

**EFFECT OF FINANCIAL LEVERAGE ON FINANCIAL
PERFORMANCE OF NON FINANCIAL FIRMS LISTED AT THE
NAIROBI SECURITIES EXCHANGE**

BY

ISMAIL BISHAR MOHAMED

**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL
OF BUSINESS, UNIVERSITY OF NAIROBI**

NOVEMBER 2016

DECLARATION

This research project is my original work and has not been presented for a degree at any other university for examination.

Signature Date

Ismail Bishar

D63/72486/2014

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

Signature Date

Dr. Mirie Mwangi

Senior Lecturer, Department of Finance and Accounting

School of Business

University of Nairobi

ACKNOWLEDGEMENTS

I must sincerely give thanks to God for the patience, sustenance and good health throughout this research

Special thanks go to my late parents Bishar Mohamed Adan and Rukia Mohamed Ali for my upbringing and for the support they offered me throughout my education.

Much appreciation also to my brother Abdihakim Bishar and sister Habiba Bishar for their unwavering support both moral and financial.

I wish also to extend my thanks and appreciation to my supervisor, Dr. Mirie Mwangi who tirelessly played a supervisory role to make this research a success.

DEDICATION

This research is dedicated to my sister, Habiba Bishar and brother Abdihakim Bishar who encouraged, inspired and prayed for me in making sure that this project is a reality. I also thank my friends Yussuf Abdullahi, Walid Abdalla, Abdikheir Bashey and to my cousin Adan Abdi Ahmed.

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENTS	iii
DEDICATION	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
ABSTRACT	xi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Financial Leverage	2
1.1.2 Financial Performance.....	4
1.1.4 Non-Financial Firms Listed at the NSE	6
1.2 Research Problem.....	7
1.3 Objective of the Study.....	9
1.4 The Value of the Study.....	9
CHAPTER TWO	11
LITERATURE REVIEW	11
2.1 Introduction.....	11

2.2 Theoretical Literature Review.....	11
2.2.1 The Trade off Theory	11
2.2.2 The Pecking Order Theory	12
2.2.3 The Agency Theory	13
2.3 Determinants of Financial Performance.....	15
2.3.1 Firm Size.....	15
2.3.2 Liquidity	16
2.3.3 Management Efficiency.....	16
2.4 Empirical Literature Review	17
2.5 Conceptual Framework	20
2.6 Summary of the Literature Review	20
CHAPTER THREE	22
RESEARCH METHODOLOGY	22
3.1 The Research Design.....	22
3.2 Population.....	22
3.3 Data Collection.....	22
3.4 Data Analysis	23
3.4.1 Analytical Model	23
3.4.2 Test of Significance	24
CHAPTER FOUR.....	25

DATA ANALYSIS, RESULTS AND INTERPRETATION.....	25
4.1 Introduction	25
4.2 Analysis of Data and Presentation of Findings	25
4.2.1 Response Rate.....	25
4.2.2 Descriptive Statistics	25
4.2.3 Correlation Analysis	26
4.2.4 Regression Analysis	27
4.3 Interpretation of the findings.....	30
CHAPTER FIVE	32
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	32
5.1 Introduction	32
5.2 Summary	32
5.3 Conclusions	33
5.4 Recommendations of the Study.....	34
5.5 Limitations	35
5.6 Suggestion for Further Research.....	35
REFERENCES.....	37
APPENDICES	45
Appendix I: Non-Financial Firms Listed at the NSE.....	45

LIST OF TABLES

Table 4.1 Descriptive Statistics.....	26
Table 4.2 Correlation Matrix	27
Table 4.3 Model Summary	28
Table 4.4 Analysis of Variance.....	28
Table 4.5 Regression Coefficients	29

LIST OF FIGURES

Figure 2.1 Conceptual Framework	20
---------------------------------------	----

LIST OF ABBREVIATIONS

NPM - Net Profit Margin

NSE - Nairobi Securities Exchange

ROA - Return on Assets

ROE - Return on Equity

ABSTRACT

Financing decision is one of the fundamental functions of corporate decision-making. It is ranked under much more preference to other functions that help financial managers on deciding where, how and when to obtain finances to meet investment needs of the firm. Financial leverage and financial performance are fundamental issues in corporate finance. As per the pecking order theory, an optimal structure of capital is derived a tough balancing of the costs that are related to debt financing and tax advantage benefit for use of debt finance. The study objectives was to evaluate the effect of financial leverage on financial performance of non-financial firms listed at the Nairobi Securities Exchange. This study used a quantitative research design. The population of the study was made up of the 48 non-financial firm listed at NSE. The study employed secondary data that was obtained from the annual audited financial statements, which had audited and published by the non-financial companies listed at NSE for for a period of 5 years between 2011 and 2015. This study employed a correlation analysis and a multiple linear regression method in analyzing the collected data. The study found that financial leverage had a significant negative relationship with financial performance while firm size had positive and insignificant relationship with financial performance and liquidity had a significant positive relationship with financial performance of non financial firms listed at the NSE. This study concluded that financial leverage has an adverse effect on financial performance whereas the size of the firm improves the financial performance and liquidity improves (increases) financial performance of the listed non-financial firms. The study recommended that management of the non financial firms listed at the NSE should employ minimal debt level or use an optimal debt level and focus on growing their firms to ensure that they enjoy the economies of scale associated with large firms, also to attract good management thus to improve their financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financing decision is one of the fundamental functions of corporate decision making. It is ranked under much more preference to other functions that help financial managers on deciding where, how and when to obtain finances to meet investment needs of the firm (Zhao & Wijewardana, 2012). According to Nyamita (2014), the decision on financing of a corporation is very crucial. Debt financing has been revealed to have a notable implication for corporations as far as its operations is concerned. Debt financing can lead to better performance of a corporation and expansion as well as failure of a corporation. As such, financial managers of a corporation got to be careful while making financial decisions. Financial leverage used by corporation is usually meant to earn more as far as fixed charges on funds is concerned than on costs. Financial leverage entails variations of shareholders' income in response to change in operating profits which result from financing a corporation's assets with preferences stocks or debt (Aliu, 2010).

Corporations do fund investments through a combination of equity and debt (Adenugba, Ige & Kesinro, 2016). However, the use of leverage to finance firm's investments is supported by various theoretical foundations. The pecking order theory by Majluf and Myers (1984) suggests that most companies look for external financing options rather than equity financing. The trade-off theory also explains that optimal debt financing level of the firms is established by a balance. That is between the advantages of borrowing and costs, holding assets of the firm and plans for investments steady or constant (Nyamita, 2014).

The Jensen and Meckling (1976) agency theory hold that high indebtedness instills discipline to managers, thus it is connected with better financial performance (Evgeny, 2015). According to Gill and Mathur (2011) when a company gives a signal to the market that it expects positive cash flows in future when it offers debt. This consequently gives the managers confidence of getting positive cash flows in future for better planning.

The use of debt is beneficial to a company since interest payments are not taxable and that may lead to increasing firm value (Evgeny, 2015). Debt financing has important advantages to the firm. Such advantages may include savings on tax, reduction of costs related to agency and other costs like financial distress which comes the use of debt financing (Raza, 2014). Nawaiseh (2015) stated that the survival of the firm and its continuity often depends on its performance; most importantly its profitability which may be fueled by effective leveraging. Nonetheless, the management can make decisions which result to under-investment in its working capital due to liquidity challenges. Abubakar (2015) echoed the same sentiments by stating that a higher potential return to investors is realized when financial leverage is availed but if the investment becomes worthless potential loss is also higher, loan principal and accrued interests on loans required to be repaid.

1.1.1 Financial Leverage

Financial leverage also referred to as trading on the equity is a financial tactic that encompasses the utilization of additional borrowed funds (fixed-cost debt instruments) to maximize the return on investment (Al-Otaibi, 2013). According to Rehman (2013), financial leverage is about how entities employ debt and equity as far as financing there

assets are concerned. Financial leverage explains the relation between owner's funds and borrowed funds that makes up a firm's capital structures. Financial leverage can also be defined as utilization of a third party's funds to finance a firm that might lead to an increase in operating profit and taxes (Barakat, 2014).

Financial leverage is like a loan borrowed from a financial institution by the firm with a clear intention of employing the funds in a more useful manner such as investment so that, the earnings from that investment exceeds the cost of interest charged on the funds borrowed (Abubakar, 2015). Firms employ financial leverage with the intention of earning higher returns on fixed charges funds than their costs (Enekwe, Agu & Eziedo, 2014). Shareholders returns on investment can be increased by financial leverage which most times yield an advantage as far as tax levied is concerned on borrowing. Consequently, the decision on financial leverage is fundamental since firms can utilize a certain mix of equity and debt in financing its activities like investments or general operations (Gill & Mathur, 2011).

Financial leverage is more on the debt utilized in the firm's capital structure. The leverage arises as a fixed financial expense of the firm. It bears a fixed obligation of interest payment (Adenugba, Ige & Kesinro, 2016). Two different outcomes are possible with the use of financial leverage, either positive i.e. maximizing the profit or negative minimization. The firm is exposed to risk because of high debt levels which should be repaid at a cost (Al-Otaibi, 2013). Firms utilize financial leverage in order to increase their returns on investment. Excessive use or employment of leverage can be a disaster if not well calculated or managed.

1.1.2 Financial Performance

Financial performance is the extent to which objectives of the firm and in this case financial objectives will be met or have been met (Yahaya & Lamidi, 2015). Kajirwa (2015) deduced that the company's financial performance is subject to how effectively a firm uses its assets from its principal role of conducting business and its subsequent generation of revenues. Financial performance can also refer to the general well-being of a firm as far as finance is concerned over a certain period of time. Financial performance can as well be used to gauge or measure firms from the same industry or across different industries for comparison purposes. Financial performance is, in summary, a crucial objective that firms especially the profit oriented firms desire or aim at to achieve (Yahaya & Lamidi, 2015).

Financial performance focuses more on items that affect the financial statements or reports of a firm directly. The financial performance analysis can deal with items such as dividend growth, sales turnover, capital employed, asset base among others about the firm (Omondi & Muturi, 2013). The financial performance is a crucial indicator or measure of some economic units' success for example on achievement of set goals and objectives (Xu & Wanrapee, 2014). Firms stakeholders are mostly interested in the firm's performance as far as finance is concerned (Nyamita, 2014).

Financial performance of a firm has several major characteristics, potentials of the business, defines competitiveness, economic intents of the company's leadership and reliability of present or future contractors (Dufera, 2010). Financial performance is more

often than not expressed with regards to increase in sales or price of stocks (Maghanga & Kalio, 2012).

1.1.3 Financial Leverage and Financial Performance

There exists many empirical and theoretical explanation of how leverage and firm's performance are related. Theoretically, the pecking order hypothesis which contends that companies got an order of preference as far as financing is concerned. The order of financing is based on cost related to such finance types and their availability (Mule and Mukras, 2015). The Modigliani and Miller theory (1958) affirms that in a perfect market, value of the firm is not affected by the capital structure mix of debt and equity. A Trade-off theory proposes that an ideal structure of capital is only reached when the cost of debt financing is balanced with the debt benefits to the firm (Raza, 2014). Agency theory supports that the leverage can be used as a solution to any agency problem that might arise (Jensen and Meckling, 1976).

Moghadam and Jafari (2015) assessed the role of played leverage on firm's performance. The study indicated that leverage had a significant positive relationship to the firm's performance. Therefore, the study concluded that companies with higher debt levels are more profitable than those that are less levered. Rehman (2013) investigated the impact financial leverage on financial performance and found out there exists a positive correlation between sales growth, debt equity ratio and return on asset and an inverse relationship between debt equity ratio and net profit margin, return on equity and earnings per share.

1.1.4 Non-Financial Firms Listed at the Nairobi Securities Exchange

NSE is a sole exchange that presently exists in Kenya with 64 listed companies in 2016. It is also among the most vibrant in Africa and the leading in Eastern Africa. However, N.S.E is relatively a small market as compared to other exchanges in United States and United Kingdom that have more than 5000 and 2000 companies listed respectively. NSE was initially registered as a private company in the year 1991 by shares with the floor - based open outcry system in place, it was later replaced by the central depository system that was commissioned in 2004.

According to the NSE website, its market capitalization has tremendously improved hitting Kshs. 1930.58 billion as of September 2016. Turnover at the NSE increased phenomenally from Kshs. 2.90 billion in the year 2002 to Kshs. 95 billion in the year 2006. The number of CDSC accounts that were opened increased from 80,000 in the year 2005 to over 1,000,000 investors to date (NSE, 2015).

There exist 2 indices used to measure the performance in the NSE. NSE 20 share index is a yardstick that is used to track the best performing 20 companies in Kenya that are listed at the NSE. Although it is widely watched and cited because it is comprised of select 20 large companies, it cannot gauge fluctuations in smaller companies. The Nairobi Securities Exchange all share index (NASI) that is usually used to measure Market Capitalization other than the movements in price of few selected counters.

Firms listed at NSE are classified into different sectors such as; Agricultural, Banking, insurance, investment and investment services, Allied and Construction, Commercial and service, Energy and Petroleum, Automobiles and Accessories, Manufacturing,

Telecommunication and Technology and Real Estate Sector (NSE, 2016). As at December 2016, NSE had 65 listed companies in the different sectors. Financial firms at the NSE comprise of commercial banks which provide financial intermediation functions while the Non-financial firms are those companies that are not involved in the provision of financial intermediary services. Financial services companies are excluded since they are the companies that provide leverage and other debt services to the non-financial firms. Non-financial firms listed on the NSE will provide fundamental information including size of firm, liquidity, growth rate, profitability and tax rate which will be used to establish the correlation between leverage and financial performance. The bulwark of investors on the NSE would want to invest and get high returns especially due to the well managed structures as well as the more promising Kenyan economic outlook (Muiruri, 2014).

1.2 Research Problem

Financial leverage and financial performance are fundamental issues in corporate finance (Aivazian, Ge & Qiu, 2005). As per the pecking order theory, an optimal structure of capital is derived a tough balancing of the costs that are related to debt financing and tax advantage benefit for use of debt finance. Jensen and Meckling (1976) purports that financial leverage affects the firm's capital structure in that it has an impact on managers' financial decisions and that these resolutions have a consequent effect the corporate performance (Ku & Yen, 2013). However, the Modigliani and Miller (1958) proposition argues that the value of the firm is only determined by the level of real assets and not equity and debt in their capital structure (Al-Tally, 2014). Thus, there is no generally agreed theoretical underpinning on the effect of leverage and corporate performance hence an unresolved puzzle (Ku & Yen, 2013).

In Kenya, most companies listed at the Nairobi Securities Exchange have had improved in performance however others have experienced declining fortunes which has been attributed to the fact that corporate managers another practitioner lack adequate guidance required to attain optimal financing decisions (Ayako, Kungu & Githui, 2015). According to Mwangi, Makau and Kosimbei (2014), most collapse of many financial institutions or firms in Kenya has been due to financing issues or behavior of firms in general.

The connection between leverage and performance of firms in terms of finance has been examined by several authors. Empirical studies by Olayinka and Taiwo (2012) studied the impact of leverage on profitability of Nigerian firms. The study revealed that leverage had a negative effect thus low debt ratios enhance firm profitability. Akbarian (2013) explored the impact of leverage on firms' performance in Tehran stock exchange and found that there exist a negative relationship between leverage and free cash flow per share but the study also found a significant positive relationship with return of equity. Another study by Barakat (2014) examined the effect of financial leverage and profitability in Saudi industrial firms and established an insignificant inverse relationship between financial leverage and share value.

Kajirwa (2015) examined impact of debt on performance of Kenyan commercial banks listed at NSE and concluded that, debt utilization in a firms' capital structure has a negative implication on performance of the Kenyan commercial banks. The available studies on financial leverage combine both financial and operating leverage to determine their effect on the firms' financial performance. As such, the available evidence on the leverage and performance of firms in Kenya are uncertain. Thus, the need for this study, which aims to

analyze: the effects of financial leverage on financial performance of non-financial firms listed at Nairobi Securities Exchange?

1.3 Objective of the Study

To evaluate the effect of financial leverage on financial performance of non-financial firms listed at Nairobi Securities Exchange.

1.4 Value of the Study

This study aims at examining the relationship between financial leverage and firms' performance. Thus, the outcome of the research will be beneficial to the managers of non-financial firms quoted at the NSE as it will highlight the effect of debt usage on performance and provide recommendations on how firms can use debt.

New and existing potential investors can benefit from these study findings when identifying the level of capital investment that they would need to put in listed non-financial firms in order to lend effectively finance some of their core activities.

The study findings will be of significance to various policy makers, including the government of Kenya, to determine whether they could develop other policies or make amendments to existing policies in a bid to strengthen performance of listed non-financial firms for better policy requirements and sensible guidelines. The study findings will be a great advantage to policy makers like the capital markets authority to develop effective policy framework regarding debt financing by listed non-financial firms.

Academicians will also benefit from the research findings, which they will add to the existing literature on effects of financial leverage on firms' financial performance and also

open up new areas which may require investigations. These study findings will be of value to scholars as they check suitable gaps that will inspire interest in further studies and furnished them with additional information on leverage and financial performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section outlines theoretical review, various financial performance determinants of non-financial firms listed at NSE and finally a summary of reviewed literature.

2.2 Theoretical Literature Review

2.2.1 The Trade off Theory

This theory of trade-off suggest that debt finance is mostly used when a firm has a great level of tangible assets while equity finance is mostly used when a firm has a great portion or level of intangible assets. Thus, a firm should maintain an optimal debt–equity ratio (Al-Tally, 2014). The theory of trade-off states that an optimal debt amount is determined by a comparison of the costs related to debt financing against the benefits that will be obtained if debt financing is used by a firm. Therefore, a great leverage can be taken by a more profitable firm to finance its investments or operations. According to the theory of trade off, most firms try to balance between the tax advantage on the use of leverage against the costs associated with utilization of leverage as a financing means of investments in a firm (Aliu, 2010).

Theory of trade-off holds that firms only borrow to an extent where tax shield on debt financing immediately offset total cost that is usually associated with debt financing (Itiri, 2014). Trade off theory also explains that companies usually borrow from financial institutions in a gradually manner so as to reach its optimal level of debt-equity ratio. At

this level, firms are able to maximize market value in summing up present value of expected debt financing costs against the expected benefits of debt financing (Bontempi & Golinelli, 2001).

2.2.2 The Pecking Order Theory

The theory of Pecking order was developed by in the year 1984 (Myers and Majluf, 1984). This theory explains the implications that are brought about by information asymmetries that exist between outsiders and insiders of the firm (Bitok et al., 2011). According to the theory, due to asymmetry in terms of information between the managers of a given firm and the general investors, the investors are likely to under value the firm's new stock issued to the market. Thus, the best way firms use to avoid this kind of problem is to utilize its own internal financial resources to finance its investments and operations of the firm. If the internal sources of finance aren't enough to finance the firm's investments, then the firm can turn to debt financing. In cases where debt financing is not useful to the firm anymore (that is when the cost associated with debt financing is more than the benefits of debt financing), the firm can issue equity in form of stocks (Raza, 2014). In simple terms, the theory of pecking order assumes that for any new investment, most firms will first prefer to finance it using internal resources, followed by the use of debt then equity as the last option of financing new investments (Al-Tally, 2014).

The theory of pecking order states that optimal capital structure does not exist since debt ratio occurs because of cumulative external financing requirements thus the primary determinant of a capital structure of an organization is the problem of asymmetric information between insiders and outsiders (Itiri, 2014). Pecking order theory does not

recognize that there exists target leverage: where retained earnings comes first in terms of financing preference and equity, that is the stocks comes last in preference as far as financing of new investment is concerned (Bontempi & Golinelli, 2001). Basically, this theory suggest that firms will prefer utilize debt rather than equity to finance its investments (Nyamita, 2014).

The theory of Pecking order is based on assumption that decisions on the use of leverage are purely catalyst by asymmetric information between managers of a firm and investors. The firms assume that investors may view the issue of equity in a negative way. As such, firms prefer to finance its investments using retained earnings as an internal source of finance first, debt as the second option then equity as last option when the first two options are unable to meet the fully required funds for investments (Calabrese, 2011). The theory of pecking order also suggest that most of firms with a high level of financial needs will probably end up with a very great debt ratio since managers do not prefer the issue of new equity in form of stocks (Al-Tally, 2014).

2.2.3 The Agency Theory

The theory of agency exists when the principle who cannot manage his business on his/her own delegates the authority to an agent (Jensen and Meckling, 1976). The issue of agency arises immediately when the desires and the goals a principle and the agent conflict. It is very tough and difficult or rather expensive for a principal to always monitor the work of his/her agent to ensure that the agent works and makes some decisions on the best interest of the principle. Thus, the theory of agency is help in solving the principle and the agent issues with an aim of ensuring a better relationship between them (Itiri, 2014). This concept

is based on the notion that the interests of shareholders and the executives are not affiliated in a perfect way to enable them work for a common goal which is achieving the organizational set goals and objectives. The agency theory plays a crucial role in financing decisions because of the problems that arise between the debt holders and the shareholders (Aliu, 2010).

The theory of Agency suggests that agents who in this case are the managers prefer to have a high level of cash flow even if there exists no profitable investment opportunity so that the funds can be used for managers own benefits other than for enhancing or increasing the firm's value (Calabrese, 2011). The Jensen and Meckling (1976) agency theory explains that decisions on capital structure must aim at reducing the cost related to agency by reducing equity in capital structure. This is done by increasing the debt financing hence increasing the market value of the firm as well as reducing the conflicts that may exist between managers of a firm and shareholders.

Agency theory suggests that debt is used as a tool to control the manager since with debt financing, managers will be forced to focus on using the free cash flows to service the debt other than trying to invest the funds in some unprofitable projects (Calabrese, 2011). The theory is founded on the notion that manager's behavior can be controlled by debt financing since the managers will use the free cash flow to interest payment of the debt rather than to finance the firm's investment projects. Thus, the theory of agency supports the use of debt to improve the firm's financial performance (Mwangi, Muturi & Ngumi, 2016).

2.3 Determinants of Financial Performance

The study will explore size, liquidity, growth, profitability and tax prospects as the major financial performance determinants of non-financial firms listed at NSE.

2.3.1 Firm Size

The size of the organization affects both the profitability and liquidity of firms. Broader market share and likely higher profitability is acquired by larger firms which makes them possess more competitive power in contrast to small firms. Moreover, larger firms have better opportunities to work in the fields, that seek high capital requirements as they have huge resources. This scenario provides the chance for them to work in higher profit environments with less competition (Nawaiseh, 2015). Smaller organizations have high liquid assets and are thought more profitable than larger organizations in the short term. Equally, bigger organizations are more profitable especially those with illiquid assets than smaller firms assumed longer durations (Al-Tally, 2014).

Smaller organizations have a higher probability of bankruptcy since they are more diversified as compared to smaller firms. Thus, larger firms take up more debt due to a lower level of bankruptcy costs. Bigger organizations can minimize information asymmetry in the market and acquire financial resources efficiently. They can also access debt easily when good risk profiles are maintained as opposed to small organizations due to stability (Padron et al., 2005).

2.3.2 Liquidity

Liquidity indicates the capability of the organization to encounter recurring financial obligations. Firm liquidity is essential for organizations which enables them avoid default on its financial responsibilities and, successfully, avoid experiencing financial crisis (Dufera, 2010). Firm liquidity is the firm's capability to release maturing short-term debt. Upholding acceptable liquidity is more essential to the corporate goals. Low liquid organization levels can result in increasing financial costs and affect its capacity to settle its financial obligations (Yahaya & Lamidi, 2015). An organization can use its liquid assets to fund its activities and investments when external sources of funds are not available. Increased levels of liquidity permit an organization transact with unexpected eventualities and achieve its responsibilities during times of low earnings (Omondi & Muturi, 2013).

Fagiolo and Luzzi (2006) investigated the evolution of the distributions of size and performance, conditioned on liquidity constraints and age. The findings were that liquidity problems do not seem to have a significant negative impact on firm performance in any given year. Credit shortages constrain firm growth due to limited investment opportunities and largely assuming that lack of financial resources reduces the possibilities for long term development and financial performance.

2.3.3 Management Efficiency

Management efficiency measured in terms of total asset growth, firm's growth and earnings flow is also a key factor that determines a firm's financial performance. Better growing firms increase their financial performance especially where the level of total assets

increases which means increased growth and it inclines to be of higher profit (Sekerci, 2013).

Financial ratios like operating profit to income ratio and operating expenses to total assets ratio can be used to assess the efficiency of management in terms operational efficiency to income generation. Performance of management can also be expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff and others (Yahaya & Lamidi, 2015).

2.4 Empirical Literature Review

Maghanga and Kalio (2012) studied the impact of leverage on performance of the Kenya power and lighting company. The study used a sample of 55 respondents and structured questionnaires to collect primary data and secondary data was obtained from firm's annual reports. The study concluded that leverage has a great impact on performance as far as financing is concerned. Thus, the study revealed that an optimal debt financing is crucial in ensuring that companies realize improved financial performance. The study recommended that companies should work on reducing some operational costs by going for relative cheaper sources of financing so as to improve greatly on their financial performance.

Raza (2013) examined effect leverage on company's performance from Karachi Stock Exchange. Panel data methodology was used for companies listed at Karachi Stock Exchange for the year 2004-2009. The study finding established a negative relation between performance and leverage hence a conclusion that long-term debt was more expensive thus utilization of debt in a high level results in a low profitability.

Matemilola, Bany-Ariffin and Azman-Saini (2013) examined the effect of leverage and managerial skills on returns for shareholders. The study used the fixed effects model and multiple linear regression to analyze data collected. Regression analysis results established that leverage had a positive relationship with shareholders' return. Moreover, it was established that managerial skills had a positive relationship with shareholders' return. The study concluded that leverage and managerial skills may be priced in equity valuation.

Enekwe, Agu & Eziedo (2014) explored effect of financial leverage on financial performance of Nigeria pharmaceutical companies. The study used secondary data for the year 2001 to 2012 a sample of three companies. The study employed Pearson correlation and regressions models to analyze data collected. It was established that both debt ratio and debt-equity ratio had a negative relation with profitability when measured using ROA. The study also found that the ration on interest coverage had a positive relation with profitability of pharmaceutical companies in Nigeria. However, the study revealed that debt to equity ratio, debt ratio and interest coverage ratio had insignificant impact on profitability of the pharmaceutical industry in Nigeria.

Gweyi and Karanja (2014) investigated the impact of leverage on performance of Kenyan registered deposit-taking SACCOs using a sample of 40 Savings and Credit Co-operative Societies. The study used secondary data for period of 2 years from the year 2010 to 2012. The findings of the study established that a positive correlation exists between the debt-equity ratio with return on equity and after tax profits.

Wabwile et al. (2014) explored the effect of financial leverage on performance variance tier 1 of Kenyan commercial banks listed at NSE. To measure performance, the study used

return on assets (ROA) and return on capital employed (ROCE), earnings per share (EPS) and the Price book value. The study used the Person correlation analysis and the regression model to analyze the collected data. The study findings revealed a negative correlation between debt asset ratio and ROA and ROCE and positive correlation between the debt asset ratio and the EPS though the relationship was insignificant. The study also found an insignificant negative correlation between Price Book value and ratio.

Banafa, Muturi and Ngugi (2015) examined impacts of leverage on financial performance of listed Kenyan non-financial firms. The study employed a causal research design and to examined the effect of leverage of the 42 listed non - financial firms at NSE. Secondary data from firms' financial statements was used for a period of five years from the year 2009-2013. The study used the regression model to analyze the collected data. The study revealed that leverage had a negative and significant impact on corporate financial performance.

Syed et al (2015) investigated impact of financial leverage on corporate financial performance using panel data in a textile sector of economy in Pakistan for a period of 13 years beginning in the year 1999 to 2012. The study employed accounting ratios ROA and Tobin Q to measures of corporate financial performance and total debt to total assets ratio, long-term debt to total assets ratio, short-term debt to total assets and debt to equity ratios to determine financial leverage. The study established that leverage had a negative impact on ROA while Tobin Q has a positive coefficient with SDTA. The study concluded that due to high cost of borrowing in Pakistan and the less development of capital markets, firms are forced to borrow from banks to finance projects, which in turn they pay huge amount of interest and principal, which affects their performance.

Mule and Mukras (2015) investigated the relationship between financial leverage and financial performance of listed Kenyan firms. The study used annual data for a 5 years period starting from the year 2007 to the year 2011. The study using panel data analysis found strong evidence that financial leverage significantly and negatively affects the performance measured using ROA and Tobin Q. Moreover, the study found that financial leverage negative and insignificant effect on performance measured using ROE. The study also revealed that asset tangibility and ownership concentration are important determinants of performance.

2.5 Conceptual Framework

This study seeks to evaluate the effect of financial leverage on financial performance of non-financial firms listed at NSE. The independent variable was financial leverage while the control variables were firm size and firm liquidity while the dependent variable will be financial performance. Figure 2.1 shows the conceptual framework

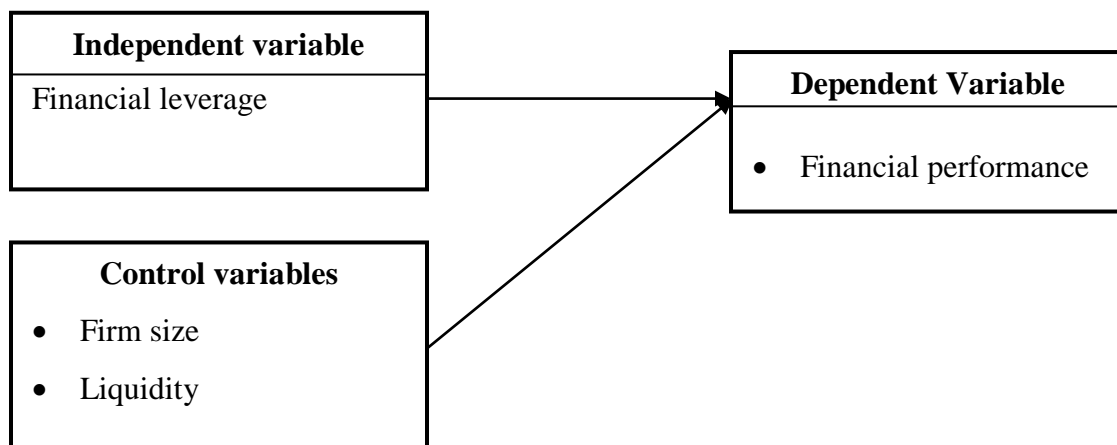


Figure 2.1 Conceptual Framework

2.6 Summary of the Literature Review

This chapter has reviewed several empirical studies on the effect of leverage on performance of firms. Studies by Adenugba, Ige & Kesinro (2016) & Maghanga and Kalio (2012) found that financial leverage had a significant effect on leverage. Studies by Syed et al (2015), Enekwe, Agu & Eziedo (2014), Raza (2013) & Banafa, Muturi and Ngugi (2015) revealed that financial leverage had insignificant effect on leverage while Rajkumar (2014) established that a negative relationship exists between financial leverage and financial performance.

Matemilola, Bany-Ariffin and Azman-Saini (2013) & Gweyi and Karanja (2014) established a positive relationship between financial leverage and profitability. Thus, from this reviewed studies the relationship between financial leverage and firm financial performance varies based on industry and the country in which the study has been carried out. Thus, the findings may not be generalized to non-financial firms listed at NSE.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 The Research Design

Research design is a plan, which outlines procedures and methods for collecting and analyzing the required data (Zikmund et al., 2011). A research design presents a framework or arrangement of action for a study. This study will use a quantitative research design. A quantitative research is a research design that addresses the objectives of a study through empirical evaluations, which entails numerical analysis and measurement (Zikmund, et al., 2011). The quantitative method will help in obtaining data from databases, a large sample and with a statistical method conclude the research problem.

3.2 Population

A population refers to a set people or items with similar characteristics that a research intends to study and to draw statistical inferences or conclusions. The population of the study was made up of the 48 non-financial firm listed at NSE. The study excluded listed financial institutions in Kenya.

3.3 Data Collection

This study employed secondary data that was obtained from the annual audited financial statements, which had audited and published by the non-financial companies listed at NSE. The data was obtained from income statement, balance sheets and statements of cash flow of the listed firms, which included; total assets of the firm, cash flow balances, total revenues, net profit and tax paid. The annual published financial reports were obtained

from the Nairobi Securities and used data of the most recent years for a period of 5 years between 2011 and 2015.

3.4 Data Analysis

This study employed a correlation analysis and a multiple linear regression method in analyzing the collected data. Regression was used to establish the relationship while correlation was utilized in determination of the nature as well as the degree of relationship that exists between the research variables.

3.4.1 Analytical Model

The regression equation was generated as follows

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

Where: Y = Financial performance measured using Return on Assets (ROA) for firm *i* at time *t*

β_0 = Constant term

$\beta_1, \beta_2, \beta_3, \& \beta_4$ = Coefficients to the regression model

X_1 = Financial leverage determined by the total debt divided by the total assets

X_2 = Size of firm determined using natural log of the total assets

X_3 = Firm liquidity determined using ratio of current assets to current liabilities

ε = Probable error

3.4.2 Test of Significance

The F and t tests were used to test statistical significance where F test was used to determine the significance of the analytical model while t – test helped to determine the significance of the coefficients of the regression model where a t value greater than two ($t > 2$) was considered significant at 5% significance level.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

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

4.2 Analysis of Data and Presentation of Findings

4.2.1 Response Rate

The study targeted the 48 non-financial firms listed at Nairobi Securities Exchange as at 31.12.2015. However, complete data was obtained from 40 non-financial firms, which had been listed for the more than five years since 2011 up to 2015. The 40 firms made up a response rate of 83%, which was deemed sufficient for the research.

4.2.2 Descriptive Statistics

The descriptive summary statistics are as shown in table 4.1

Table 4.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA (Ratio)	200	-.5553	.3889	.061756	.1190822
Financial leverage (Ratio)	200	.0000	.8932	.169413	.1963834
Size (Ln)	200	12.1613	21.8793	16.003781	1.8606510
Liquidity (Ratio)	200	.1805	18.7609	2.368049	2.7644785

Source: Research Findings

Table 4.1 illustrates the results of the descriptive statistics. According to the results, the mean ROA ratio for the non-financial firms was 0.0618 with a minimum and maximum ROA of -0.555 and 0.3889. The results indicate that the average financial ratio is 0.1694 with minimum and maximum ratios being 0.000 and 0.8932, which indicates some of the listed non-financial firms employ zero debt while others finance themselves using a very high debt ratio. The results also indicate that the mean size value in terms of the natural log is 16.033 and the average liquidity ratio is 2.36 respectively.

4.2.3 Correlation Analysis

The correlation results are shown by table 4.2 as follows

Table 4.2 Correlation Matrix

	ROA	Financial leverage	Size	Liquidity
ROA	1			
Financial leverage	-.135	1		
Size	-.072	.305**	1	
Liquidity	.224**	-.301**	-.385**	1

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

Source: Research Findings

Table 4.2 indicates that financial leverage has a negative correlation with financial performance (ROA). The results also indicate that size has negative correlation with financial performance while liquidity has a positive and significant correlation with financial performance.

4.2.4 Regression Analysis

4.2.4.1 Model Summary

The results of the model summary are shown in table 4.3

Table 4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.237 ^a	.056	.042	.1165778

a. Predictors: (Constant), Liquidity, Financial leverage, Size

Source: Research Findings

The results on table 4.3 indicate that the R- square is 0.056, which means that the independent variable (Financial leverage) and the control variables (liquidity and size) explain only 5.6% of the variation in the dependent variable (ROA).

4.2.4.2 Analysis of Variance

Table 4.4 Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.158	3	.053	3.881	.010 ^b
	Residual	2.664	196	.014		
	Total	2.822	199			

a. Dependent Variable: ROA

b. Predictors: (Constant), Liquidity, Financial leverage, Size

Source: Research Findings

Table 4.4 indicates that there is significant relationship between the variable (Financial leverage) and the control variables (liquidity and size) and the dependent variable (Financial performance) This is indicated by the f value and the significance value of 0.010 which is less than 0.05.

4.2.4.3 Regression Coefficients

Table 4.5 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.013	.081		.160	.873
1 Financial leverage	-.049	.045	-.081	-1.090	.277
Size	.002	.005	.035	.449	.654
Liquidity	.009	.003	.213	2.766	.006

a. Dependent Variable: ROA

Source: Research Findings

From the results on table 4.5, the following regression equation has been generated

$$Y = 0.013 - 0.049X_1 + 0.002X_2 + 0.009X_3 + \varepsilon$$

Table 4.5 indicates that that financial leverage has an insignificant negative relationship with financial performance as indicated by the beta vale of (-0.049) significance value of (0.277>0.005). The results also indicate that size has positive and insignificant relationship

with financial performance of the listed non-financial firms as indicated by beta value of (0.002) and the significance value of (0.654>0.05). The results also indicate that liquidity has a significant positive relationship with financial performance as indicated by the beta value of 0.009 and significance value of (0.006<0.05) respectively.

4.3 Interpretation of the findings

The findings revealed that financial leverage negatively influences the financial performance of non financial firms listed at the Nairobi Securities Exchange. This means that a unit increase in financial leverage reduces financial performance by 0.049 units financial leverage has an adverse effect on financial performance of non financial firms listed at the Nairobi Securities Exchange. In concurrence, Olayinka and Taiwo (2012) revealed that leverage had a negative effect thus low debt ratios enhance firm profitability.

Akbarian (2013) also found that there exist a negative relationship between leverage and free cash flow per share. Barakat (2014) established an inverse relationship between financial leverage and share value. Raza (2013) established a negative relation between performance and leverage hence a conclusion that long-term debt was more expensive thus utilization of debt in a high level results in a low profitability. Banafa, Muturi and Ngugi (2015) revealed that leverage had a negative and significant effect on corporate financial performance.

Secondly, the finding revealed that size of a firm positively influences the financial performance of non-financial firms listed at the Nairobi Securities Exchange. This means that a unit increase in the size of the firm improves the financial performance of the listed non-financial firms by 0.002 units hence size has a positive effect on the financial

performance of the non-financial firms listed at the Nairobi Securities Exchange. According to Nawaiseh (2015) smaller firm are less competitive as compared to larger organizations as they have a smaller market share and slimmer chance to profit. Moreover, bigger organizations have a chance to arrest more lucrative chances to work in the environments, that exhibit more capital as they have heightened resources, and there provide higher opportunities to labor in less competitive environments and more profitable fields.

Finally, the findings revealed that liquidity significantly and positively influences the financial performance of non-financial firms listed at the Nairobi Securities Exchange. This means that a unit increase in liquidity improves (increases) financial performance of the listed non-financial firms by 0.009 units hence liquidity has a positive effect on the financial performance of the non-financial firms listed at the Nairobi Securities Exchange. According to Yahaya and Lamidi (2015), less liquid level can lead to heightened financial costs and effect in the inability to settle debt responsibilities. Omondi and Muturi (2013) established that higher liquidity allows an organization to transaction with unexpected contingencies and to cope with its obligations during periods of low earnings.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

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

5.2 Summary

This study sought to answer the question whether financial leverage affects financial performance of non-financial firms listed at the Nairobi Securities Exchange. The study focused on financial leverage as the independent variable and incorporated firm size and liquidity as the control variables while financial performance measured using ROA was the dependent variable. The study targeted 48 non-financial firms listed at the NSE and excluded financial institutions like commercial banks and insurance firms. Out of the targeted 48 firms the study was able to obtain complete data from only 40 firms thus a response rate of 83%.

The finding revealed that average ROA ratio for the non-financial firms was 0.0618 and that the mean financial leverage value was 0.1694. The findings also revealed that the average size value in terms of the natural log was 16.033 and the average liquidity ratio was 2.36 respectively. Additionally, the findings found that financial leverage had a significant negative correlation with financial performance (ROA) while firm size had a negative correlation with financial performance while liquidity had a significant positive correlation with financial performance of non financial firms listed at the NSE.

The findings revealed that the R- square value was 0.056; hence, an indication that the study variables explained 5.6% of the variation in the dependent variable (ROA) while 94.4 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 leverage had a significant negative relationship with financial performance while firm size had positive and insignificant relationship with financial performance and liquidity had a significant positive relationship with financial performance of non financial firms listed at the NSE.

5.3 Conclusions

The study revealed financial leverage significantly and negatively influence the financial performance of non financial firms listed at the Nairobi Securities Exchange. The study makes the conclusion that financial leverage has an adverse effect on financial performance hence non financial firms listed at the Nairobi Securities Exchange should use optimal debt levels to ensure they maximize their financial performance

The study finding revealed that size of a firm positively influences the financial performance of non-financial firms listed at the Nairobi Securities Exchange. The study makes the conclusion that the size of the firm improves the financial performance of the listed non-financial firms hence firm size has a positive effect on the financial performance of the non-financial firms listed at the Nairobi Securities Exchange.

The findings of the study also revealed that liquidity significantly and positively influences the the financial performance of non-financial firms listed at the Nairobi Securities Exchange. The study makes the conclusion that liquidity improves (increases) financial

performance of the listed non-financial firms hence liquidity has a positive effect on the financial performance of the non-financial firms listed at the Nairobi Securities Exchange.

5.4 Recommendations of the Study

The study found that financial leverage has a significant negative relationship with financial performance of non financial firms listed at the NSE. The study therefore recommend that the managers of the non financial firms listed at the NSE should employ minimal debt level or use an optimal debt level which will not affect the firms performance due to the inverse relationship between financial leverage and financial performance.

Secondly, the study found that firm size has a positive relationship with financial performance of non-financial firms listed at the NSE. The study therefore recommends that managers of the listed non-financial firms should focus on growing their firms to ensure that they enjoy the economies of scale associated with large firms, also to attract good management thus to improve their financial performance.

Finally, the study found that liquidity had a significant positive relationship with financial performance of non-financial firms listed at the NSE. This means that an increase in liquidity enhances financial performance. The study therefore recommends that the manager of the listed non-financial firms should ensure that their firms have adequate liquidity levels to ensure that the can meet any contingencies and to improve their firms financial performance.

5.5 Limitations

The study obtained complete data from only 40 non-financial firms from the total population of 48-listed firms. Therefore, the findings are based on the sampled firms and may not be applicable to the firms whose data was not obtained. In addition, the findings are based on the listed firms, not non-listed firms, and non-financial firms listed in other stock exchanges regionally and across the world.

The study also did not collect data from commercial banks and insurance firms listed at the Nairobi Securities exchanges since financial firms mostly providing financing inform of debt (Financial leverage) to other firms. However, an examination of their financial statements indicates that such financial institutions also obtain debt with other financial institutions and debt forms part of their capital structure despite the fact that they are financiers.

5.6 Suggestion for Further Research

The objective of this study was to explore the relationship between financial leverage and financial performance of non financial firms listed at the NSE. However, non-financial firms also employ debt in their capital structure and debt is one of their financing modes as they use debt to make additional investments. Therefore, a further study can be carried on the effect of financial leverage on the performance of financial institutions listed at the Nairobi Securities Exchange.

Additionally, financial leverage is part of total leverage which comprises of operating and financial leverage. Operating leverage may also affect the financial performance of the listed non financial firms. Therefore, an addition research can be carried on the effect of

operating leverage on financial performance of non financial firms listed at the Nairobi Securities Exchange in Kenya.

REFERENCES

- Abubakar, A. (2015). Relationship between Financial Leverage and Financial Performance of Deposit Money Banks in Nigeria. *International Journal of Economics, Commerce and Management*, 3(10), 759 – 778
- Adenugba, A. A., Ige, A. A. & Kesinro, O. R. (2016). Financial Leverage and Firms' Value: A Study of Selected Firms in Nigeria. *European Journal of Research and Reflection in Management Sciences*, 4(1), 14-32
- Aivaziana, V. A., Geb, Y. & Qiu, J. (2005). The Impact of Leverage on Firm Investment: Canadian Evidence. *Journal of Corporate Finance* 11, 277– 291
- Akbarian, S. (2013). The investigation Effect of Financial Leverage and Environment Risk on Performance firms of Listed Companies in Tehran Stock Exchange. *Journal of Applied Science and Agriculture*, 8(3), 249-255
- Akhtar, S., Javed, B., Maryam, A. & Sadia, H. (2012). Relationship between Financial Leverage and Financial Performance: Evidence from Fuel & Energy Sector of Pakistan. *European Journal of Business and Management*, 4(11), 7 – 17
- Akinmulegun, S. O. (2012). The Effect of Financial Leverage on Corporate Performance of Some Selected Companies in Nigeria. *Canadian Social Science*, 8 (1), 85-91.
- Aliu, N. O. (2010). Effect of Capital Structure on the Performance of Quoted Manufacturing Firms in Nigeria. Unpublished Thesis. Ahmadu Bello University
- Al-Otaibi, R. (2015). Impact of Financial Leverage on the Company's Financial Performance. Saudi Arabia

- Al-Tally, H. A. (2014). An Investigation of the Effect of Financial Leverage on Firm Financial Performance in Saudi Arabia's Public Listed Companies. Doctoral thesis, Victoria University; Melbourne, Australia
- Aroni, J. M. (2011). Factors Influencing Stock Prices for Firms Listed in the Nairobi Stock Exchange. *International Journal of Business and Social Science*, 2(20), 303-311
- Ayako. A., Kungu, G. & Githui, T. (2015). Determinants of the Performance of Firms Listed at the Nairobi Securities Exchange. *Research Journal of Finance and Accounting*, 6(12), 157-164
- Banafa, A. S, Muturi, W & Ngugi, K (2015). The Impact of Leverage on Financial Performance of Listed Non-Financial Firm in Kenya. *International Journal of Finance and Accounting*, 4 (7), 1-20.
- Barakat, A. (2014). The Impact of Financial Structure, Financial Leverage and Profitability on Industrial Companies Shares Value (Applied Study on a Sample of Saudi Industrial Companies). *Research Journal of Finance and Accounting*, 5(1), 55 – 66
- Bitok, J., Kibet, L., Tenai, J. & Mutwol, M. (2011). The Determinants of Leverage at the Nairobi Stock Exchange, Kenya. The Asian Business and Management Conference Official Conference Proceedings 2011. Available at: http://iafor.org/abmc_proceedings.html
- Bontempi, M. E. & Golinelli, R. (2001). Is Financial Leverage Mean-Reverting? Unit Root Tests and Corporate Financing Models. University of Bologna

- Calabrese, T. D. (2011). Testing Competing Capital Structure Theories of Nonprofit Organizations. *Public Budgeting & Finance*, 119-143
- Duferu, A. (2010). Financial Performance Evaluation: A Case Study of Awash International Bank. Unpublished MSc Project. Mekelle University, Ethiopia
- Enekwe, C. I., Agu, C. I. & Eziedo, K. N. (2014). The Effect of Financial Leverage on Financial Performance: Evidence of Quoted Pharmaceutical Companies in Nigeria. *IOSR Journal of Economics and Finance*, 5(3), 17-25
- Evgeny, I. (2015). The Impact of Financial Leverage on Firm Performance: Evidence from Russia. *J. of Corporate Finance Research*, 34, 24-26
- Fagiolo, G. and Luzzi, A. (2006). Do liquidity constraints matter in explaining firm size and growth? Some evidence from the Italian manufacturing industry. *Industrial and Corporate Change*, 15(1), 1-39
- Frank, M. Z. & Goyal, V. K. (2005). Tradeoff and Pecking Order Theories of Debt. Working Paper. Tuck School of Business
- Gatuhi, S. K. (2015). Macroeconomic Factors and Stock Market Performance in Kenya. Unpublished Msc Project. Jomo Kenyatta University of Agriculture and Technology
- Gill, A. & Mathur, N. (2011). Factors that Influence Financial Leverage of Canadian Firms. *Journal of Applied Finance & Banking*, 1(2), 19-37

- Goel, U., Chadha, S. & Sharma, A. K. (2015). Operating liquidity and financial leverage: Evidences from Indian Machinery Industry. *Procedia - Social and Behavioral Sciences* 189, 344 – 350
- Gweyi, M. O. & Karanja, J. (2014). Effect of Financial Leverage on Financial Performance of Deposit Taking Savings and Credit Co-operative in Kenya. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4 (2), 176–184
- Itiri, I. O. (2014). Impact of Financial Structure on the Performance of Quoted Firms in Nigeria. University of Nigeria
- Kajirwa, H. I. (2015). Effects of Debt on Firm Performance: A Survey of Commercial Banks Listed on Nairobi Securities Exchange. *Global Journal of Advanced Research*, 2(6), 1025-1029
- Kale, A. A. (2014). The Impact of Financial Leverage on Firm Performance: The Case of Non-Financial Firms in Kenya. Unpublished MA Project. University of Nairobi
- Ku, Y. & Yen, T. (2013). Heterogeneous Effect of Financial Leverage on Corporate Performance: A Quantile Regression Analysis of Taiwanese Companies. Proceedings of Global Business and Finance Research Conference 28-29 October, 2013, Taipei, Taiwan
- Maghanga, E. N & Kalio, A. M. (2012). Effects of Leverage on the Financial Performance of Parastatals: A Case Study of Kenya Power. *International Journal of Science and Research*, 3(10), 990 – 994

- Matemilola, B. T., Bany-Ariffin, A. N. & Azman-Saini, W. N. W. (2013). Impact of Leverage and Managerial Skills on Shareholders' Return. *Procedia Economics and Finance*, 7, 103 – 115
- Mburu, S. M. (2015). Impact of Capital Structure on Financial Performance; Evidence from Non-Financial Firms Quoted at the Nairobi Securities Exchange in Kenya. *International Journal of Scientific and Research Publications*, 5(12), 173-177
- Moghadam, M. D.& Jafari, M. (2015). The Role of Financial Leverage in the Performance of Companies Listed in the Stock Exchange. *Indian Journal of Natural Sciences*, 5(30), 7402 – 7657
- Muchiri, M. J., Muturi, W. M. & Ngumi, P. M. (2016). Relationship between Financial Structure and Financial Performance of Firms Listed at East Africa Securities Exchanges. *Journal of Emerging Issues in Economics, Finance and Banking*, 5 (1), 1734 - 1755
- Muiruri, P. M. (2014). Effects of Estimating Systematic Risk in Equity Stocks in the Nairobi Securities Exchange. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4), 228–248
- Mule, M. K. & Mukras, M. S. (2015). Financial Leverage and Performance of Listed Firms in a Frontier Market: Panel Evidence from Kenya. *European Scientific Journal*, 11(7), 547 - 563
- Mwangi, L. M., Makau, M. S. & Kosimbei, G. (2014). Relationship between Capital Structure and Performance of Non-Financial Companies Listed in the Nairobi

- Securities Exchange, Kenya. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(2), 72 – 90
- Nawaiseh, R. I. (2015). Do Profitability and Size Affect Financial Leverage of Jordanian Industrial Listed Companies? *European Journal of Business and Innovation Research*, 3(5), 1-12
- Ness, R. K., Paul Miesing, P. & Kang, J. (2010). Board of Director Composition and Financial Performance in a Sarbanes-Oxley World. *Academy of Business and Economics Journal*, 10 (5), 56-74
- Nyamita, M. O. (2014). Factors Influencing Debt Financing and Its Effects on Financial Performance of State Corporations in Kenya. Doctorate Thesis. Durban University of Technology
- Nyasha, S. & Odhiambo, N. M. (2014). The Dynamics of Stock Market Development in Kenya. *The Journal of Applied Business Research*, 30(1), 73-82
- Olayinka, A. & Taiwo A. (2012). Profitability and Leverage: Evidence from Nigerian Firms. *Global Journal of Business Research*, 6(1), 17-25
- Omondi, O. M. & Muturi, W. (2013). Factors Affecting the Financial Performance of Listed Companies at the Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, 4 (15), 99 – 104.
- Padron, Y.G., Apolinario, M.C., & Santana, O. (2005). Determinant factors of leverage: An empirical analysis of Spanish corporations, *Journal of Risk Management*, 6, 60-68.

- Rajkumar, P. (2014). Impact of Financial Leverage on Financial Performance: Special Reference to John Keells Holdings plc in Sri Lanka. *Scientific Research Journal*, 2 (2), 15 – 20
- Raza, M. W. (2013). Effect of Financial Leverage on Firm Performance. Empirical evidence from Karachi Stock Exchange. Online at <https://mpra.ub.uni-muenchen.de/50383/>
- Rehman, B. S. (2013). Relationship between Financial Leverage and Financial Performance: Empirical Evidence of Listed Sugar Companies of Pakistan. *Global Journal of Management and Business Research Finance*, 13 (8), 1-9
- Sekerci, N. (2013). Does Enterprise Risk Management Create Value for Firms? Evidence from Nordic Countries. School of Economics and Management, Lund University
- Syed, J. H., Paeman, A., Tanveer, A. & Sajid, A. (2015). Financial Leverage and Corporate Performance: Does Financial Crisis Owe an Explanation? *Pakistan Journal of Statistics and Operation Research*, 11(1), 67-90
- Tan, T. K. (2015). Financial Distress and Firm Performance: Evidence from the Asian Financial Crisis. *Journal of Finance and Accountancy*, 1- 11
- Tauseef, S., Lohano, H. & Khan, S. A. (2015). Effect of Debt Financing on Corporate Financial Performance: Evidence from Textile Firms in Pakistan. *Pakistan Business Review*, 1, 903-916
- Wabwile, E. S., Chitiavi, M. S., Alala, O. B. & Musiega, D. (2014). Financial Leverage and Performance Variance a Mong Banks. Evidence of Tier 1 Commercial Banks

Listed On Nairobi Security Exchange Kenya. *International Journal of Business and Management Invention*, 3(4), 01-13

Xu, M. & Wanrapee, B. (2014). Factors Affecting Financial Performance of Firms Listed on Shanghai Stock Exchange 50. University of the Thai

Yahaya, O. A. & Lamidi, Y. (2015). Empirical Examination of the Financial Performance of Islamic Banking in Nigeria: A Case Study Approach. *International Journal of Accounting Research*, 2(7), 1 – 13

Zhao, B. & Wijewardana, W. P. (2012). Financial Leverage, Firm Growth and Financial Strength in the Listed Companies in Sri Lanka. *Procedia - Social and Behavioral Sciences* 40, 709 – 715

Zikmund, W. G., Babin, J., Carr. J. C. & Griffin, M. (2011). *Business Research Methods*. (9th Ed.). South-Western, Cengage Learning

APPENDICES

Appendix I: Non-Financial Firms Listed at the NSE

Agricultural sector

1. Eaagads Limited
2. Williamson Kenya Limited
3. Kakuzi Limited
4. Kapchorua Limited
5. Limuru Tea Company Limited
6. Rea Vipingo plantation limited
7. Sasini tea & coffee limited

Commercial & Services sector

1. Express Kenya Limited
2. Kenya Airways Limited
3. Nation Media group
4. TPS Serena limited
5. Standard group

6. Uchumi Supermarkets

7. Hutching Biemer

8. Longhorn Kenya

9. Scan group

10. Home Africa Ltd

Construction & Allied sector

1. Athi river Mining

2. Crown Paints Kenya

3. Bamburi cement Limited

4. E.A.Cables

5. E.A.Portland cement Ltd

Automobile & Accessories

1. Car & general Kenya Limited

2. Marshall E.A Limited

3. Sameer Africa

5. East Africa Breweries Ltd

Energy & Petroleum

1. KenGen

6. Mumias Sugar Co.

7. Eveready EA

2. Kenol Kobil

Telecommunication

3. Kenya Power & Lighting Co Ltd

1. Safaricom Ltd

4. Total Kenya Limited 5. Umeme

Ltd

Investment

1. Centium Investment Company

2. Olympia Capital Holding

3. Trans – Century Ltd

4. Nairobi Security Exchange

5. B.O. C Kenya

Manufacturing

1. Baumann & Co.

2. Kenya Orchards Ltd

3. Unga group Ltd

4. BAT Kenya Limited