EFFECT OF DEBT FINANCING ON PERFORMANCE OF NON-FINANCIAL FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE, KENYA

BY

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DECLARATION

I declare that this research project is my original work and has never been presented for any examination.

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(MBA/BE/6005/15) Sign Date

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

Dr. Adoyo P. O. ....
Department of Finance and Economics Sign Date
Maseno University

ACKNOWLEDGEMENT

I thank God the almighty for giving me wisdom and strength to complete the project. Great appreciation also goes to my supervisor for his time and dedication to ensure that I completed the project.

DEDICATION

This project is dedicated to my family members who continuously inspired and supported my efforts throughout this study, may God bless you abundantly.

ABSTRACT

Various firm stakeholders have interest in the financial health of their firms. Efforts to increase financial performance of companies have focused on financial restructuring. The effectiveness of this strategy has however not been empirically proven since the studies have also produced mixed results. Despite aggressive strategies, firms still encounter financial distress as evidenced by liquidity and bankruptcy problems. The purpose of this study was to determine the effect of debt financing on financial performance of non-financial firms listed at the Nairobi securities Exchange. The specific objectives of the study were to establish the effect of debt to equity ratio of non financial firms listed at the Nairobi securities exchange on their return on equity, to establish the effect of interest coverage ratio of non financial firms listed at the Nairobi securities exchange on their return on equity and to establish the controlling effect of firm size of non financial firms listed at the Nairobi securities exchange in the relationship between debt financing and financial performance of non-financial firms listed at the Nairobi securities exchange. This study was based on the stakeholder theory. The study used a correlation research design. The target population were the 64 firms listed at the Nairobi Securities Exchange. The study period was six years from 2011 to 2016. The research used secondary data collected from the Capital Markets Authority and from individual firms' financial reports; data analysis by multiple regression. The findings were as follows: With respect to the effect of debt to equity ratio on return on equity, the regression findings revealed a p-value of (0.000) and a beta value of (0.999), With respect to effect of interest coverage ratio on return on equity the regression results indicates a p-value of (0.620) and a beta value of 0.001 and With respect to the effect of firm size on return on equity, the regression finding revealed a p-value of (0.419) and a beta value of 0.002. The study concluded that there is need for efficient management of debt as a source of capital. The study recommends that firms should use debt as much as possible so that they benefit from positive effect of borrowing, which includes interest deductibility of debt and reduction of agency costs. Special consideration should also be taken to ensure that the assets financed by the borrowed funds bring in a higher return than the interest the firms are paying for the debts. The study is of significance to the stakeholders of the companies such as managers, potential investors, shareholders, debt holders, the government and researchers in the field of finance.

TABLE OF CONTENTS

LIST OF ABREVIATIONS AND ACRONYMS

CMA	Capital Markets Authority
NSE	Nairobi securities Exchange
ROA	Return on Assets
ROE	Return on Equity
DER	Debt to Equity Ratio
DR	debt Ratio
IC	Interest Coverage Ratio
SZ	Firm Size
CG	Corporate Governance
SPSS	Statistical Package for Social Science

DEFINITION OF OPERATING TERMS

DEBT- This is amount of money borrowed by one party from another.

FANANCING - Refers to acquisition and management of capital.

FINANCIAL PERFOMANCE- This is the growth in value and efficiency in management of a firm that is measured in economic terms.

FIRM-This refers to a legal a business entity.

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE: INTRODUCTION

This chapter entails; the background of the study, objective of the study, research question, scope of the study, justification of the study.

1.1 Background of the Study

World over, financial performance of companies is a subject that attracts a lot of attention and interest from financial experts, the general public and management of corporate entities (Maleya & Muturi, 2013). Selecting the most successful firm has always been a difficult task as many firms have a high level of profitability, yet they are struggling with liquidity issues (Maleya & Muturi, 2013). This is because debt financing is one of the main methods that firms use to fund their operating and investment activities (Aydin & Aigniezka, 2015). In Kenya for instance several firms have suffered financial difficulties which can be attributed largely to poor financing decisions for example Uchumi supermarket which was suspended in June 2006 due to financial difficulty.

For a business to be successful, business managers and owners need to ensure that the business is operating efficiently and effectively as possible (CPA Australia, 2011). All relevant key drivers should be identified and regularly evaluated against key performance indicators such as business target and benchmarks. Implementing a continuous improvement programme will ensure that key business resources are being utilised effectively and efficiently at all times (CPA Australia, 2011). Successful businesses are those that have a clear purpose, set goals and establish procedures to meet those goals consistently. Good practice provides that the business should regularly review both strategic and financial planning processes in the business (CPA Australia, 2011).

Financial planning involves sustainable allocation of financial resources to meet strategic goals and objectives. As one of the key drivers of business performance, maximising the use of assets is critical in improving business performance is very important. Both working capital and long term assets managed effectively can contribute to the success of the business. In broader terms, performance refers to the degree to which an achievement is being or has been accomplished or fulfilled. Financial performance refers to the degree to which financial objectives of a firm are

being or have been achieved. It is the process of measuring a firm's policies and operations in monetary terms. It is used to measure a firms overall financial health over a given period of time and can also be used to compare similar firms across the same industry and to compare industries or sectors in aggregation (Makanga, 2015).

The analysis of financial statements is a process of evaluating the relationship between component parts of financial statements and income statements to help understand the firm's financial position and performance (Frank & Alan, 2005). Financial analysis is a three step process. The first task is to select the information relevant to the decision under consideration from the array of information available. Secondly the information is arranged in a way to highlight significant relationship. Finally, the information is interpreted and inferences and conclusions are drawn (ibid). In other words, financial analysis is a process of selection, relation and evaluation. Financial health of a firm can be measured from the perspective of working capital analysis, financial structure analysis, activity analysis and profitability analysis (ibid).Profitability underpins performance and it is the essential driver of the future of every business. It is not just about making money today but also securing the ability to grow the business in the future. Therefore increasing profitability will increase the business' performance (CPA Australia, 2011). Accounting measurement of performance has been the traditional tool of quantitative approaches to firm performance measurement. Much of performance management at the operational level is carried our using specific indicators that are not usually measured in financial terms while at the most senior level, financial performance is inevitable as a major consideration (ibid).

Debt financing involves the use of debt in financing firm projects. Researchers have identified that there are benefits associated with debt financing such as tax deductibility of interest thus make it more preferable than equity as the primary source of finance (William, 2011). Financial distress is a condition when covenants with creditors of a company are broken or honoured with difficulties (Myers, 2002). Firms may encounter financial distress if they incorporate excess or inappropriate debt in their capital structure as evidenced by liquidity and bankruptcy problems. The costs of financial distress include the administrative costs of bankruptcy, moral hazard, monitoring and contracting costs (William, 2011). If financial distress is not

resolved, it can lead to bankruptcy. Financial distress is usually associated with some costs; these are known as costs of financial distress (Myers, 2002). Financial distress can be resolved through financial restructuring. Financial restructuring is the reorganizing of business assets and liabilities (Osoro, 2014). Financial restructuring involves reorganizing debt and equity funds, short and long term financing to achieve; a reduction in finance costs, reduce loss of capital, increase EPS, improve market value of shares and to solve agency problems (Osoro, 2014).

Henri and Peter (2006) considered debt to be only consisting of interest bearing debt whether short term or long term. This was in line with a survey their study conducted asking executives in the global market what variables they cover in their definition of debt. According to William (2011), the matching principle of finance provides that the term of the finance should match the term of the project hence short term projects should be financed with short term finance. Stakeholders are therefore not faced with the problem of the choice between long term and short term debt financing. In a survey by Henri and Peter (2006) on the factors influencing debt level decisions by companies, it was found that the main primary factors were: EBITDA/interest payment ratio at 58 per cent; debt/EBITDA at 58 per cent; debt/book value of equity at 55 per cent and absolute level of debt at 53 per cent. The variables were either leverage ratios of some sort (which represents the levels of debt) or debt coverage ratios (which focus on debt servicing).

Financial performance is an evaluative judgment passed on activities of a firm based on its income statement and balance sheet or using data on securities market prices (Berger & Patti, 2002). Tools used to assess financial performance of an organization are the financial ratios (Ayako, Kungu and Githui, 2015). They help interpret information in a way that can assist making the right decision. Financial performance can be evaluated in terms of; return on asset (ROA), return on equity (ROE), return on net asset (RONA), asset turn over (ATO) (ibid). To harness the true value of financial ratios they are benchmarked against past performance or performance of another organization in the same business area (Pandey, 2004).

Studies that have been carried on the effect of capital structure on financial performance are related to the studies on effect of debt financing on financial

performance in that, all of them considered leverage ratios as the independent variables and they measure performance using ROA and ROE among other indicators of performance. The studies have produced mixed results for example, Makanga (2015) found positive relationship between short term debt and ROA but a significant negative relationship between total debt and ROA. Muchugia (2013) found positive relationship between long term debt and profitability and a negative relationship between short term debt and profitability. Makanga (2015) on the other hand studied effect of debt financing on performance of firms listed at the NSE and found negative relationship between debt ratio and ROA. Financial firms face different regulations and have capital structures that may not necessarily be due to economic and business reasons. The lumping together of financial firms with non financial firms is therefore not appropriate (Koori, 2015). Some studies for example Muchugia (2013) and Makanga (2015) disintegrated debt into short term and long term components. The application of such findings are limited since managers use the matching principle which provides that short term debt should be used for short term projects and long term debt for long term projects. The gap in literature was the relationship between debt to equity ratio and ROA of non financial firms in the NSE.

The effect of debt coverage ratio on performance has been tackled by several studies. Frezewd (2016) studied corporate capital structure and its impact on profitability: evidence from manufacturing firms in Ethiopia. He measured debt using interest coverage ratio and performance using return on capital employed(ROCE) the finding was that interest coverage ratio had a positive but insignificant effect on ROCE. The use of ROCE which excludes short term debt in its calculation in a study that investigate debt financing makes the scope of the study inadequate. Enekwe, Agu, & Eziedo, (2014) in their study, the effect of financial leverage on financial performance: evidence of pharmaceutical companies in Nigeria studied the effect of interest coverage ratio on performance as measured by ROA found that interest coverage ratio had positive relationship with (ROA). The gap in literature was the relationship between interest coverage ratio of non financial firms listed at the NSE and their (ROE).

Maleya and Muturi (2013) and Makanga (2015) identified; company size, company age, growth rate, growth opportunity, tangibility and corporate governance as the

factors influencing financial performance. Such factors are considered to be intervening variables in this study. The study will focus on firms that have been operational for the whole of the period under investigation. That is, the firm must have been listed before 2009 and not delisted at any point during the period. Hence, the variable age of the firm will not be included in the study. Growth rate and growth opportunity are related as growth opportunity will influence growth rate. Firms listed at the Nairobi Securities exchange are assumed to be under a going concern management and therefore growth is inevitable. Growth opportunity and growth rate will therefore not be used in the study.

Tangibility can be described as the asset structure of a firm (Gathogi & Ragui, 2014). According to Makanga (2015), tangibility determines the creditworthiness of the firm since firms that have assets of high value also has a high liquidating value. Therefore, firms that invest heavily in fixed assets of high value are likely to have higher financial leverage since they borrow at lower interest rates if their debts are secured by such assets (Gathogi & Ragui, 2014). Generally, firms listed at the Nairobi securities Exchange have huge capital invested in fixed assets. Tangibility as a variable will therefore not be used in the study as a control variable.

Corporate governance is the system of rules and regulations by which a company is directed and controlled. Corporate governance involves balancing the interest of a company's many stakeholders such as shareholders and management (Gathogi & Ragui, 2014). According to Gathogi and Ragui (2014), the level of corporate governance can be measured in terms of the number of directors a company has. According to Gathecha (2006), corporate governance is a non financial variable affecting financial performance. This is because managers may have different interests from shareholders leading to wrong decisions. In situations where few shareholders control ownership, they may influence over managers decisions leading to poor financial decisions.

Firm size can be measured in terms of its asset base (Gathogi & Ragui, 2014). Empirical evidence show a positive relationship between company size and capital structure. Small firms are likely to use equity finance while large firms prefer debt to stock (Gathogi & Ragui, 2014).Gathecha (2006) postulates that firm size is a major

determinant as to whether a firm is financially distressed or not due to the fact that large firms can access external finance cheaply since they can bargain for better terms of credit. Large firms can also survive during crisis than small firms due to accumulated reserve. There is conflicting findings in literature concerning the effect of firm size on financial performance.

The Nairobi Securities Exchange (NSE) was formed in 1954 as a voluntary association of stock brokers (Nairobi Securities Exchange Limited, 2017). It has since undergone numerous transformations to become one of the most active capital markets in Africa. Firms in the NSE are grouped into 13 sectors namely; agricultural, automobile and accessories, banking, commercial and services, construction and allied, energy and petroleum, insurance, investment, investment services, telecommunication and technology, real estate investment trust and exchange traded funds (Nairobi Securities Exchange Limited, 2013). In compliance with the capital markets act and the regulations and guidelines there under; the Nairobi Securities Exchange has set out rules and regulations for listing of firms to the official list of the exchange, listing of additional shares and continuing listing of firms for the purpose of ensuring orderliness and efficiency (Nairobi Securities Exchange Limited, 2017). Failure to comply with the guidelines may lead to delisting or suspension of firms from the exchange (Nairobi Securities Exchange Limited, 2017). Given the strict regulations at the Nairobi Securities Exchange, the researcher will access reliable data that gives a true picture of the debt and financial performance of the firms. Financial firms will be excluded from this study because they are controlled by different regulations and have capital requirements that may not be affected by economic or business factors (Koori, 2015). Financial firms in the NSE include those in the banking and insurance sectors.

1.2 Statement of the Problem

Firm financial performance as described by profits, return on assets and return on equity among other measure is a concern for all stakeholders. Financial managers have a responsibility of ensuring financial health and profitability. To achieve this, financial managers need to be empowered with information regarding appropriate financial decisions depending on various circumstances. One of the ways proposed by researchers for increasing financial performance is debt financing which is associated

with benefits such as tax deductibility of interest and reducing agency costs. Debt financing is however associated with financial distress. Financial distress is a condition in which the covenants with creditors of a company are broken or honoured with difficulties. Firms may encounter financial distress if they incorporate excess or inappropriate debt in their capital structure as evidenced by liquidity and bankruptcy problems. Besides the financial distress, debt financial also comes with a cost in terms of interest which firms have to pay for using the debt. Availability of debt is also limited for some firms due to collateral requirements hence may resort to equity issues. Considering the wide array of measures of debt and financial performance available, it is important that the most appropriate measures are chosen. It is also important that since the different industries have unique characteristics that may influence their financing decision, studies targeting specific industries are needed. Considering gaps in literature, specific measures of debt will be regressed against specific measures of performance for carefully chosen group of firms. Such studies that have been carried out in Kenya have considered leverage ratios as independent variables but have not considered liquidity ratios such as debt coverage ratios which have been proven to indicate debt levels.

1.3 Objectives

The general objective of study was to examine the effect of debt financing on financial performance of firms listed at the Nairobi securities Exchange. The specific objectives will be:

1. To determine the effect of debt to equity ratio of the non-financial firms listed at the Nairobi Securities Exchange on their ROE.
2. To determine the effect interest coverage ratio of the non-financial firms listed at the Nairobi Securities Exchange on their ROE.
3. To determine the controlling effect of firm size of non-financial firms listed at the Nairobi securities exchange in the relationship between their debts financing and financial performance.

1.4 Research Hypotheses

With respect to the research objectives stated above, the research hypotheses were as follows:

$H_0$1 Debt to equity ratio of non-financial firms listed at the Nairobi Securities Exchange does not significantly affect their ROE.

$H_0$2 Interest coverage ratio of the non-financial firms listed at the Nairobi Securities Exchange does not significantly affect their ROE.

$H_0$3 Firm size of non-financial firms listed at the Nairobi securities exchange is not a significant control variable in the relationship between their debt financing and financial performance.

1.5 Scope of the Study

The study investigated the influence of debt financing on financial performance of firms listed at the Nairobi securities Exchange. The general objective was to establish the effect of debt financing on financial performance of companies listed at the Nairobi Securities Exchange. The purpose of the study was to describe debt financing and the financial performance of the firms listed at the Nairobi securities Exchange. Data was collected from the financial statements and income statements of the firms listed for the six year period from 2010 to 2016.

1.6 Justification of the Study

The results of this study is of great value to the various stakeholders of the companies among them including; the managers for financing decisions; the shareholders and potential investors who should know the implications of debt financing on their investments; Debt holders should also know risks of their investments and the government will know the role that debt financing play in the economy. This study may also form basis for further research in the field of finance.

1.7 Conceptual Framework

The framework below shows the relationship that exists between independent variables; debt to equity ratio and interest coverage ratio and dependent variable financial performance as measured by return on equity (ROE). The intervening variables is the company size and. The study narrowed on effect of debt to equity ratio and interest coverage ratio on return on equity and the intervening effect of company size on the relationship between debt financing and financial performance.

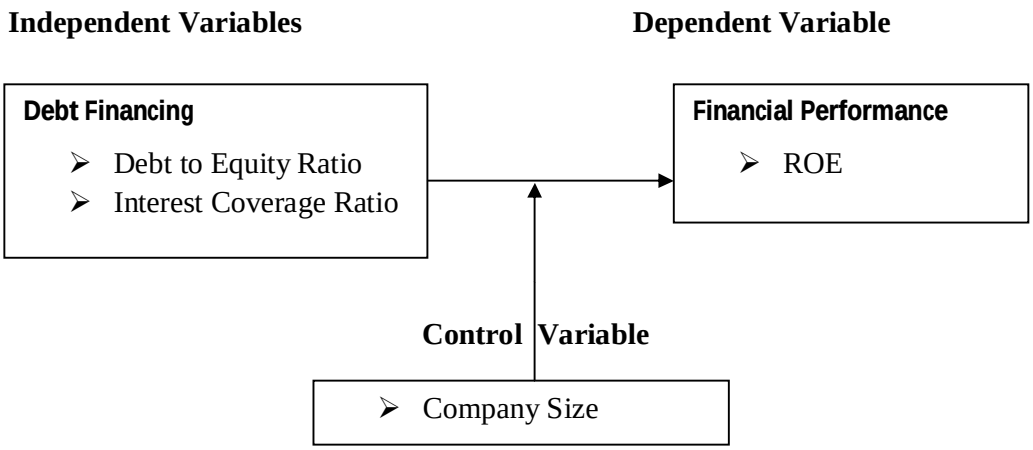

Fig 1.1: Conceptual Framework: Relationship between debt financing and financial performance and the mediating role of company size

Source: Adapted from Wamugo, Makau & Kosimbei (2014)

CHAPTER TWO: LITERATURE REVIEW

This chapter covers theory and conceptual issues and empirical studies that have been carried out in the area of debt financing, financial performance and their relationship.

2.1 Theoretical Literature

Modigliani and Miller (1958) provided a platform on which scholars could engage the discourse of value creation and capital structure. One of the ways in which a firm's value can be measured is its profitability and a firm's profitability can be in terms of financial performance (Ayako et. al., 2015). Some of the theories that have been put forward to explain value creation and debt financing in firms include.

2.1.1The Stakeholder Theory

Stakeholder theory was first articulated by Ian (1983) in his book stakeholders of the organizational mind. It is now common knowledge that firms have stakeholders and should proactively pay attention to them. The stakeholder theory provides a vehicle for connecting ethics and strategy and that when firms diligently seek the interest of all stakeholders will create more value over time.

From stakeholder theory perspective, financial performance measurements are important to all stakeholders but they are incomplete and over simplify the role of and utility received by various stakeholders in the firm (Barney, 2011). According to Kaplan and Norton (1992) what is traceable is what gets the management's attention, financial performance measures are therefore important especially when they are measured for short term and long term hence assisting managers to decide on how to increase value for stakeholders. Apart from focusing primarily on economic measures of performance, a stakeholders-based performance measures challenges managers to examine more broadly the value their firms are creating from the perspective of the shareholders who are involved in creating it. Thus it gives managers the information they need to engage stakeholders and enhance managerial ability to use such insights to create more value. At its core, this perspective is about creating a higher level of well-being for the stakeholders involved in a system of value creation led by the firm.

In pursuing stakeholder interest, it is important to define what entails value for each stakeholder and how much value should each stakeholder claim from the firm. In

literature, the concept of value is assumed to be economic value. Stakeholder-based perspective of value is important from a managerial perspective because managers tend to focus attention on things that lead to higher performance based on what actually gets measured Kaplan and Norton (1992). Rather than focusing primarily on economic measures of performance, a stakeholders-based performance measures challenges managers to examine more broadly the value their firms are creating from the perspective of the shareholders who are involved in creating it. Thus it gives managers the information they need to engage stakeholders where they are and enhance managerial ability to use such insights to create more value. At its core, this perspective is about creating a higher level of well-being for the stakeholders involved in a system of value creation led by the firm.

The balanced scorecard technique of measuring performance by Kaplan and Norton (1992) identified four perspectives of measuring performance; finance, customer satisfaction, innovation and learning and internal efficiency. However they identified financial return as the main dependent variable. Triple bottom line technique by Elkington (1998) on the other hand is based on the idea that firms should from the perspective of economic, environmental and social value added. According to the scholars of balanced scorecard and triple bottom line, firms have to think about not just economic value but the way it creates value in social, environmental and social terms.

Most empirical studies based on stakeholder theory have used a measure of stakeholder's performance as the independent variable, with some measure of economic performance as the independent variable (Choi and Wang, 2009 and Hillman and Keim, 2001). If a broad-based measure of stakeholder performance instead becomes the independent variable, with an organization or phenomenon such as debt structure as the independent variable, then there is much greater potential to understand how that phenomenon is influencing the overall value the firm creates. The decisions made may however not be effective in achieving the objectives of the firm. This in turn, not only diminishes the value of the insights but also raises questions about the ability of the firm to sustain its economic performance over time; especially if its efforts to focus on financial returns are not bearing fruits. Debt financing decisions may be management decisions or reactions to certain satiations in

the firm bringing in the possibility of control variables in the relationship between debt financing decisions and financial performance.

According to Mule, Mukras, Mutunga, and Halima (2015), stakeholder theory provides that various firm stakeholders have competing interests among equity holders, debt holders and other. To safeguard the interests of the various stakeholders, the level of corporate governance should be enhanced. Abuse of powers by management may lead to lose of stakeholders' value in the business. Through excessive power managers may pay themselves excessive remuneration which overburdens firm revenues and may not be commensurate to efforts input by the managers hence returns are affected. In the NSE however, such variability is taken care of by the stringent regulation hence corporate governance was not included as a control variable.

2.1.2 The Pecking Order Theory

The pecking order theory of financing started by Myers and Majluf (1984) is a theory that that tries to explain the nature of capital structure and by extension debt structure of firms. This theory is based on the idea that firm managers or insiders are assumed to possess private information about the characteristics of the firm's cash inflow streams or investment opportunities which they may not want to expose to outsiders. According to Myers and Majluf (1984), the use of debt in the capital structure of a firm is designed in such a way as to mitigate inefficiencies in the firm's investment decisions that are caused by information asymmetry Majluf (1984).

The pecking order theory is based on the empirical fact that firms show a distinct preference for using internal finance such as retained earnings or excess liquid assets over external finance. If internal funds are not enough to finance investment opportunities, firms may or may not acquire external financing, and if they do, they will choose among the different external finance sources in such a way as to minimize additional costs of asymmetric information (Harris &Raviv, 1991). According to Myers and Majluf model (1984) if investors are less informed than the current firm insiders about the value of the firm's assets, then equity may be mispriced by the market. If firms are to finance new projects by issuing equity, under pricing may be so severe that new investors acquire more than the NPV of the new project, resulting in a

net loss to the existing shareholders, in this case, the project will be rejected even if the NPV is positive. This under investment can be avoided by financing the project using a security that is not severely undervalued by the market. Therefore, internal funds or riskless debts are preferred to equity by firms in this situation. In the absence of investment opportunities, firms retain profits and build up financial slack to avoid having to raise external finance in the future (Harris &Raviv, 1991).

According Gaud et al. (2005) and Mazur (2007) cost also play an important role in a firms capital structure decisions. Transaction costs associated with external financing are higher than the costs of obtaining internal financing. Internal funds do not bear any transaction cost. These studies are consistent with pecking order theory. According to Shyam and Myers (1999) and Ramalho and Silver (2009), firms with high growth opportunity tends to undertake major investment projects, which generate greater need for finance. In accordance with the pecking order theory, when internal finance is exhausted, firms prefer debt than external equity for funding growth opportunities. Therefore pecking order theory postulates a positive relationship between growth opportunities and debt (Serrasqueiro& Caetano, 2013). Considering the fact that a higher level of tangible assets increases possibility of offering collateral therefore lessening the problem of information asymmetry between managers owners and creditors hence lower risk (Sogorb-Mira, 2005), a positive relationship is expected between asset tangibility and debt in the pecking order model (Serrasqueiro& Caetano, 2013). Considering the uniqueness of the Nairobi securities in that the firms listed borrow from the same market hence uniformity of cost; the variable, transactional cost will not be controlled for. Firms listed at the NSE generally have growth prospects hence growth rate as a factor will not be controlled for. Similarly, firms in the NSE generally have large investments in fixed assets hence tangibility will not be controlled for.

Pecking order theory can also be used to explain the relationship between company size debt levels in a company. Larger size allows a firm to accumulate retained earnings and therefore less debt is needed. The theory therefore postulates a negative relationship between size and debt (López-Gracia & Sogorb-Mira, 2008). According to Myers (1984), firm size reduces the problem of information asymmetry between the managers, owners and creditors, allowing firms to obtain debt on more favourable

terms. A positive relationship between size and debt may also be expected in the pecking order theory approach. Therefore according to the pecking order theory, there is a close relationship between company size and debt level. It is therefore important that company size be included as control variable. According to Murray and Vidhan (2005), the advantage of the pecking order theory is its linearity with the firm's objective and simplicity. The weakness of this theory is its failure to show the reaction of debtors and shareholders to the information quality of financing and investing behaviour of the managers (Harris & Raviv, 1991).

2.1.3 The Trade-off theory

Modigliani and miller (1958) proposed that under an hypothetical business environment where: there are no taxes; there is a perfect market without market restrictions (zero transaction cost, no asset trade restrictions and no bankruptcy cost); there is a symmetrical access to credit markets (firms and investors can borrow at the same interest rate and firm financial policy reveal no information) and each firm belong to a risk class set with common earnings. In such a situation, the firm's debt equity ratio does not affect its market value. However when corporate tax is introduced, capital structure is indeed relevant in determining the value of the firm since debt comes with the tax deductibility of interest benefits. The interests paid on the debt are deducted from the gross profit as expenses so as to get the taxable income on which to apply the corporate tax. Based on this assertion, firms would borrow up to 100 per cent so as to reduce taxes to zero if possible. The 100 per cent debt financing has however not been observed in practice hence a question is raised as to whether there are costs related to debt financing that reduces the benefits gained from the tax deductibility benefits of debt.

Later, Modigliani and Miller (1963) introduced debt costs against the tax shield. The actual level of debt would therefore be determined by trade-off between tax advantage of debt and the costs of debt. Economists identify bankruptcy costs, personal tax, agency costs, asymmetric information and corporate control considerations as possible trade-off options against tax shield. This is the essence of the trade-off theory. According to this, 100 per cent debt financing is not feasible due to trade-off costs (Mykhailo, 2013).

The weakness of the trade off theory is the fact that it does not explain the empirical facts that: first, most profitable firms in an industry use least debt; second stock markets react to increased leverage strongly positive and negatively to increasing leverage and third firms issue debt frequently but rarely issue equity (James, 2007). These weaknesses lead to the development of the pecking order theory (Myers, 1984).

2.2 Review of Empirical Studies

Researchers have carried out Studies on the effect of capital structure on profitability or financial performance. Generally the studies have used measures of financial performance as dependent variables. The choice of independent variables has been varied. Some scholars have settled on leverage ratios such as debt ratio and debt to equity ratio while some have included liquidity ratios such as interest coverage ratio and repayment period. Depending on the context of the studies, researchers have also controlled for different variables such as firm size; corporate governance; asset tangibility and growth rate. Most studies on financial performance have used quantitative design. However, they have adopted different regression analysis including multiple regression analysis, fixed effect regression model and random effect regression models. For example; Mykhailo (2013) in his study of the impact of capital structure on firm performance: evidence from Ukraine, tested the relationship using regression analysis. For most of the industries, leverage appears to have negative significant impact on firm performance. However the negative effect was insignificant for transport and energy sectors but for both industries, the only difference was in the manufacturing which recorded positive significant effect of the capital structure. Enekwe, Agu and Eziedo (2014) studied effect of debt ratio and debt equity ratio on ROA for three selected firms for 12 years (2006-2012) using Pearson correlation and regression. They found negative but insignificant effect in both cases.

Studies relating to relationship between leverage ratios and financial performance that have been carried out include: Mule and Mukras (2015) studied effect of debt ratio on ROA for firms listed at a frontier market in Kenya. They found a negative and significant effect of debt ratio on ROA. Makanga (2015) in his study effect of debt financing on financial performance of companies listed at the Nairobi Securities Exchange found negative relationships between; short term debt and ROA and long term debt and ROA but a significant negative relationship between total debt and

ROA. Ayako, Kungu and Githui (2015) in their study the effect of leverage on ROE of firms listed at the Nairobi stock exchange used the fixed effect model. They found that the leverage of a firm had a negative relationship with performance and was statistically significant. Oginda (2013) in his study of effect of debt ratio on performance (ROE) of firms listed at the Nairobi securities exchange using multiple regression analysis revealed that there was an inverse relationship between debt ratio and ROE. Bishar (2016) studied effect of debt ratio on ROA of non financial firms listed at the NSE for 5 years (2011-2015) and analysed the data using multiple linier regression. He found a negative and significant relationship. Makau, Wamugo and Kosimbei (2016) on the other hand studied the effect of both debt ratio and debt to equity ratio on ROA of non financial firms listed at the NSE for six years (2006-2012) using feasible generalised least square (FGLS) regression analysis. Both measures of debt had negative effect on ROA.

The studies relating to the relationship between liquidity ratios and financial performance include; Frezewd (2016) studied effect of corporate capital structure on profitability of manufacturing firms in Ethiopia. He identified interest coverage ratio as one of the independent variables. He found a positive but insignificant effect if interest coverage ratio on ROCE. Enekwe, Age and Eziedo (2014) studied effect of interest coverage on return on assets (ROA) of quoted pharmaceutical companies in Nigeria for a period of 12 years (2001-2012). The data was analysed using Pearson correlation and regression. They found that interest coverage ratio had positive relationship with (ROA) this was consistent with the findings of Enekwe (2015) in his study the relationship between financial ratio analysis and corporate profitability of selected quoted oil and gas companies in Nigeria for a period of five years (2008-2012). There is clearly a consensus in findings on interest coverage ratio for the three studies at least in terms of the direction of the effect. From the empirical studies effect of interest coverage ratio on ROA of non financial firms listed at the NSE was identified as a gap.

There are several control variables that have been identified by scholar (Maleya & Muturi, 2013) and (Makanga, 2015). However, given the unique nature of firms listed at the NSE, only firm size was considered for the study. Sana, Heman and Sara (2015) studied the controlling effect of firm size on ROE of textile files in Pakistan; the

findings firm size has no effect. Suleiman (2013) controlled for firm size in studying capital structure effect on firm performance for firms listed in Saudi the finding was a positive and significant effect while Madubuko (2016) found a negative but insignificant effect of firm size on ROA of quoted conglomerates in Nigeria. Muchugia (2013) studied the effect of control variables size and sales growth rate on ROA of firms listed at the NSE using multiple regression analysis, the finding was that the variables are negatively related to ROA this was consistent with the findings of Sana, Heman and Sara (2015). Ayako, Kungu and Githui (2015) on the other hand studied determinants of performance of firms listed at the Nairobi stock exchange they found that Firm size has significant effect on performance the finding was similar to Mule et al., (2015) and Madubuko (2016). Corporate governance was on the other hand found to have positive and significant effect on performance. Makanga (2015) and Mule and Mukras (2015) found no effect of firm size on ROA of companies listed at the Nairobi securities exchange.

The studies span more than one period indicating the use of panel data in the studies. Generally the empirical studies have found that debt ratio and debt to equity ratios effects on financial performance. Most studies have focused on the cash inflow side of debt as measured by debt ratio hence may not be effective in serving the information needs of stakeholder. Debt as a source of capital should be evaluated based on its direct cash inflow and outflow. Interest coverage ratio as an indicator of cash outflow due to debt financing should be explored in more areas and with more methodologies to corroborate the few studies in this that area. It is clear that the firm size determines financial performance. The basis of the choice of the control variables by the various scholars has however not been adequately demonstrated in these studies.

CHAPTER THREE: METHODOLOGY

The purpose of this chapter is to present the underlying research methodology, the choice of the appropriate research method and model specifications for the study.

3.1. Research Design

There are three alternative strategies of inquiry: qualitative, quantitative and mixed approaches. Creswell (2009) explains that the approaches differ in terms of their typical philosophical assumptions as well as techniques used in data collection, analysis and interpretation. In this study Quantitative methods approach was applied to meet the overall objective of the study and therefore confirm or reject the null hypotheses. The study used a correlation research design. Correlation research design involves determining if relationship exists between two or more quantifiable variables and estimating the degree of relationship between such variables (Mugenda, 2003). The study was focused on the effect of debt financing on financial performance of non-financial firms listed at the Nairobi securities exchange through multiple regression analysis. The strength and direction of the relations was determined using correlation co-efficient. Hypothesises were tested by t-test for validity and test of significance test for reliability.

3.2 Study Area

The study focused on firms that were listed at the Nairobi Securities Exchange and for that case, they are affected by political and economic factors in the country during.

3.3 Target Population

The target population was the firms listed at the Nairobi Securities Exchange. There were a total of 64 firms listed at the Nairobi Securities Exchange as at April 2017.

3.4 Sample and Sampling Techniques

The study sampled all the 64 non financial firms that are listed Nairobi securities Exchange that have data for the entire period of study that is from 2011 to 2016.

3.5 Data Collection

This outlines the choice of tools and techniques for collecting, recording and analyzing data that were used in the study.

3.5.1 Data Type and Sources

In order to reach out its very objective, the study used panel data which involves combining cross-sectional and time series data. According to Brooks (2008), by combining cross-sectional and time series data, a number of benefits may accrue: giving a more informative data that have more variability and less co-linearity among variables, more degree of freedom and more efficiency because of its combination of cross-sectional and time series observations and by structuring the model in an appropriate way, it can remove the impact of certain forms of omitted variables bias in regression results that would exist if individual units were regressed.

The study used secondary data. Income statements and financial statements of the companies were downloaded from the capital markets authority website and the individual companies' websites. The Nairobi Securities Exchange handbook also provided a source of data.

3.5.2 Data Collection Procedure

The study adopted a census approach because of the small number of companies in the NSE. According to Saunders, Lewis &Thornhill (2009), a census approach enhances validity of the collected data by including certain information-rich cases for study. Income statements and financial statements of the firms were reviewed to find earnings before interest and tax (EBIT), total assets (TA), total debt (TD), total equity funds (EQ) interest expense (I). The information was used to populate the data collection sheet for each of the firms by calculating the variables: return on equity (ROE), debt to equity ratio (DER), interest coverage ratios (IC) and firm size (SZ) as measured by the natural log of total assets.

3.5.3 Instrument for Data Collection

The data was recorded in the data collection sheet for further analysis. The debt structure was measured using Debt to equity Ratio and interest coverage ratio. The variables are based on models developed on previous studies by researchers such as Oginda (2013), Makanga, (2015) and Kipkorir (2013) with few modifications on variables. The paper established how the level of indebtedness as measured by debt to equity ratio and interest coverage ratio affects financial performance of firms listed at

the NSE as measured by return on equity(ROE). The model also included a firm level explanatory control variable to enhance the validity of the model. The variable is Size (SZ).

3.6. Data Analysis

The data collected was edited and cleaned for accuracy. The data was then analysed through statistical tools which included multiple regression analysis and hypothesis testing by t-test for validity and test of significance test for reliability.

3.6.1 Regression Model

The study adopted the following regression models adapted from Wamugo, Makau and Kosimbei (2014).

$$\mathbf{ROE_{it}} = \beta_0 + \beta_1 \mathbf{DER}it + \beta_2 \mathbf{IC_{it}} + \beta_3 \mathbf{SZ}_{it} + \boldsymbol{\varepsilon}_i$$

Where:

$\mathbf{ROE}_t$ is EBIT divided by total assets for firm i in time t (dependent variable).

$\mathbf{DER}_{it}$ is total debt divided by total shareholders' equity for firm i in time t (independent variable).

$\mathbf{IC}_{it}$ is the interest coverage ratio for firm *i* in time *t*(independent variable).

$\mathbf{SZ}_{it}$ is the firm size represented by the natural log of the firm's total assets in firm i and time t (intervening variable).

$\mathbf{CG}_{it}$ is the natural log of the number of directors in firm i and time t (intervening variable).

$\boldsymbol{\varepsilon}_i$ is the error term.

$\beta_{0...3}$ are the coefficients of the various independent and intervening variables.

CHAPTER FOUR: RESSULTS AND FINDINGS

This chapter presents the analysis of the research findings from the collected data in terms of the response rate, descriptive statistics, correlation analysis, regression analysis and the interpretation of the research findings.

4.1 Data analysis and Presentation of Findings

4.1.1 Response Rate

The study targeted the 64 firms listed at the Nairobi Securities Exchange as at April 2017. Of the 64 firms, 52 were non financial firms. Complete data was obtained from 34 non financial firms which had been listed during the six years from 2011 to 2016 representing 65 percent response rate which was deemed sufficient.

4.1.2 Descriptive Statistics

Table 4.1 Descriptive Statistics

	Mean	Std. Deviation	N
Return on Equity	7.54204	89.164529	204
Debt to Equity Ratio	33.36810	383.097149	204
Interest coverage ratio	96.71882	451.149835	204
Firm Size (natural log of total assets)	9.90352	.770472	204

Source: Research findings

Table 4.1 illustrates the results of the descriptive statistics. According to the results, the mean ROE ratio for the non-financial firms was 7.54204. The results also indicate the mean of debt to equity ratio was 33.36810 while interest coverage ratio had a mean of 96.71882 and the mean size value in terms of the natural log was 9.90352.

4.1.3 Correlation Analysis

A partial correlation was run to determine the relationship between Return on assets and independent variables; debt to equity ratio and interest coverage ratio while controlling for firm size and corporate governance. The results for correlation analysis are shown in table 4.2 bellow.

Table 4.2 Correlation Table

Control Variables			Return on Equity	Debt to Equity Ratio	Interest coverage ratio
Firm Size (natural log of total assets)	Return on Equity	Correlation	1.000	1.000	-.012
		Significance (2-tailed)	.	.000	.889
		Df	0	139	139
	Debt to Equity Ratio	Correlation	1.000	1.000	-.013
		Significance (2-tailed)	.000	.	.876
		Df	139	0	139
	Interest coverage ratio	Correlation	-.012	-.013	1.000
		Significance (2-tailed)	.889	.876	.
		Df	139	139	0

The correlation results as shown in table 4.2 above indicates that (DER) has a significant positive relationship with financial performance as indicated by the beta vale of (1.000) two tailed significance value of (0.000>0.005). The results also indicate that liquidity as measured by (ICR) has a small and insignificant negative relationship with financial performance as indicated by the beta value of -0.012 and two tailed significance value of (0.889>0.005) respectively.

4.1.4 Regression Analysis

4.1.4.1 Model Summary

Table 4.3Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999[a]	.999	.999	3.262565

a. Predictors: (Constant), Firm Size (natural log of total assets), Interest coverage ratio, Debt to Equity Ratio

Source: Research findings

The model summary has an R squared value of 0.999. This means that the model predicts 99.9 % of the dependent variable. This is a very high percentage.

4.1.5 Analysis of Variance

Table 4.4Analysis of Variance

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1611784.709	3	537261.570	50473.955	.000[a]
	Residual	2128.867	200	10.644		
	Total	1613913.576	203			

a. Predictors: (Constant), Firm Size (natural log of total assets), Interest coverage ratio, Debt to Equity Ratio

b. Dependent Variable: Return on Equity

The one way ANOVA has a p-value of 0.000 indicating that the model has a combined strong effect on the dependent variable.

4.1.6 Regression Coefficients

The correlation results are shown in table 4.5 bellow.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-2.632	2.960		-.889	.375
	Debt to Equity Ratio	.233	.001	.999	388.105	.000
	Interest coverage ratio	.000	.001	.001	.497	.620
	Firm Size (natural log of total assets)	.241	.298	.002	.810	.419

a. Dependent Variable: Return on Equity

Source: Research Findings

From the results in appendix in table 4.5 above, the following regression formula has been generated.

$$ROE=-2.632+0.999\ DER+0.001IC\ +0.002SIZE+\varepsilon$$

Table 4.5 indicates that debt to equity ratio has a positive significant effect on ROE of non-financial firms listed at the Nairobi securities exchange as indicated by the beta value of (0.316) and a significance value of (0.000<0.05), while interest coverage has a weak, negative and insignificant effect on ROE of non financial firms listed at the Nairobi securities as indicated by a beta value of 0.001 and a p-value of (0.620>0.05). For the control variable firm size the effect on (ROE) is positive but insignificant as indicated by the beta value of (0.002) and a p-value of (0.419>0.05).

Objective one sought to determine the effect of debt to equity ratio of the non-financial firms listed at the Nairobi Securities Exchange on their ROE. The regression findings revealed a p-value of (0.000<0.05) and a beta value of (0.999). This means that debt to equity ratio has a positive significant effect on ROE of non financial firms listed at the NSE. The objective one was therefore not accepted. This finding was consistent with the findings of Oginda (2013) who found a positive effect of debt ratio on ROE. This is however in contrary to Makanga (2015) who found negative

relationship between debt ratio and (ROA) and Enekwe, Agu and Eziedo also found a negative effect of debt to equity ratio on (ROA).

The second objective sought to determine the effect interest coverage ratio of the non-financial firms listed at the Nairobi Securities Exchange on their ROE. The regression results indicates a p-value of (0.620>0.05) and a beta value of 0.001. This means that interest coverage ratios of non financial firms listed at the Nairobi securities exchange does significantly their ROE. Hypothesis two was therefore accepted. The hypothesis two was therefore accepted. This is does not concurs with the findings of Enekwe, Agu and Eziedo (2014) who found a positive effect of (ICR) on financial performances as measured by (ROA). Frezewd (2016) also found a positive and significant effect of (ICR) on financial performance as measured by (ROCE).

The third objective sought to determine the controlling effect of firm size of non-financial firms listed at the Nairobi securities exchange in the relationship between their debts financing and financial performance. The regression finding revealed a p-value of (0.419>0.05) and a beta value of 0.002. This means that firm size does not significantly affect (ROE) hence does not have a controlling effect on the relationship between debt financing and financial performance. Hypothesis three was therefore accepted. Hypothesis three was therefore accepted. This finding is in concurrence with the findings of Sana, Heman and Sara (2015) found that firm size has no effect on ROE.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter illustrates a summary of the research findings, conclusions, recommendations, limitations and suggestion for further research.

5.1 Summary

This study sought to answer the question whether debt financing affects financial performance of non-financial firms listed at the Nairobi Securities Exchange. The study focused on debt financing as the independent variable and incorporated firm size as the control variable while financial performance measured using ROA was the dependent variable. The study targeted 57 non-financial firms listed at the NSE and excluded financial institutions like commercial banks and insurance firms. Out of the targeted 57 firms the study was able to obtain complete data from only 32 firms thus a response rate of 43%.

The finding revealed that average ROE ratio for the non-financial firms was 7.54204 and that the mean debt to equity ratio was 33.36810, while the average interest coverage ratio was 96.71882. The findings also revealed that the average firm size value in terms of the natural log was 9.90352. Additionally, the findings found that financial leverage (DER) had a significant positive correlation with financial performance (ROE) of non-financial firms listed at the Nairobi securities exchange while liquidity (ICR) had a non significant negative correlation with financial performance (ROE) of non financial firms listed at the NSE. Firm size as a control variable had a negative and insignificant correlation with financial performance of non-financial firms listed at the Nairobi securities exchange.

The findings revealed that the R- square value was 0.999; hence, an indication that the study variables explained 99.9% of the variation in the dependent variable (ROE) while 0.1% is explained by other factors outside the model and the error term. The ANOVA results found a significant relationship between the study variables. Additionally, the study found that financial debt to equity ratio had a significant positive effect on financial performance while interest coverage ratio had significant negative effect on financial performance. Firm size had in insignificant positive effect on financial performance of non financial firms listed at the NSE.

5.2 Conclusions

Objective one sought to determine the effect of debt to equity ratio of the non-financial firms listed at the Nairobi Securities Exchange on their ROE. The regression findings revealed increase in debt to equity ratio significantly increases the firms' (ROE). This conclusion is supported by Modigliani and miller (1963). According to them, there exists a trade-off between the costs and benefits of debt financing. According to the findings, the benefits seem to be more than the costs.

The second objective sought to determine the effect interest coverage ratio of the non-financial firms listed at the Nairobi Securities Exchange on their ROE. The regression results indicated that interest coverage ratio of non financial firms listed at the NSE does not significantly effects their (ROE). In line with the stakeholder theory, interest coverage ratio is not relevant in increasing value for stakeholders.

The third objective sought to determine the controlling effect of firm size of non-financial firms listed at the Nairobi securities exchange in the relationship between their debts financing and financial performance. The regression finding revealed that firm size does not significantly affect (ROE) hence does not have a controlling effect on the relationship between debt financing and financial performance.

5.3 Recommendations

It was considered to be very important when finance directors and managing directors trying to fund the firm's assets to understand the impact of debt financing on their financial performance as well the cost of funds. It was evident from the study and analysis arising thereof. This study established that debt to equity ratio and interest coverage analyses are very important tools for boosting firm's financial performance and consequently profitability. In addition, the capital market analyst as well investment analyst should advise the investors and firms on the optimal debt to equity ratio and interest coverage ratio based on debt structure analysis. Based on the results of the study the following recommendations were made;

The conclusion that debt to equity ratio improves a firm's financial performance leads to the recommendation that firms should use debt as much as possible so that they benefit from positive effect of borrowing, which includes interest deductibility of debt

and reducing agency costs. The use of debt in the capital structure of the firm should be optimal so as to ensure adequate utilization of the firm's assets.

When a firm decides to finance its operations through debt so as to enhance value for the stakeholders, special consideration must be taken to ensure that the assets financed by the borrowed funds bring in a higher return than the interest the firm is required to pay on the debt. If this is not done, the firm will erode the reserves in order to pay the debt as the assets financed will not be making enough returns to cover the debt. The firm must select source of funding carefully to avoid falling into the leverage risk trap.

5.4 Limitations of the Study

The researcher encountered quite a number of challenges related to the research and most particularly during the process of data collection. Due to inadequate resources, the researcher conducted this research under constraints of finances. Time allocated for the study was insufficient while holding a full time job and studying part time. This was encountered during the collection of material as well as the data to see the study success. However the researcher tried to conduct the study within the time frame as specified.

5.5 Suggestions for Further Studies

Arising from this study, the following directions for future research in Finance were recommended as follows: First, this study focused on all the 61 listed companies in the Nairobi Securities Exchange. Therefore, generalizations could not adequately be extended to every listed company as they have varying industry risk and asset structure. Based on this fact among others, it is therefore recommended that a narrow based study covering a specific segment or company be done to find out the Impact of debt financing.

Similar studies to this can also be replicated in a few years to come to asses if the Impact of debt financing on Performance of the firms listed at the Nairobi Securities Exchange has changed as the Nairobi Securities Exchange continues to change. Also the effect of debt financing on corporate strategy is also another area of interest which can be under the area of further research and a more intense study along that area can come in handy.

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APPENDICES

Appendix I: Firms Listed at the Nairobi Securities Exchange

Agricultural Sector

1. Eaagads Limited
2. Kakuzi Limited
3. Kapchorua Tea Company Limited
4. Limuru Tea Company Limited
5. Sasini Tea And Coffee Limited
6. Williamson Tea Kenya Limited

Automobiles and Accessories

7. Car And General (Kenya) Limited
8. Marshalls (EA) Limited
9. Sameer Africa Limited

Banking

10. Barclays Bank of Kenya Limited
11. CFC Stanbic Bank
12. Co-operative Bank of Kenya
13. Diamond Trust Bank (Kenya) Limited
14. Equity Group Holdings Limited
15. Housing Finance Company Limited
16. I&M Holdings Limited
17. Kenya Commercial Bank Limited
18. National Bank of Kenya Limited
20. NIC Bank Limited
21. Standard Chartered Bank Kenya Limited

Commercial and Services

22. Express Kenya Limited
23. Hutching Beamer Limited
24. Kenya Airways Limited
25. Longhorn Kenya Limited

26. Nation Media Group Limited
27. Scangroup Limited
28. Standard Group Limited
29. TPS Serena
30. Uchumi Supermarket Limited

Construction and Allied Sector

31. ARM Cement Limited
32. Bamburi Cement Company Limited
33. Crown-Berger (Kenya)
34. East African Cables Limited
35. East African Portland Cement Company

Energy and Petroleum

36. Kengen
37. KenolKobil Limited
38. The Kenya Power & Lighting Co. Limited
39. Total Kenya Limited
40. Umeme Limited

Insurance

41. British-American Investment Company
42. CIC Insurance group
43. Liberty Kenya Holdings Limited (formerly CFC insurance)
44. Jubilee Holdings Limited
45. Kenya Reinsurance Corporation Limited
46. Sanlam Kenya Plc (formally Pan Africa Insurance holdings)

Investment

47. Centum Investment Company
48. Olympia Capital Holdings Limited
49. Transcentury Limited
50. Home Africa (Real Estate)
51. Kurwitu Ventures (Sharia investments)

Investment Services

52. Nairobi securities Exchange

Manufacturing and Allied

53. BOC Kenya Limited
54. British American Tobacco Kenya Limited
55. Carbacid Investments Limited
56. East African Breweries Limited
57. Eveready East Africa Limited
58. Mumias Sugar Company Limited
59. Unga Group Limited
60. A Baumann and company
61. Flame Tree Group Holdings Ltd (consumer goods)

Telecommunication and Technology

62. Safaricom

Real Estate Investment Trust

63 Stanlib Fahari I-REIT

Exchange Traded Fund

64. New Gold Issuer (RP) Ltd

Source: Nairobi Securities Exchange.

Appendix II: Survey on What Constitute Company Debts

Element used by companies in defining what constitute their debts	**Percentage**
LT debt maturing> 1yr	96 %
LT debt maturing < 1 yr	90%
ST debt	86%
Cash holding (-debt)	53%
Capitalized option leases	39%
Unfunded pension liabilities	20%
Trade debt/AP	19%
Other current liabilities	16%
Debt related derivatives	15

Source: Henri, S and peter, T (2006) for Deutsche Bank.

Appendix III: A Survey on How Managers Determine Capital Structures

Measure companies use in determining their capital structure	Primary	Secondary	Total
EBITDA/interest payments	**58%**	**25%**	**83%**
Debt/EBIT	**58 %**	25%	**83%**
Debt/BV F equity	**55%**	**25%**	**80%**
Absolute level of debt	**53%**	**25%**	**78%**
Free operating cash flow/debt	**47%**	**34%**	**81%**
Credit ratings target	**47%**	**29%**	**75%**
Debt/BV of total assets	**38%**	**33%**	**71%**
FFO/debt	**38%**	**29%**	**66%**
EBIT/interest payment	**32%**	**27%**	**60%**
Debt/MV of equity	**21%**	**37%**	**59%**
RCF/debt	**21%**	**33%**	**54%**
FFO/interest payment	**19%**	**32%**	**50%**
Debt/(MV of equity + BV of debt)	**15%**	**30%**	**46%**
Debt/(MV of equity and debt)	**14%**	**31%**	**46%**
EBITDA/fixed charges	**13%**	**33%**	**46%**
EBIT/fixed charges	**9%**	**32%**	**42%**
FFO/fixed charges	**5%**	**24%**	**29%**

Source: Henri, S and peter, T (2006) for Deutsche Ban