On Assets value hence a small variation in financial performance over the six-year period.

Capital structure expressed in terms of Long-term liabilities to total assets ratio had a mean of 114% and a standard deviation of 94.77%.

4.3. Correlation analysis

Table 4.2 Correlation analysis summary

	SIZE	RETURN ON ASSETS	LONG-TERM LIABILITIES/TOTAL ASSETS
SIZE	1	0.3319	0.33205
RETURN ON ASSETS	0.331901	1	0.98855
LONG-TERM LIABILITIES/TOTAL ASSETS	0.332046	0.98855	1

From the table above, it is evident that correlation of the dependent , independent and control variables with themselves is perfectly positive with a value of 1 whereas the correlation between SIZE and Return on assets was a positive of 0.3319 as compared to 0.3320 of between SIZE and Long-term liabilities/total assets.

4.4 Regression analysis

4.4.1. Regression output

Table 4.3 Summary of regression output

<i>Regression Statistics</i>	
Multiple R	0.98856
R Square	0.97725
Adjusted R Square	0.97645
Standard Error	0.10395
Observations	60

From the table above, there is a strong positive correlation of 0.98. The adjusted R square was 0.97 hence an indication of 97% change in the performance of Naivas outlets in Nairobi region caused by variations in the size of the respective outlets as well as the long-term debt to total assets ratio at 95% confidence level hence strongly affected by the respective variables.

4.4.2. Statistical significance of the model

It is as shown in the table below;

Table 4.4 Analysis of variance

	<i>df</i>	<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>	<i>Significance F</i>
Regression	2	0.2645299	1.32265	1.2445	0.0448
Residual	57	0.0615892	0.010805		
Total	59	0.2706889			

From the table above, it is evident that the model significance level of 0.0448 that is less than confidence level of 5% indicates the model is reliable to make conclusions on the population hence a proof that financial performance is strongly affected by the size of a firm as well as capital structure.

4.4.3. Estimated model coefficients

Table 4.5 Estimated Model Coefficients

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.0985969	0.670977	-0.14695	0.883693812	-1.442205797	1.245012	-1.442205797	1.245012
SIZE	0.00633754	0.032661	0.19404	0.846834709	-0.059065082	0.07174	-0.059065082	0.07174
LONG-TERM LIABILITIES/TOTAL ASSETS	0.69969709	0.015013	46.6071	4.44218E-47	0.669634728	0.729759	0.669634728	0.729759

The equation derived from the above table can be expressed as :

$$\text{RETURN ON ASSETS} = -0.0986 + 0.6997 \text{LDA} + 0.0063 \text{SIZE} + \varepsilon$$

Hence, it is evident that the Return On Assets would be -0.0986 if SIZE and Long-term liabilities to total assets variables were 0 thereby a unit increase in long-term debt would lead to a decrease in Return on assets by 70% while a growth in size (increase in sales value) would lead to a 0.6% increase in return on assets.

4.5 Discussion of research findings

From the analysis performed, it was discovered that there was a strong negative correlation coefficient of -9.8% between the study variables. Furthermore, additional analysis of the coefficient model showed that size of the firm affects financial performance in a positive manner to a small extent whereas capital structure expressed in terms of Long-term liabilities to total assets ratio negatively impacted financial performance hence in line with Maina and Ishmail (2014) study on impact of capital structure on performance of firms listed in the Nairobi Securities Exchange with debt and equity being major determinants.

However, it contrasts with Abor (2005) study that states that debt, both short term and long-term has a significant positive effect on the financial performance of a firm.

From this, there emanates a finding that other factors apart from long-term debt and size of a firm expressed as a natural logarithm of sales majorly affect financial performance such as liquidity, inflation, government regulation , economic situation (recession and boom) and many others.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter forms a basis of a summary of the results of the study, conclusions of the study, limitations of the study as well as possible recommendations for future studies and research based on this study.

5.2 Summary of Findings

There was a strong positive correlation of 0.98. The adjusted R square was 0.97 hence an indication of 97% change in the performance of Naivas outlets in Nairobi region caused by variations in the size of the respective outlets as well as the long-term debt to total assets ratio at 95% confidence level hence strongly affected by the respective variables.

Nevertheless, the outcome of the regression equation indicated a negative relationship between firm performance and long-term debt to total assets ratio whereas a positive relationship existed between size of a firm and financial performance hence increasing the long-term debt to total assets ratio by a unit would negatively impact firm performance by 70% while a unit increase in size of a firm would positively affect a firm's performance by 0.6%.

5.3 Conclusions

From the study findings, it can be seen that there exists a negative relationship between firm performance and long-term debt to total assets ratio whereas a positive relationship existed between size of a firm and firm performance. Hence, a strong negative relationship exists between capital structure and financial performance in general due to effect of long-term liabilities being significantly higher in a negative aspect as compared to the positive relationship between revenue expressed as size of firm in form of natural logarithm of revenue generated in a single financial period.

5.4 Policy Recommendations

The study conclusion was an existence of a strong negative relationship between capital structure and financial performance of Naivas Supermarket stores in Nairobi Region. Long term debt ratio and profitability were negatively related thus supermarket chains should try to create a balance between use of equity and debt when financing their day to day operations. A positive relationship between size of the firm expressed as a natural logarithm of sales and financial performance is an indicator that management should come up with strategies that greatly help to increase revenue as well as minimizing on operational costs on the premise of their main objective of profit maximization. Moreover, further studies should be performed including other factors affecting firm performance externally such as government regulation, economic situation, inflation etc.

5.5 Limitations of the study

This study was conducted while I was busy with other units at school hence posing a challenge of time in terms of completing it within the stipulated period. Moreover, the data analysis bit was time consuming in terms of computation of statistical figures in relation to the different Naivas branches as well as ensuring the figures gotten were a true reflection of the study under consideration.

5.6 Suggestions for Further Research

This study focused on Naivas Supermarkets in Nairobi County. Future studies should be conducted on other retail chains like Carrefour, Shoprite and the like as well as in other sectors in the economy such as agricultural sector as well as juacali sector.

References

- Abor, J. (2005). The Effect of Capital Structure on Profitability: An Empirical analysis of Listed Firms in Ghana. *Journal of Risk Finance*, 6, 438-445.
- Addae, A.A., Baasi, M.N., & Hughes, D. (2013). The effects of capital structure on profitability of listed firms in Ghana. *European Journal of Business and Management*, 5(31)
- Ebaid., E. I. 2009. The impact of capital structure choice on firm performance: empirical evidence from Egypt, *Journal of risk Finance*, Vol. 7, pag, 477-487.
- Frank, M. Z., & Goyal, V. K. (2000). Testing the pecking order theory of capital structure. *SSRN Electronic Journal*.
- Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The Review of Financial Studies* 15(1), 1-33.
- Graham, J. R. (2000). How Big Are the Tax Benefits of Debt? *Journal of Finance*, 55, 1901-1941.
- Javed, T., Younas, W., & Imran, M. (2014). Impact of capital structure on firm performance: Evidence from Pakistani firms. *International Journal of Academic Research in Economics and Management Sciences*, 3(5).
- Jensen, M.C., & Meckling, W.H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305-360.
- Jonsson, B. (2007). Does the size matter? The relationship between size and profitability of Iceland firms. *Bifrost Journal of Social Science*, 1, 43–55.
- Just, D., & Roe, B. (2009). Internal and External Validity in Economics Research: Tradeoffs between Experiments, Field Experiments, Natural Experiments, and Field Data. *American Journal of Agricultural Economics*, 91. 1266-1271. 10.1111/j.1467-8276.2009.01295.x.

- Kumar, S.N. (2015). Capital structure and its impact on profitability. *International Journal of Science, Technology & Management*, 4(2), 24-30.
- Maina, L. &Ishmail, M. (2014). Capital structure and financial performance in Kenya: Evidence from firms listed at the Nairobi Securities Exchange. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 209-223.
- Mbugua, E. (2010). An investigation into application of pecking order concept by companies listed at Nairobi Stock Exchange. Unpublished MBA project, University of Nairobi, Kenya.
- Mesut, D. (2013).Does firm size affect the firm profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*, 4(4).
- Modigliani, F., Miller, M. (1958), The cost of capital, corporation finance and the theory of investment, *American Economic Review*, Vol. 48 pp.61-97.
- Modigliani, F., Miller, M. (1963), corporate income taxes and the cost of capital: a correction, *American Economic Review*, Vol. 53 pp.433-43.
- Myers, S.C. (1984). The capital structure puzzle. *Journal of Finance and Economics*, 39, 575-592.
- Myers, S.C., &Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13, 187-221.
- Mwangi, L. W., Makau, S. M., &Kosimbei, G. (2014). *Relationship between Capital Structure and Performance of Non-Financial Companies Listed In the Nairobi Securities Exchange, Kenya*.
- Oguna, A. (2014). Examining the effect of capital structure on financial performance: a study of firms listed under manufacturing, construction and allied sector at the Nairobi Securities Exchange. Unpublished MBA project, University of Nairobi, Kenya.
- Saeedi, A. &Mahmoodi, I. (2011). Capital Structure and Firm Performance: Evidence from Iranian Companies. *International Research Journal of Finance and Economics*, 70, 20-29.

- Sheikh, J., Shakeel, A. W., Iqbal W., &Tahir, M. M. (2012). Pecking at Pecking Order Theory: Evidence from Pakistan's Non-financial Sector. *Journal of Competitiveness*, 4 (4), 86-95
- Siro, R. (2013). Effect of capital structure on financial performance of firms listed at the Nairobi Securities Exchange. Unpublished MBA project, University of Nairobi, Kenya.
- Tarek, G. (2013).The Capital Structure through the Trade-Off Theory: Evidence from Tunisian Firm, *International Journal of Economics and Financial Issues*, 3(3), 625- 636
- Titman, S., &Wessels, R. (1988). The Determinants of Capital Structure Choice. *The Journal of Finance*, 43(1), 1-19.

**APPENDIX 1: LIST OF NAIVAS SUPERMARKETS IN NAIROBI REGION
USED IN ANALYSIS**

- I. NAIVAS WESTLANDS
- II. NAIVAS UMOJA
- III. NAIVAS MOUNTAIN MALL
- IV. NAIVAS RUARAKA
- V. NAIVAS KASARANI
- VI. NAIVAS KOMAROCK
- VII. NAIVAS EASTGATE
- VIII. NAIVAS RONALD NGALA
- IX. NAIVAS GITHURAI
- X. NAIVAS SYOKIMAU

APPENDIX II : DATA COLLECTION SHEET

NAME OF BRANCH

DATA(KSH)	2015	2016	2017	2018	2019	2020
NET PROFIT AFTER TAX						
REVENUE						
TOTAL ASSETS						
LONG TERM DEBT						

APPENDIX III : DATA USED IN ANALYSIS

SIZE: Natural Log of Sales							
S/N	Store name	2015	2016	2017	2018	2019	2020
1	Westlands	20.9995	21.0483	21.0971	21.1458	21.1946	21.2434
2	Umoja	20.3859	20.4347	20.4835	20.5323	20.5811	20.6299
3	Mountain Mall	21.0220	21.0708	21.1196	21.1684	21.2172	21.2660
4	Ruaraka	20.7149	20.7637	20.8125	20.8613	20.9101	20.9589
5	Kasarani	20.7885	20.8373	20.8861	20.9349	20.9836	21.0324
6	Komarock	20.6827	20.7315	20.7803	20.8291	20.8779	20.9267
7	Eastgate	20.6930	20.7417	20.7905	20.8393	20.8881	20.9369
8	Ronald Ngala	20.5606	20.6093	20.6581	20.7069	20.7557	20.8045
9	Githurai	19.4251	19.4739	19.5227	19.5715	19.6203	19.6691
10	Syokimau	20.5972	20.6460	20.6948	20.7436	20.7923	20.8411

Return On Assets = Net profit after tax/Total Assets							
S/N	Store name	2015	2016	2017	2018	2019	2020
1	Westlands	0.3440	0.4547	0.5969	1.1044	1.0530	0.6588
2	Umoja	0.3423	0.4793	0.6169	0.6817	0.7962	0.7090
3	Mountain Mall	0.2795	0.3586	0.3980	0.7336	0.6499	0.3282
4	Ruaraka	1.0917	0.9122	1.6734	1.6990	1.4669	1.1806
5	Kasarani	0.9974	0.6827	0.7536	1.0273	0.9447	0.6234
6	Komarock	0.9743	0.9352	0.9754	1.0148	0.9104	0.6053
7	Eastgate	0.6292	0.3639	0.5706	0.3109	0.8695	0.8769
8	Ronald Ngala	0.4630	0.1680	0.3391	0.7776	0.9409	0.7096
9	Githurai	(0.1389)	(0.0495)	0.0432	0.0293	0.0720	0.0923
10	Syokimau	0.7738	2.1547	2.7830	2.6904	2.8711	2.8149

Long-term debt/Total Assets							
S/N	Store name	2015	2016	2017	2018	2019	2020
1	Westlands	0.4915	0.4547	0.8526	1.5778	1.5043	0.9412
2	Umoja	0.4890	0.4793	0.8813	0.9739	1.1374	1.0129
3	Mountain Mall	0.3992	0.3586	0.5686	1.0480	0.9285	0.4689
4	Ruaraka	1.5596	0.9122	2.3906	2.4271	2.0955	1.6866
5	Kasarani	1.4248	0.6827	1.0765	1.4675	1.3495	0.8906
6	Komarock	1.3918	0.9352	1.3935	1.4497	1.3006	0.8647
7	Eastgate	0.8988	0.3639	0.8152	0.4442	1.2421	1.2527
8	Ronald Ngala	0.6614	0.1680	0.4844	1.1108	1.3442	1.0137
9	Githurai	(0.1984)	(0.0495)	0.0616	0.0418	0.1028	0.1318
10	Syokimau	1.1054	2.1547	3.9757	3.8434	4.1016	4.0213