

**THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND
FINANCIAL PERFORMANCE OF REAL ESTATE FIRMS IN
KENYA**

BY

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DECLARATION

I declare that this research project is my original work and has not been submitted for examination in any other University.

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

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DEDICATION

This study is dedicated to my loving parents, Dr. and Mrs. Yabs and my siblings James and Viola who continuously inspired me and supported my efforts throughout this study.

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LIST OF ABBREVIATIONS

CFROI	Cash flow return on investment
EBITDA	Earnings before interest, tax, depreciation and amortization
EPS	Earnings per share
EUR	Euro
EVA	Economic value added
GSE	Ghana Stock Exchange
LTD	long term debt
MM	Modigliani and Miller
MUR	Mauritius rupee
NI	Net income
NOI	Net Operating Income
NPV	Net present value
NSE	Nairobi Securities Exchange
ROA	Return on assets
ROE	Return on equity
SEM	stock exchange of Mauritius
SOE's	State owned enterprises
SPSS	Statistical Package for Social Sciences
STD	short term debt
STDTA	short term debt to total assets
TD	total debt
USD	United States dollar
WACC	Weighted average cost of capital

ABSTRACT

This study sought to determine the relationship between capital structure and financial performance of real estate firms in Kenya. Financing and investment are two major decision areas in a firm, how an organization is financed is important to both the managers of the firm and the providers of funds. Capital structure has been a major issue in finance ever since Modigliani and Miller showed in 1958 that capital structure decision of the firm is irrelevant – under perfect market assumptions. Whether or not an optimal capital structure exists is one of the most important and complex issues in corporate finance. If a wrong mix of finance is employed, the performance as well as the survival of the firm may be seriously affected. This study was guided by the study objective which was to establish the relationship between capital structure and financial performance of real estate firms. This was achieved by analyzing the relationship between financial performance measured by return on asset (ROA) with capital structure measured by total debt, Short term debt and long term debt. The study focused on a sample size of 28 real estate firms and collected data for 5 years from the annual reports of the firms. The type of data collected include return on asset, long term debt, short term debt and total assets; size of the company was measured by natural logarithm of total assets, while growth was measured by the change in total assets. Correlation and regression analysis was used to establish the association and effect of the variables under study. The research design that was adopted for this study was a descriptive research design. This type of design involves an extensive well focused literature review and identification of the existing knowledge gap. The data was then analysed using Statistical Package for Social Sciences (SPSS) and presented in tables. The researcher preferred SPSS because of its ability to cover a wide range of the most common statistical and graphical data analysis. An analysis of the mean shows that the sample of real estate firms prefer long term debt compared to short term debt. The mean of long-term debt was 4.864 and that of short-term debt was 0.721. The study finds that total debt has a negative relationship with financial performance. The study also reveals that long-term debt and short-term debt is positively related to return on assets (ROA). The study found out that the adjusted r squared was 0.321. The study found that the standardized coefficient was 0.416, 0.422 and 0.223 for total debt, long-term debt and short-term debt respectively. This study concludes that capital structure has a moderately positive impact on financial performance of real estate firms in Kenya for the period under study. This study therefore recommends that real estate firms in Kenya should reduce the debt levels in their capital structure for a better performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The global economy is witnessing investment movements, especially in recent decades. This is consistent with what is witnessed in the Kenyan economy, which has developed as a result of openness to the outside world, and this in turn had led to the expansion in the operations and activities of the Kenyan real estate firms. These firms therefore require financial resources to finance these expansive operations and activities (Soumadi, & Hayajneh, 2015).

All business organizations strive to improve their efficiencies and to increase their profitability. There are many factors that influence efficiency and effectiveness of business organizations including capital structure. The capital structure of a firm is the mixture of debt and equity that a firm uses to finance its business. The financing decision that a manager is concerned with is in determining the best financing mix or capital structure for his firm (Ehrhardt & Brigham, 2013). The management of the firm has to set their capital structure in a way to maximize their firm value and this decision is really important.

The first milestone on the issue of capital structure was set by Modigliani and Miller (1958), also known as proposition 1; whose model argued on the irrelevance of the capital structure in determining firm's value and future performance, under the assumptions of investors' homogenous expectations, tax free economy and no transaction costs. Capital structure has been a major issue in finance since then. Later on Modigliani and Miller (1961), also known as proposition 2; argued that firm value can be increased by changing the capital structure because

of tax advantage of debt, under restrictive assumptions of perfect capital markets, investors' homogenous expectations, tax free economy and no transaction costs, capital structure is irrelevant in determining firm value.

The relationship between capital structure and financial performance is one that has received considerable attention in the finance literature. How important is the concentration of control for the company performance or the type of investors exerting control are questions that various authors have tried to answer for a long time. Prior studies show that capital structure is related to financial performance, which is a key issue in corporate finance (Brigham & Ehrhardt, 2013).

To study the effects of capital structure on financial performance helped us to know the potential problems in financial performance and capital structure. The study on capital structure attempts to explain the mix of financing sources used by companies to finance investments (Brealey, Myers, & Allen, 2014). Brigham (2013), referred to capital structure as the way in which firms finances its operations which can either, be through debt or equity capital or both. According to Brealey (2014), there was no universal theory on the debt to equity choice but noted that there were some theories that attempted to explain the capital structure mix. Brealey (2014) cited the trade-off theory which states that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress.

The pecking order theory states that firms borrow rather than issue equity when internal cash flow is not sufficient to fund capital expenditure (Brealey, 2014). The theory concluded that the amount of debt will reflect the firms' cumulative need for external funds. The free cash flow theory on the other hand stated that dangerously high debt levels would increase firm value

despite the threat of finance distress when a firms' operating cash flow significantly exceeds its profitable investment opportunities.

Firm performance is a subjective measure of how well a firm can use its' assets from its primary business to generate revenues. Brigham (2013), argued that in theory, the Modigliani and Miller model was valid however in practice, bankruptcy costs did exist and that these costs were directly proportional to the debt levels in a firm. This conclusion implied a direct relationship between capital structure and financial performance.

Financing and investment are two major decision areas in a firm. In the financing decision the manager is concerned with determining the best financing mix or capital structure for his firm. Capital structure decision is the mix of debt and equity that a company uses to finance its business (Damodaran, 1999). Capital structure has been a major issue in financial economics ever since Modigliani and Miller showed in 1958 that capital structure decision of the firm is irrelevant – under perfect market assumptions.

The capital structure of firms contain as shown in the statements of financial position of those firms. How an organization is financed is important to both the managers of the firm and the providers of funds. The theory of capital structure is an important reference here, in an enterprise's financing policy. Whether or not an optimal capital structure exists is one of the most important and complex issues in corporate finance. If a wrong mix of finance is employed, the performance as well as the survival of the firm may be seriously affected. This study examines the effect of capital structure on firms' performance. Hence the paper seeks to fill the gap in the literature as a result of limited studies that have been conducted so far in this area of real estate using Kenyan context.

1.1.1 Capital Structure

Capital structure refers to different sources of a firm's capital. These funds are required for carrying on the business and are a major determinant on how the business operates hence their availability and quantity is critical to the firm. There are two financing sources, internal financing and external financing. Capital structure represents the proportions of the firm's financing from short and long term debt and equity. There are two major classes of financing for a business, debt and equity (Pandey, 2004).

The net income (NI) approach proposes that capital structure of a firm influences its cost of capital (WACC) and thus directly affects the value of the firm (Durand, 1959). The Net operating income (NOI) approach proposes that the value of a firm is not dependent upon its capital structure (Durand, 1959). The Modigliani and Miller (MM) approach supports the net operating income (NOI) approach and furthermore it adds a behavioral justification in favor of the net operating income (NOI) approach (Modigliani and Miller, 1958). The traditional or intermediate approach confirms the existence of an optimal capital structure where the cost of capital (WACC) is minimum and the value of the firm is maximum (Weston 1961).

Equity is the finance provided by the owners of the business (Brockington, 1990), and it represents an ownership interest which is entitled to a part of the profit of a business, that is dividend. It is however not mandatory to pay a dividend all the time as the company may retain some or all of its profits for financing expansion of its operations. Equity represents a residual claim; this means that they are paid after debt holders. As a result of this, they bear most of the risk and have greater control over decisions (Kochhar, 1997).

Debt is finance obtained through borrowing from external sources such as banks or from issues of bonds, all of which attract a fixed return. Debt may be short term, repayable over periods shorter than one year, or long term, repayable over periods longer than one year. While debt holders exert lesser control over the company, and do not determine how the business is run, they earn a fixed rate of return which is to be paid for the finance and when it is due, called interest (Kochhar, 1997). The borrower has a contractual obligation to pay the interest and to repay the principal when due, regardless of the performance or profitability of the business (Brockington, 1990)

The value of a firm is defined as the market value of debt plus the market value of equity (Ross, Westerfield, Jaffe, & Kakani, 2009). A firm should work towards maximizing its value and at the same time maximizing the stockholders' interests. It should therefore establish what ratio maximizes the shareholders' interests (Ross et al., 2009). Capital structure of any institution should therefore be well managed to ensure that the firm remains in operation and it's able to finance its projects. Therefore the way a firm combines its debt and equity, will define its market value as noted by Ross et al. (2009). In order to analyse the relationship with capital structure, capital structure is measured by short term debt to total assets, long term debt to total assets and total debt to total assets.

1.1.2 Financial performance

Financial performance (Prahalathan & Ranjany, 2011) has a broad definition in finance largely because of its various meanings. The performance of a firm reflects how effectively the firm has been managed and resources utilized. It can be measured in terms of the value of the firm and the use of profitability and efficiency ratios. To evaluate performance, it is necessary to determine

the constituents of good performance using performance indicators. To be useful, a performance indicator must be measurable, relevant, and important to the organization (Oakland, 1989).

Performance can be observed from two points of view: financial and organizational; a company's performance can be measured based on variables that involve productivity, returns, growth or even customer satisfaction. Financial performance (Chakravarthy, 1986) is based on the firm's efficiency – reflected in profit maximization, maximizing return on assets and maximizing shareholder return. According to other authors (Barbosa & Louri, 2005), the assessment of financial performance is based on the return on investment, residual income, earnings per share, dividend yield, price/earnings ratio, growth in sales, market capitalization.

The measurement of performance is dependent upon the information introduced in the measurement system and the instruments employed. The classical indicators used in financial analysis have been the return on investment, leverage, capital efficiency, liquidity, cash flow, inventory turnover, receivable turnover ratio. In addition to these factors, the modern value creation indicators include (Vernimmen, 2009): accounting indicators: net profit or earnings per share; operating profit or EBITDA; Return On Assets (ROA) and Return On Equity (ROE); hybrid indicators (accounting and financial): economic value added (EVA); Cash Flow Return on Investment (CFROI); financial indicators: Net Present Value (NPV); market indicators: Market Value Added; Total Shareholder Return.

The choice of alternatives of ascertaining performance (Demsetz & Lehn, 1985) may be influenced by the firm's objective. In our case, performance that enables an increase in market value is relevant (Gorton & Rosen, 1995); the most widely used instruments to measure performance are return on assets and return on equity (Mehran, 1995). The assessment of

financial performance using financial indicators must be complemented by an assessment based on non-financial indicators that express the quality of management, corporate culture, the effectiveness of executive compensation policies, the quality of shareholder communication system etc. Presently, there is a trend towards assessing performance based on value creation, subsumed under the goal of sustainable development (Tudose, 2012).

Measuring the organization's performance helps in formulation, implementing and monitoring a strategic plan. It aids managers in evaluating whether the objectives of an organizational are being achieved. It is also used in developing and compensating managers. It assists managers to monitor the progress and direction in which a company wants to follow. Literature review of previous research has shown that there are different systems that measure performance (Chenhall & Langfield-Smith, 2007). Hence, it is important to identify the most suitable performance measures which should be associated to the capital structure that is adopted by a firm. Managers are usually faced with a problem in effective performance measurement and are usually beleaguered with the performance data (Maltz, Souder & Kumar, 2001; Moullin, 2007). In order to analyse the relationship with capital structure, financial performance is measured by ROA.

1.1.3 Effect of Capital structure on financial performance

Modigliani and Miller's (1958) capital structure irrelevance theory states that the firm's overall market value and the WACC is independent of capital structure in a perfect market without taxation. However, the tax free perfect market does not hold in the real world. Later Modigliani and Miller (1963) proposed the modified capital structure relevance theory which analyzed the present value of interest tax shield at the corporate level and found that the higher the debt ratio, the higher the firm value. Miller (1977) extends the MM model to personal as well as corporate

taxes, and introduced the Miller theory which considered the relative advantage of debt over equity.

Nonetheless, over borrowing will lead to financial distress and even bankruptcy. The trade-off theory balances the tax advantage of borrowing against the costs of financial distress and states that there exists the optimal capital structure by considering the marginal costs and benefits of each additional unit of financing and then choosing the form of financing that equates these marginal costs and benefits.

Due to the tax deductibility of interest payment, it is argued that highly profitable companies tend to have higher levels of debt (Modigliani & Miller, 1963). However, Myers and Majluf (1984) argued that as a result of asymmetric information, companies prefer internal sources of finance. Higher profitable companies tend to have lower debt levels and higher retained earnings. Relative to this theory, Kester (1986) and Titman and Wessels (1988) find leverage to be negatively related to the levels of profitability.

Fama and French (1998), analyzing the relationship among taxes, financing decisions and the firms value, concluded that debt does not concede tax benefits. Besides, the high leverage degree generates agency problems among shareholders and creditors that predict negative relationships between leverage and profitability. Therefore negative information relating to debt and profitability obscure the tax benefit of debt. Booth, Aivazian, Demircug-Kunt and Maksimovic (2001), developed a study attempting to relate to capital structure of several companies in the countries with extremely different financial markets. They concluded that the variables that affect the choice of capital structure of companies are similar in spite of the great difference presented in financial markets. Besides, they concluded that profitability has an inverse

relationship with debt levels and size of the firm. Graham (2000) concluded in his work that big and profitable companies present a low debt rate.

The pecking order theory predicts that firms will use retention first, then debt and equity issue as a last resort. The order of preference reflects the relative costs of various financing options. Less profitable firms facing a positive NPV investment opportunity will be more willing to use external funds if cash flows are weak. Therefore, there will be a negative relationship between leverage and profitability. Fama and French (2002) and Myers and Majluf (1984) both documented a negative relationship between leverage and profitability. Therefore, the pecking order theory, estimates a negative correlation between firm's debt level and its performance.

Static tradeoff theory admits a positive relation between the firm's debt level and its performance. Agency cost theory recognizes that higher leverage, in the context of lower agency costs, reduces inefficiency thereby leads to enhanced company performance.

1.1.4 Real estate firms in Kenya

Kenya is one of the most developed economies in East Africa, with a vibrant housing sector and a booming property market. Over the years, macro-economic reforms have led to greater economic stability, making the country a prime investment destination in the region (Choka, 2014). The real estate sector is dominated by private developers with the Government through the National Housing Corporation accounting for a small percentage (Otwoma, 2013). In the last decade, Kenya's real estate has been very resilient. The real estate boom survived the 2008 post-election violence and global financial crisis that crippled other sectors of the economy such as tourism and horticulture (Choka, 2014).

The construction industry in Kenya refers to that sector of the economy that encompasses all forms of construction whether in infrastructure or in real estate. This study focuses on the real estate only, because of its importance in the improvement of the living standards of people in Kenya (Kanyuru, 2010). The other sectors of construction industry are also important to the Kenya's economy and can be a subject for other studies. Real estate refers to that sector of construction and land development sector of the economy that includes land, buildings, crops, minerals, or water, immovable property, real property and buildings or housing in general. It can also include the profession of buying, selling, or renting of land, buildings or housing. According to Myers & Majluf (1984), the industry sector - in this case real estate - can be a determinant of firm's capital structure decisions, given that the nature and composition of assets influence financing needs, as well as firm's capacity to provide creditors with assets as collateral. Therefore, firms whose activities are based on tangible assets obtain debt more easily. On the contrary, firms whose activities are based on intangible assets associated with future growth opportunities experience more difficulty in obtaining credit (Kuria 2010).

In 2014, the Real Estate sector was the fourth largest contributor to Kenya's GDP, at 10.6% of the total GDP behind Agriculture and Information Communication and Technology, ICT. Growth in the industry was backed by a growing economy coupled with an increase in the urban population (currently at 34% and projected to grow to 54% by 2030) and a slight decrease in the average level of interest rates. In 2014, the prices of properties for sale and rental rose significantly due to increased demand for property in Nairobi and its suburbs by Kenya's middle class and institutional investors as well as the emerging landlord class who are increasingly buying properties to let (Britam Group Annual Report 2014).

1.2 Research problem

The impact of capital structure on financial performance has been a subject of great empirical investigations in finance. It has been a part of research in financial economics since Modigliani and Miller's (1958) irrelevance of capital structure theory. Capital structure is an important factor in improving the value and performance of the firm. The decision is important because of the impact such a decision has on the organization's ability to deal with its competitive environment.

The difficulty facing companies when structuring their finance is to determine its impact on performance, as the performance of the business is crucial to the value of the firm and consequently its survival. Some capital decisions made by managers may not add value to the firm but may be meant for protecting the managers' interests (Dimitris & Psillaki, 2008). Even where shares are not closely held, owners of the equity are generally large in number and an average shareholder controls a minute portion of the shares of the firm. This gives rise to the tendency for such a shareholder to take less interest in the monitoring of managers who when left to themselves, pursue other interests different from the owners of equity.

Real estate and real estate companies have unique characteristics which make them an interesting area of study. They are definitively safe, with very high asset backing. Equity performance and financing choice is likely to be closely tied to the underlying assets which are frequently valued and held at market value on the statement of financial position. Furthermore, real estate firms in Kenya operates in a different environment to US (and other) counterparts. No publicly traded REIT structure yet exists, meaning real estate firms suffer from a double taxation penalty and a corresponding discount on their equity. An interesting question is whether Kenyan real estate

firms will exhibit different financing choices to other forms of real estate vehicle (Bond & Scott, 2006).

Real estate firms have a great deal of collateral that can be used to support high levels of debt. In the trade-off framework this means the costs of financial distress are likely to be lower. Examining the capital structure decision for Real Estate Investment Trusts (REITs) in the USA, Allen (1995) finds that such firms employ more leverage because their assets are well-suited as collateral on debt. This would tend to support the optimal capital structure and target leverage ideas of the trade-off theory (Bond, & Scott, 2006).

The impact of capital structure on financial performance has received much attention in developed countries. However, it has remained neglected in developing countries. The reason for this neglect according to Bhaduri (2002) was, that until recently, developing economies have placed little importance to the role of firms in economic development as well as corporate sectors in many developing countries are faced with several constraints on their choices regarding sources of funds and access to stock markets which may either be regulated or limited due to under-developed stock markets. Consequently, in Kenya, determining the actual effect a firm has on its market value has been a challenge among researchers. Particularly specifying what capital mix seems to optimize firm's values has been a difficult puzzle to ravel.

Various studies have tried to address the issue of capital structure and financial performance in Kenya, these have yielded conflicting results. A positive relationship between capital structure and financial performance was found by Wagana (2014), Kuria (2010), Kyule and Ngugi (2014), Gichangi (2014), Mwangi (2010), Oguna (2014) and Tale (2014). A negative relationship between capital structure and financial performance was found by Siro (2013), Arimi (2010),

Oguna (2014), Gichangi (2014) and Njagi (2013). While there were those studies that found no relations between capital structure and financial performance by Mwangi and Birundu (2015), Okiro (2014), and Muiru and Kamau (2014).

The two recent studies that were conducted in Kenya are: Mwangi and Birundu (2015) examined the effect of capital structure on the financial performance of small and medium enterprises in Thika sub-County, Kenya. The study findings were that there were no significant effect of capital structure, asset turnover and asset tangibility on the financial performance of SMEs in Thika sub-County, Kenya. The study concluded that capital structure, asset turnover and asset tangibility do not have significant effects on financial performance of SMEs.

In the other study, Oguna (2014) examined the effect of capital structure on financial performance: a study of firms listed under manufacturing, construction and allied sector at the Nairobi Securities Exchange. The study findings were that only long-term debt has significant positive relationship with return on assets but not with return on equity. The study concluded that capital structure as measured by long-term debt has a negative significant relationship with financial performance as measured by return on equity.

Several studies have tested the hypothesis of finding the relationship between capital structure and financial performance. However, very few studies have been conducted in the context of the real estate sector in Kenya and it is limited in finding the relationship with capital structure. This research study seeks to examine the relationship between capital structure and financial performance of real estate firms in Kenya. The research question for this study is: what is the relationship between capital structure and financial performance of real estate firms in Kenya?

1.3 Research Objectives

The objective of this study was to establish the relationship between capital structure and financial performance of real estate firms in Kenya.

1.4 Value of the Study

This study will be significant and beneficial to shareholders. Current and prospective shareholders in real estate firms will be able to understand better the capital structure of the firm they have invested in or seek to invest in and the impact it has on financial performance. Current shareholders are interested in evaluating financial performance, to have knowledge on the success of management in applying their capital. To find out how its capital structure has an impact on firm value and if the returns can cause it to change its capital structure and what the consequences of such a choice would be. It will also further inform their investment decisions lowering the risks of investing. Debt holders will also be able to evaluate the performance of the firm for credit facilities. This study will also be of great use to security analysts, stock brokers and other parties whose knowledge of the relationship between capital structure and financial performance is required in making various recommendations and decisions.

Academic researchers will be able to gain from this study as it aims to contribute to the existing body of knowledge on the topic of capital structure. Scholars will learn more on the relationship between capital structure and financial performance. This study will be of use to scholars as it will provide information on the topic, and open up future areas of research on the topic. This study will also be useful by regulators and policy makers in coming up with policies for which regulators will be able to gauge firm's performance based on capital structure of the firms.

This study will also be of great interest to real estate firm managers in formulating policies that steer towards the capital structure that optimizes financial performance. They can also use the results of this study to improve the performance of capital structure and allocate resources in a manner that would improve the activities of real estate firms in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter addressed literature review both theoretical and empirical. It covers related material from different studies carried out in the past and in different areas. It describes the theories that are examined in the study about capital structure and financial performance. The capital structure of firms is discussed and the methods of its measurement are explained. The main theories discussed that relate to capital structure and financial performance are: Modigliani and Miller propositions, the Trade-off theory, Pecking order theory and the Market timing theory.

2.2 Theoretical Framework

Capital structure theory starts with the famous proposition 1 of Modigliani and Miller. Since the publication of the Modigliani and Miller (1958) irrelevance theory of capital structure, the theory of corporate capital structure has been a study of interest to financial economists. Over the years, three major theories of capital structure emerged which diverge from the assumptions of perfect markets (under which the irrelevance model works). The first is the trade-off theory which assumes that firms trade off the benefits and costs of debt and equity financing and find an optimal capital structure after accounting for market imperfections such as taxes, bankruptcy costs and agency costs. The second is the pecking order theory (Myers, 1984, Myers and Majluf, 1984) that argues that firms follow a financing hierarchy to minimize the problem of information asymmetry between the firm's managers (insiders) and the shareholders (outsiders).

Recently, Baker and Wurgler (2002) have suggested a new theory of capital structure: The market timing theory of capital structure. This theory states that the current capital structure is

the cumulative outcome of past attempts to time the equity market. Market timing implies that firms issue new shares when they perceive they are overvalued and that firms repurchase own shares when they consider these to be undervalued. Market timing issuing behavior has been well established empirically by others already, but Baker and Wurgler (2002) show that the influence of market timing on capital structure is highly persistent.

2.2.1 Modigliani-Miller Theorem

Modigliani and Miller (1958) start by making assumptions that the firm has a particular set of expected cash flows. When a firm chooses a certain proportion of debt and equity to finance its assets, all that it does is to divide up the cash flows among investors. Investor and firms are assumed to have equal access to financial markets, which allows for homemade leverage. The investor can create any leverage that was wanted but not offered, or the investor can get rid of any effect on the market value of the firm.

Their paper led subsequently to both clarity and controversy. As a matter of theory, capital structure irrelevance can be proved under a range of circumstances. There are two fundamentally different types of capital structure irrelevance propositions. The classic arbitrage-based irrelevance proposition; provide settings in which arbitrage by investors keeps the value of the firm independent of its leverage. In addition to the original Modigliani and Miller (1958) paper, important contributions include papers by Hirshleifer (1966) and Stiglitz (1969). The second irrelevance proposition concludes that given a firm's irrelevance policy, the dividend payout it chooses to follow will affect neither the current price of its shares nor the total return to its

shareholders (Modigliani & Miller, 1963). In other words, in perfect markets neither capital structure choice nor dividend policy decisions matter.

Modigliani-Miller theorem has failed under a variety of circumstances. The most commonly used elements include consideration of taxes, transaction costs, bankruptcy cost, agency conflicts, adverse selection, lack of separation between financing and operations, time varying financial market opportunities and investor clientele effects. Alternative models use differing elements from this list. Given that so many different ingredients are available, it is not surprising that many different theories have been proposed. Covering all of these would go well beyond the scope of this paper. Harris and Raviv (1991) provided a survey of the development of this theory as of 1991.

Secondly, as an empirical proposition, the Modigliani-Miller irrelevance proposition is not easy to test. With debt and firm value both plausibly endogenous and driven by other factors such as profits, collateral and growth opportunities, we cannot establish a structural test of the theory by regressing value on debt.

A popular defense has been to argue as theory and as follows: while the Modigliani-Miller theorem does not provide realistic description of how firms finance their operations, it provides a means of finding reasons why financing may matter. This description provides a reasonable interpretation of much of the theory of corporate finance. Accordingly, it influenced the early development of both the trade-off theory and pecking order theory.

2.2.2 Trade-off Theory

The term trade-off theory is used by different authors to describe a family of related theories. In all of these theories, a decision maker running a firm evaluates the various costs and benefits of

alternative leverage plans. Often it is assumed that an interior solution is obtained so that marginal costs and marginal benefits are balanced (Campbell & Kelly 1994).

The original version of the trade-off theory grew out of the debate over the Modigliani-Miller theorem. When corporate income tax was added to the original irrelevance, this created a benefit for debt in that it served to shield earnings from taxes. Since the firm's objective function is linear and there is no offsetting cost of debt, this implied 100% debt financing (Campbell & Kelly 1994).

Several aspects of Myers' definition of the trade-off merit discussion. First, the target is not directly observable. It may be imputed from evidence but that depends on adding a structure. Second, the tax code are included, different conclusions regarding the target can be reached. Graham (2000) provides a useful review of the literature on the tax effects. Third, bankruptcy costs must be deadweight costs rather than transfers from one claimant to another. The nature of these costs is important too. Fourth transaction costs must take a specific form for the analysis to work. For the adjustment to be gradual rather than abrupt, the marginal cost of adjusting must increase when the adjustment is larger. Leary and Roberts (2005) describe the implications of alternative adjustment cost assumptions.

The static trade-off theory affirms that firms have optimal capital structure, which they determine by trading off the costs against the benefits of the use of debt and equity. One of the benefits of the use of debt is the advantage of debt tax shield. One of the disadvantages of debt is the cost of potential financial distress, especially when the firm relies on too much debt. Already, this leads to a trade-off between tax benefit and the disadvantage of higher risk of financial distress. But there are more cost and benefits involved with the use of debt and equity. One other major cost

factor consists of agency costs. Agency costs stem from conflicts of interests between different stakeholders of the firms and because of ex post asymmetric information (Jensen and Meckling, 1976; Jensen, 1986). Hence, incorporating agency costs into the static trade-off theory means that a firm determines its capital structure by trading off the tax advantage of debt against the costs of financial distress of too much debt and by trading off the agency costs advantage of debt against the costs of equity. Many other cost factors have been suggested under the trade-off theory, and it would lead too far to discuss them all. Therefore, this discussion ends with the assertion that an important prediction of the static trade off theory is that firms target their capital structures, for example if the actual leverage ratio deviates from the optimal one, the firm will adapt its financing behavior in a way that brings the leverage ratio back to the optimal level.

Constructing models that recognize the role of time requires specifying a number of aspects that are typically ignored in a single period model. Of particular importance are the roles of expectations and adjustments costs. In a dynamic model, the correct financing decision typically depends on the financing margin that the firm anticipates in the next period. Some firms expect to pay out funds in the next period, while others expect to raise funds. If funds are to be raised, they may take the form of debt or equity. More generally, a firm undertakes a combination of these actions. An important precursor to modern dynamic trade-off theories was Stiglitz (1969), who examined the effects of taxation from a public finance perspective. The first dynamic models to consider the tax savings versus bankruptcy cost trade-off are Brennan and Schwartz (1984). They analyzed continuous time models with uncertainty, taxes and bankruptcy costs, but no transaction costs. Since firms react to adverse shocks immediately by rebalancing cost take adversely, firms maintain high levels of debt to take advantage of the tax savings.

Dynamic trade-off models can also be used to consider the option values embedded in deferring leverage decisions to the next period. Goldstein and Leland (2001) observe that a firm with low leverage today has the subsequent option to increase leverage. Under their assumptions, the option to increase leverage in the future serves to reduce the otherwise optimal level of leverage today. Strebulaev (2007) analyzed a model quite similar to that Goldstein and Leland (2001). Again, if firms optimally finance only periodically because of transaction costs, then the debt ratios of most firms will deviate from the optimum most of the time. In the model, the firm's leverage responds less to short-run equity fluctuations and more to long run value changes.

Certain ideas are fairly general in dynamic models. The optimal financial choice today depends on what is expected to be optimal in the next period. In the next period, it may be optimal to raise funds or pay them out. If raising new funds, it might be optimal to raise them in the form of debt or in the form of equity. In each case, what is expected to be optimal in the next period will help to pin down the relevant comparison for the firm in the current period.

Much of the work on dynamic trade-off models is fairly recent and so any judgments on their results must be somewhat tentative. This work has already fundamentally altered our understanding of mean reversion, the role of profits, the role of retained earnings, and path dependence. As a result, the trade-off class models now appears to be much more promising than it did even just a few years ago.

2.2.3 Pecking Order Theory

The pecking order theory does not take an optimal capital structure as a starting point, but instead asserts the empirical fact that firms show a distinct preference for using internal finance (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. The latter costs basically reflect the lemon premium (Akerlof, 1970) that outside investors ask for the risk of failure for the average firm in the market. The resulting pecking order of financing is as follows: internally generated funds first, followed by respectively low-risk debt financing and share financing.

Empirical evidence supports both the pecking order and trade-off theory. Empirical tests to see whether the pecking order or the trade-off theory is a better predictor of observed capital structures finds support for both theories of capital structure (Shyam-Sunder and Myers, 1999; Fama and French, 2002)

According to the pecking order theory of business financing advanced by for the Myers and Maljuf (1984), the presence of asymmetric information between outsiders and insiders of the firm is used to predict a negative relationship between indebtedness and profitability. In the pecking order theory, the outsiders are presumed to have less information than managers and owners of the business. The managers may issue shares to raise funds for expansion or to finance a project and this will be valued by the potential investor on the value they think is the market value. If the stock is undervalued, according to the owners and managers, they may decline to issue the stock and forego the investment opportunities. On the other hand, if a firm issues shares to outsiders, it will be believed to be overvalued and the share price will fall. This will discourage firms from issuing shares. Myers uses this theory to argue that companies will prefer to use internally generated funds and if external funds are required, debt will be preferred to issuing shares. Firms will use debt only when they have exhausted the internal funds.

The pecking order hypothesis in general, advocates that existence of an optimal capital structure (or an optimal capital range) of the firm, this optimal capital structure range being dependent on the firm's trade-off of the various factors influencing its decision of the source of financing. This is against the propositions of the non-optimal capital structure perception.

2.2.4 Market Timing Theory

The market timing theory of capital structure argues that firms time their equity issues in the sense that they issue new stock when the stock price is perceived to be overvalued and buy back own shares when there is undervaluation. Consequently, fluctuations in the stock prices affect firm's capital structures. There are two versions of equity market timing that lead to similar capital structure dynamics (Baker and Wurgler, 2002).

The first assumes economic agents to be rational. Companies are assumed to issue equity directly after a positive information release which reduces the asymmetry problem between the firm's management and stockholders. The decrease in information asymmetry coincides with an increase in the stock price. In response, firms create their own timing opportunities (Baker and Wurgler, 2002).

The second theory assumes the economic agents to be irrational (Baker and Wurgler, 2002). Due to irrational behavior there is a time-varying miss-pricing of the stock of the company. Managers issue equity when they believe its costs is irrationally high. It is important to know that the second version of market timing does not require the market actually to be inefficient. It does not ask managers to successfully predict stock returns. The assumption is simply that managers believe that they can time the market.

In a study by Graham and Harvey (2001), managers admitted trying to time the equity market, and most of those that have considered issuing common stock report that the amount by which our stock is undervalued or over-valued was an important consideration.

Baker and Wurgler (2002) provide evidence that equity market timing has persistent effect on the capital structure of the firm. They find the leverage changes are strongly and positively related to their market timing measure, so they conclude that the capital structure of a firm is the cumulative outcome of past attempts to time the equity market.

2.3 Determinants of Financial Performance

A firm's performance is influenced by several factors namely growth of firms, size of the firm, risk profile of the firm, liquidity of the firm and tax.

Growth of the firm is an essential determinant of the performance of the firm. Growth of the firm is attributable to increase in net assets. Firms are a collection of a certain number of resources that provide the means to successfully take advantage of those opportunities and grow (Barney, Wright, & Ketchen, 2001). Penrose (1959) there is no limit to the growth of the firms; it is the rate of growth what is limited in the short run but there is no limit to the size of the firm.

The other determinant of financial performance of real estate firms is the size of the firm. Most large firms enjoy economies of scale and thus are able to minimize their costs and improve on their financial performance (Kumar, Rajan & Zingales, 2001). Risk profile is a significant determinant of financial performance of real estate firms.

Liquidity of the firm is a key determinant of the firm's performance. Liquidity risk can be measured by two main methods: liquidity gap and liquidity ratios. The liquidity gap is the difference between assets and liabilities at both present and future dates. At any date, a positive

gap between assets and liabilities is equivalent to a deficit (Storey, 1994). Liquidity ratios are various balance sheet ratios which should identify main liquidity trends. These ratios reflect the fact that firm should be sure that appropriate, low cost funding is available in a short time. This might involve holding a portfolio of assets that can be easily sold for cash reserves, minimum required reserves or treasury bills.

Leverage of the firm is a key determinant of financial performance. The firms leverage decisions centers on the allocation between debt and equity on financing a firm (Variyan & Kraybill, 1994). Leverage affects the level and variability of the firm's after tax earnings hence, the firm's overall risk and return. The study of leverage is significant due to the following reasons (Hall, 1997). Operating risk refers to the risk of the firm not being able to cover its fixed operating costs. Since operating leverage depends on fixed operating costs, larger fixed operating costs indicates higher degree of operating leverage and thus higher operating risk of the firm. High operating leverage is good when sales are rising but risky when the sales are falling (Kumar, Rajan & Zingales, 2001).

2.4 Review of Empirical Studies

Empirical studies have analysed the correlation between capital structure and financial performance in various developed countries taking into account the specific influencing factors. Although the final purpose of research was the same, the findings were contradictory (Tudose, 2012).

The following studies delivered empirical evidence in support of the positive correlation between capital structure and financial performance. Abor (2005) investigated the relationship between capital structure and profitability of listed firms on the Ghana Stock Exchange (GSE) during a

five year period. Regression analysis was used in the estimation of functions relating the return on equity (ROE) with measures of capital structure. The results revealed a significant positive relationship between the ratio of short-term debt to total assets and return on equity (ROE). However, a negative relationship between the ratio of long-term debt to total assets and return on equity (ROE) was found. With regard to the relationship between total debt and return rates, the results show a significantly positive association between the ratio of total debt to total assets and return on equity.

In another study, Ghosh and Jain (2000) empirically examined whether firms increase financial leverage following mergers, and found out that financial leverage of combined firms increases significantly following mergers. A cross-sectional analysis shows that the change in financial leverage around mergers is significantly positively correlated with the announcement period market-adjusted returns. Further tests indicate that the increase in financial leverage is an outcome of an increase in debt capacity, although there is weak evidence that some of the increase in financial leverage is a result of past unused debt capacity.

In another study, Yat Hung, Ping Chuen Albert and Chi Man Eddie (2002) examined capital structure and performance of firms in property and construction sector in Hong Kong. An analysis of financial data suggested that gearing is generally higher among contractors than developers. However, it does not mean that contractors borrow more than developers. Indeed they do not need to borrow as much as developers even if they have the assets to pledge as collateral. Contractors do not have to pay for high land costs, and they obtain project finance from developers through interim payments in lump sum contracts that are widely adopted in the industry. Their high gearing reflects more their low equity base than high level of debts. Their costs of equities are about double the developers', probably due to their usually low or negative

profit margins. This conclusion was substantiated by further regression analysis of the data. The study concluded that high gearing is positively related to asset but negatively related to profit margins.

In another study, Chang, Wang, Lee and La (2014) examined capital structure decisions and firm performance of Vietnam state-owned enterprises (SOEs). Capital structure decisions were considered by short and long-term debts respectively. We considered 1,580 firm-quarter observations of Vietnamese nonfinancial listed firms during 2007–2011 by applying panel data regression. The study concluded that short-term capital structure decisions are found to be significantly negative associated with accounting-based firm performance but long-term capital structure decisions are positively related to market-based firm performance.

Locally, Mwangi (2010) examined the relationship between capital structure and financial performance of firms listed at the Nairobi stock exchange. The causal research design was adopted in this study. The population of this study comprises 57 firms that were listed at the Nairobi Stock Exchange between year 2000 and 2009. Purposive sampling technique was used for this study. The sample comprises 32 non- financial firms that were continuously listed for a period of ten years from year 2000 to 2009. The sample excluded 13 financial firms (Banks and Insurance firms) and 12 non-financial companies which were not continuously listed during the study period; 2 firms were de-listed, 4 firms were suspended and 6 were newly listed. Pearson correlation which establishes relationship between variables indicated that leverage is determined by return on equity, liquidity, and return on investment. This is because there is strong relationship between leverage and return on equity, liquidity, and return on investment. Co-efficient of the regression shows that there is relationship between leverage and return on equity, return on asset, liquidity and return on investment. The study findings were that leverage is

determined by return on equity, liquidity and return on investment. The study concluded that there is a strong positive relationship between leverage and return on equity, return on asset, liquidity and return on investment.

In another study, Maigua (2014) examined the relationship between capital structure and financial performance of top 100 small and medium enterprises in Nairobi County. The study targeted 100 SMEs which are registered as companies in Nairobi County. Simple random sampling was applied for choosing the samples size. The sample size selected under proportional allocation was 30. Secondary data was collected from financial records of SMEs. Documentary guide aided in data collection. Descriptive statistics such as mean and standard deviation and inferential statistic such as Pearson correlation and multiple regression model was used in analyzing data. The study findings were that capital structure had a negative relationship on firm financial performance of SMEs in Nairobi County. There is however also evidence that capital structure has a positive significant effect on ROA. The study concluded that capital structure has a significant effect on financial performance.

In another study, Kyule and Ngugi (2014) examined the influence of capital structure on leverage of small and medium size enterprises in Kenya. The study variables included: firm size, firm profitability, firm age, firm risk and firm asset structure. The study adopted a descriptive survey design. The study was conducted on the SMEs in Nairobi. The population comprised of 4300 SMEs. Stratified proportionate random sampling technique was used to select the sample. The study grouped the population into the various sectors i.e. Manufacturing, Trading and Service sectors. From each sector the study used a proportion of 10% from each stratum to select 430 SMEs. Primary as well as secondary data was collected. Primary data was collected using questionnaires. Secondary data was obtained from relevant literature review from studies,

journals, magazines and the internet. The completed questionnaires was then tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 21 to analyze the data. Descriptive statistics such as mean and standard deviation were used. Tables, pie charts, and graphs were used to present responses and facilitate comparison. The study findings were that a positive relationship between firm leverage and its size stressed out, that when the value of the firm increases; the ratio of direct bankruptcy costs to the firm value would decrease. The study concluded that there is a negative relationship between the firm profitability and the level of leverage, also that the level of risk is said to be one of the primary determinants of a firm's capital structure.

In another study, Oguna (2014) examined the effect of capital structure on financial performance: a study of firms listed under manufacturing, construction and allied sector at the Nairobi Securities Exchange. The research design used was a descriptive research. Data was collected from the firms consolidated financial statement. The target population for the study consisted of manufacturing, construction and allied firms Listed at The Nairobi Securities exchange from 2010 to 2013. The data was then analyzed using linear regression models using SPSS to establish if there is any significant relationship of capital structure and the financial performance. Two regression models were utilized, with return on asset and return on equity as the dependent variables so as to assess the effects of debt on firm performance. A series of regression analysis were executed for each model, where both one of the capital structure proxies was included in each analysis and lag values were used so as to achieve the best fitted relationship between capital structure and firm performance. The correlation between return on equity and current debt was significant compared to the correlation between return on equity and long-term debt with a correlation of 0.778 and -0.518 respectively. The study findings were that

only long-term debt has significant positive relationship with return on assets but not with return on equity. The study concluded that capital structure as measured by long-term debt has a negative significant relationship with firm performance as measured by return on equity.

In another study, Tale (2014) examined the relationship between capital structure and performance of non-financial firms listed at the Nairobi Securities Exchange. Financial performance was measured by return on equity while capital structure was measured by debt ratio. Other control independent variables: Tangibility of assets, size of the firm and the growth of the firm. It is important to note that during this period Kenya experienced political anxiety, leading to uncertainty in the securities market. This presents an interesting period of study considering the ups and downs of the trade cycle in the securities market. The beginning of this period also experienced the global financial crisis which was witnessed in the period around 2008-2009. The population of study consisted of all the 40 nonfinancial firms listed and duly registered with capital market authority of Kenya. Secondary data used was obtained mainly from the annual audited and published books of accounts, financial statements and the NSE. Data analysis was done by use of regression analysis model with the help of a computer that was used to analyze regression statistics, Analysis of Variances and coefficients or gradients of variables and the constant. The study findings were that there is a significant positive relationship between financial performance of the firm and debt ratio, also that there is no significant relationship between financial performance and tangible assets. The study concluded that a positive relationship exists between capital structure and financial performance of the firm.

The following studies delivered empirical evidence in support of the negative correlation between capital structure and firm performance. Salim and Yadav (2012) investigated the

relationship between capital structure and firm performance. The investigation was performed using panel data procedure for a sample of 237 Malaysian listed companies on the Bursa Malaysia Stock exchange during 1995-2011. The study used four performance measures (including return on equity, return on asset, Tobin's Q and earning per share) as dependent variable. The five capital structure measure (including long term debt, short term debt, total debt ratios and growth) as independent variable. Size is a control variable. The data were divided into six sectors which were construction, consumer product, industrial product, plantation, property, trading and service. The investigation results indicated that firm performance, which is measured by return on assets (ROA), return on equity (ROE), and earning per share (EPS) have negative relationship with short-term debt (STD), long-term debt (LTD), total debt (TD), as independent variable. Moreover, the study found out that there is a positive relationship between the growth and performance for all the sectors. Tobin's Q reports that there are significantly positive relationship between short term debt (STD) and long term debt (LTD). It also reports that total debt (TD) has significant negative relationship with the performance of the firm which similar to the first analysis.

In another study, Rajendran and Nimalthasan (2013) examined capital structure and its impact on firm performance: a study on Sri Lankan listed manufacturing companies. In a way, the present study is initiated on capital structure and firm performance "with the samples manufacturing companies using the data representing the periods of 2008 - 2012. Gross profit, net profit, returns on equity and return on assets were used as the measures of firm performance whereas and debt assets ratio were used as the measures of statistical tests were used includes: descriptive statistics, correlation and regression analyses. The study finding were that gross profit, net profit, return on equity, return on assets, are not significantly correlated with debt

equity ratio and gross profit margin and return on equity are significantly correlated with debt assets ratio as the measure of capital structure and capital structure has significant impact on gross profit and return on equity. The study concluded that an increase in leverage negatively affects return on equity.

In another study, Seetanah, Seetah, Appadu, and Padachi (2014) examined capital structure and firm performance: evidence from an emerging economy. The study empirically assessed the impact of capital structure on performance of Mauritian firms listed on the official market of the stock exchange of Mauritius (SEM) for the period 2005-2011. The study employed both static and dynamic panel data techniques to identify the determinants of firm performance. Robust static panel data techniques were employed to account for the effect of heteroskedasticity and to improve the accuracy of the regression coefficients. Dynamic panel analysis was adopted to capture any effect of endogeneity and to check the robustness of the results obtained using the static panel models. The findings of the study indicated that the main determinants of firm performance are capital structure, firm size, business risk, Mauritius rupee to the Euro (MUR/EUR) exchange rate and Mauritius rupee to the American dollar (MUR/USD) exchange rate. The study concluded that growth opportunities, free cash flow, age of the firm and price of oil are found to insignificant influence on firm performance, and that firm performance is observed to be negatively related to capital structure indicating that firms with lower leverage have better performance thereby supporting the pecking order theory.

In another study, Abdulmalik, Yusuf and Muhammed (2014) examined the effect of capital structure on firm's performance of quoted cement companies in Nigeria. This was achieved by analyzing the relationship between financial performance measured by return on assets (ROA) and return on equity (ROE) with short term debt and long term debt. The study covers four (4)

cement firms in Nigeria for the year 2002 through 2011. Panel data for the selected firms are generated and analyzed using ordinary least square (OLS) as a method of estimation, from where a series of regression analysis were executed for each model. The study findings were that short term debt has significant negative impact on the accounting measure of performance studied. The result also reveals that long term debt has significant effect on return on assets (ROA) but not with return on equity (ROE). The study concluded that capital structure has a significant negative impact on financial performance of quoted cement firms in Nigeria for the period under study.

In another study, Hasan, Ahsan, Rahaman, and Alam (2014), examined the influence of capital structure on firm performance with evidence from Bangladesh. The investigation was performed on a sample of 36 Bangladeshi firms listed in Dhaka Stock Exchange during the period 2007–2012. They had used four performance measures; earnings per share (EPS), return on equity (ROE), return of asset (ROA) and Tobin's Q; as dependent variables and three capital structure ratios; short-term debt, long-term debt and total debt ratios; as independent variables. Using pooling panel data regression method, they found that earning per share (EPS) is significantly positively related to short-term debt while significantly negatively related to long-term debt. There is significant negative relation between return on asset (ROA) and capital structure. On the other hand, there is no statistically significant relation exists between capital structure and firm's performance as measured by return on equity (ROE) and Tobin's Q. Nonetheless, aside from the positive relation between earning per share (EPS) and short-term debt to total assets (STDTA), the study concluded that capital structure has negative impact on firm performance which is consistent with the proposition of pecking order theory.

Locally, Arimi (2010) examined the relationship between capital structure and financial performance: a study of firms listed under industrial and allied sector at the Nairobi Stock

Exchange (NSE). The research design was a descriptive survey. The population of the study consisted of all the companies quoted on the NSE under the Industrial and Allied Sector. All the companies under this sector were sampled except for those that were not continuously listed during the period. Secondary data was utilized for the study. Data was collected by the aid of checklist. Data analysis was done by forming a trend analysis to enable determination of the impact of debt equity ratio on ROE. Yearly debt equity ratio, the proxy for capital structure, and ROE were calculated and tabulated. Additionally a regression analysis on DER and ROE was performed to determine the strength and direction of the DER-ROE relationship. The data was presented in tables and graphs. The study findings were that a negative relation was noted between debt equity ratio and return on equity (ROE), thus an increase in debt equity ratio caused a decrease in return on equity (ROE). The study concluded that there is a negative relationship between debt equity ratio and return on equity. The findings are consistent with the traditional capital structure theory. The pecking order theory predicts that firms will use retentions first, then debt and equity issues as a last resort. The order of preference reflects the relative costs of various financing options. Less profitable firms facing a positive net present value (NPV) investment opportunity will be more willing to use external funds if cash flows are weak. Therefore, there will be a negative relationship between leverage and profitability.

In another study, Kuria (2010) investigated the determinants of capital structure of companies quoted in the Nairobi stock exchange (NSE). The study was conducted on 35 commercial banks in Kenya which were in operation in Kenya for the five years of study from 2008 to 2012. The various ratios of these commercial banks were computed from the various data collected from the data extracted from their financial statement for the period. The data was then analyzed using linear regression models using SPSS19 to establish if there is any significant relationship of

capital structure and the financial performance of these commercial banks. The study findings were that firm characteristics such as profitability and tangibility are significantly negatively related to leverage as also liquidity growth and taxation, but are insignificant. While firm risk was seen to have a significant positive relationship but an insignificant one for dividend policy and non-debt tax shield. The study concluded that the financing decisions of listed firms seem to support both the pecking order theory and static trade-off theory.

In another study, Siro (2013) looked at the effect of capital structure on financial performance of firms listed at the Nairobi Securities Exchange (NSE). The financial performance was measured in terms of return on equity while capital structure was measured in terms of debt ratio. The period of study was 2012. It is important to note that during this period of study, Kenya experienced political anxiety, leading to uncertainty in the securities market. This presents an interesting period of study considering the ups and downs of the trade cycle. The population of study consisted of all the 61 listed firms duly registered with capital market authority of Kenya in 2012. Secondary data used was obtained from the Nairobi securities exchange handbook and also in firm's publications. Data analysis was done by use of regression analysis model with the help of Statistical Package for Social sciences Software. The study findings were that there was an inverse relationship between capital structure and financial performance of listed firms in securities exchange in Kenya. The study indicated that the higher the debt ratio, the less the return on equity which therefore supports the need to increase more capital injection rather than borrowing, as the benefits of debt financing are less than its cost of funding.

In another study, Njagi (2013) examined the relationship between capital structure and financial performance of agricultural firms listed at Nairobi Securities Exchange (NSE). The study sample was 7 agricultural firms listed at the Nairobi Securities Exchange (NSE). The study being

descriptive in nature the quantitative method of data analysis and inferential analysis was used to analysis techniques. The study findings were that capital structure of a firm influences the financial performance of agricultural firms listed at the Nairobi Securities Exchange (NSE). The study concluded that there was a positive relationship between capital structure (measured by short-term debt and revenue) and financial performance, also there was a negative relationship between capital structure measured by long term debt and financial performance of agricultural companies listed at the Nairobi Securities Exchange (NSE).

In another study, Gichangi (2014) examined the relationship between capital structure and profitability of listed non-financial firms in Kenya. The study adopted a descriptive research design. The target population of this study comprised of all the 40 listed non-financial firms. A census was carried out due to the small number of non-financial firms in Kenya. The study used secondary data extracted from annual financial reports. Descriptive data analysis techniques and regression were used to analyse the data. The study findings were that long-term liability to equity indicated an inverse relationship to profitability and that the firm's profitability, measured by return on equity (ROE) was positively correlated with the short-term debt and long-term debt. The study concluded that there is a negative relationship between capital structure and profitability. The results are in line with the pecking order theory and information asymmetrical theory.

The following studies delivered empirical evidence in support of no correlation between capital structure and firm performance, Okiro (2014) examined the relationship between corporate governance, capital structure, regulatory compliance and performance of firms listed at the East African Community securities exchange. A census survey was carried out on all the 98 listed companies between 2009 and 2013 in Nairobi Securities Exchange, Uganda Securities

Exchange, Dar es Salaam Stock Exchange and Rwanda Stock Exchange. Out of the 98 firms that were targeted, 56 were analyzed constituting 57%. The study developed a Corporate Governance Index as a proxy for corporate governance and the index constitutes board structure and composition, ownership and shareholding, transparency, disclosures and auditing, board remuneration and corporate ethics. The accounting and market based measures were used as firm performance measurements and for comparison purposes the cost of capital was also considered. Hypotheses were tested using regression analysis and Pearson's Product Moment Correlation analysis. Descriptive statistics were computed for the listed companies and the main characteristics of the study variables. The study findings were that a relationship exists between capital structure and return on assets (ROA), another finding was that there is no significant relationship between capital structure and firm performance as measured by Tobin's Q. The study concluded that there is a positive significant relationship between capital structure and firm performance as measured by return on assets (ROA) and that capital structure had no significant relationship on firm performance as measured by Tobin's Q.

In another study, Muiru and Kamau (2014) did an assessment of capital structure decisions by small and medium enterprises in Kenya. The study employed survey research design. This involved collecting primary data on small and medium firms in Kenya, using structured questionnaires. To obtain a representative sample, a survey sample of thirty businesses was selected using simple random sampling. Data was collected from both secondary and primary sources. The secondary data derived from the annual financial statements. For the primary sources, the data was obtained using self-administered structured questionnaires, whereby the respondents were asked to complete questionnaires themselves. In some cases one-on-one interviews were done to extract some important information. The study findings were that age,

profitability, size, growth opportunities and tangible assets of the business greatly determine the leverage of the business. The study concluded that the age of a business has no significant impact in determining the capital structure of SMEs.

In another study, Mwangi and Birundu (2015) examined the effect of capital structure on the financial performance of small and medium enterprises in Thika sub-County, Kenya. The study was conducted on 40 SMEs which were in operation for the five years 2009 to 2013, using multiple linear regression. The study findings were that there were no significant effect of capital structure, asset turnover and asset tangibility on the financial performance of SMEs in Thika sub-County, Kenya. The study concluded that capital structure, asset turnover and asset tangibility do not have significant effects on financial performance of SMEs.

2.5 Summary of Literature Review

With regards to a firm's capital structure, the MM theorem opened a literature on the fundamental nature of debt versus equity. The capital structure of a firm is the result of the transactions with various suppliers of finance. In the perfect capital market world of MM, costs of different forms of finance do not vary independently and therefore there is no extra gain from opportunistically choosing among them.

Various theories of capital structure differ in their interpretation of these factors. Each emphasizes some costs and benefits of alternative financing strategies, so they are not designed to be general. The trade-off theory suggests that taxation and deadweight bankruptcy costs are important for the capital structure. The pecking order theory developed by Myers (1984) suggests that the financing order of firms, such as retained earnings, debt, and then equity, are important for the corporate capital structure. Both theories having weak parts, it is not surprising

that there is active research on this matter. In the market timing theory, there is no optimal capital structure, so market timing decisions accumulate over time into the capital structure outcome. From this, the market timing theory appears to have the most explanatory interest. Further, the recent notion of the market timing hypothesis suggests that the timing of corporate financing based on the capital market conditions is the key for the capital structure

This chapter reviews the relevant literature in relation to the research questions presented in this study. It reveals that there exists a positive relationship between capital structure and financial performance as found by Oguna (2014) and Tale (2014), a negative relationship between capital structure and financial performance as found by Siro (2013) and Njagi (2013), while no relations is found between capital structure and financial performance by Muiro and Kamau (2014) and Mwangi and Birundu (2015). Clearly, these results are mixed and therefore not conclusive. On the other hand, it has shown that the capital structure can help in raising or bringing down the firm value due to the kind of leverage and firm holds and where it sources its finances. Due to lack of common agreement on what constitutes an optimal capital structure, it is significant to examine the effects of capital structure on the financial performance of firms. In Kenya, few empirical studies have been done to establish the relationship between capital structure and financial performance in the real estate sector. Motivated by this gap, this study therefore seeks to examine the effect of capital structure on financial performance of real estate firms. The study attempts to answer this question; does capital structure have an effect on financial performance of real estate firms?

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology to be used in carrying out the study in obtaining information on the relationship between capital structure and financial performance of real estate firms in Kenya. The chapter also describes and explains the research instrument that was used in the study. Aspects covered included research design, population, data collection methods, test of significance and data analysis.

3.2 Research design

The research design that was adopted for this study was a descriptive research design. This type of design involves an extensive well focused literature review and identification of the existing knowledge gap. Descriptive research design is concerned with finding out “what is” and can either be quantitative or qualitative since it involves gathering data that describes events and then organizes, tabulates, depicts and describe the data collection (Iraya & Musyoka, 2013). The descriptive research design to be used is correlation to examine the relationship between two or more variables. Kothari (2004) refers to research design as a blue print through which research operations sail smoothly which makes the research as efficient as possible in terms of effort, time and money and at the same time reaping out maximum information possible.

3.3 Population

The target population in this study was 93 real estate firms in Kenya referred to in appendix 1. This target group has been chosen, because this is a homogenous group having diverse preferences, yet are operating under similar conditions, which can be identified and which bear similar characteristics of capital structure. They are also more likely to have tried and experimented with all manner of capital structure strategies and would therefore be in a better position of giving valid results.

3.4 Sample

The sample size is 28 real estate firms in Kenya referred to in appendix 1. The sample size is justified by 30% since it minimizes the duplicity and redundancy of the data to be obtained and the size would be large enough to ensure collection of comprehensive data. The study adopted a simple random sampling to select 28 real estate firms in Kenya referred to in appendix 1. According to Orodho (2002), a sample is selecting a given number of subjects from a defined population as representative of that population. Any statements made about the sample should also be true of the population. Mugenda and Mugenda (1999) states that, a sample of 30% of the population, is considered representative for a population less than 500. The sample chosen enabled the researcher to analyze real estate firms to determine the relationship that exists between capital structure and financial performance.

3.5 Data collection

This study used secondary data that was collected from financial statements of real estate firms to find information needed for this study. The type of data collected include return on asset, long term debt, short term debt and total assets; size of the company is measured by natural logarithm of total assets, while growth was measured by the change in total assets. The period of analysis was 5 years. The sample real estate firms were requested to provide their financial statements to facilitate extraction of the data to use in the study. The data collected was captured in excel and Statistical Package for Social Sciences for the purpose of data analysis.

3.5.1 Research model

The study used the following analytical model to conceptualize if capital structure has some effect on financial performance of real estate firms in Kenya. Regression model was used since the study had more than two independent variables.

3.5.1.1 Analytical model

To establish the effects of capital structure to financial performance of real estate firms in Kenya, the study used the following regression model adopted from Salim et al(2012). This is because it is similar to previous literature (Abor, 2005, Saeedi & Mahmoodi, 2011, Ebaid, 2009) where financial leverage was measured in the study by return on assets(ROA) measured by the ratio of short term debt to total assets (STD), the ratio of long term debt to total asset (LTD) and total debt to total asset (TD). The control variable (Ramaswammy, 2001; Frank and Goyal, 2003; Jermias, 2008, Ebaid, 2009,) suggest that the firm's size may influence its performance; a larger

firm may have more capacity and capabilities. Therefore this study controls the differences in firm's operating environment by including the size variable in the model. Size is measured by the log of total assets of the firm and included in the model to control for effects of firm size on dependent variable.

$$ROA_{i,t}(\text{performance}) = \beta_0 + \beta_1LTD_{i,t} + \beta_2Size_{i,t} + \beta_3Growth_{i,t} + \beta_4TD_{i,t} + \beta_5STD_{i,t} + \epsilon_{i,t}$$

Where:

$STD_{i,t}$ = short term debt to total assets for firm i in year t

$LTD_{i,t}$ = long term debt to total assets for firm i in year t

$TD_{i,t}$ = total debt to total asset for firm i in year t

$Size_{i,t}$ = logarithm of total assets for firm i in year t

$Growth_{i,t}$ = changes in total assets

$\epsilon_{i,t}$ = the error term

3.5.2. Test of significance

The analytical model helped in determining if there was a relationship between capital structure and financial performance of real estate firms in Kenya. The collected data was subjected to the analysis tools of SPSS (Statistical Package for Social Sciences). The data collected from secondary sources were analyzed using this model; the ANOVA test was used to determine the impact independent variables have on the dependent variable in a regression analysis. ANOVA provides a statistical test of whether or not the means of several groups are equal. ANOVAs are

useful in comparing (testing) three or more means (groups or variables) for statistical significance

3.6 Data analysis

A descriptive analysis was employed. Quantitative method of data analysis was used. Data was coded and thereafter analyzed using Statistical Package for Social Sciences (SPSS) program version 14 and presented using tables to give a clear picture of the research findings at a glance. The researcher preferred SPSS because of its ability to cover a wide range of the most common statistical and graphical data analysis. The results were presented in tables. Correlation and regression analysis was used to establish the association and effect of independent variables and the dependent variable. A linear regression model was used in determining the level of influence the independent variables has on the dependent variable as shown above in the analytical model.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter covers data presentation and analysis. The study objective was to establish the relationship between capital structure and financial performance of real estate firms in Kenya. The analysis is based on data collected by the researcher from a sample of 28 real estate firms found in appendix 1. The data for this study was obtained from annual financial statements of real estate firms.

4.2 Descriptive statistics

This section describes the descriptive statistics of the data analyzed for five years. The table below summarizes the findings:

Table 4.1: Descriptive statistics table

	ROA	TD	LTD	STD	Growth	Size
Mean	0.51716	5.584852	4.864175	0.720676	1.042782	20.81223
Median	0.069812	0.623488	0.393558	0.172699	0.209726	21.32638
Standard Deviation	2.972492	36.32003	34.21129	2.953082	3.017889	1.608863
Variance	8.835707	1319.145	1170.413	8.720696	9.107653	2.58844
Kurtosis	21.96051	81.37795	88.1944	55.86457	50.76125	6.849871
Skewness	3.521434	8.820018	9.171863	7.198614	6.6687	-2.51865
Range	31.08223	369.1873	357.2225	27.07236	27.08769	7.905416

Minimum	-12.8601	0.009575	0.007946	0.001277	0	14.13121
Maximum	18.22213	369.1969	357.2304	27.07363	27.08769	22.03662
Observations (n)	140	140	140	140	112	140

Source: Researcher's Findings

Table 4.1 above shows that return on assets (ROA) had a mean of 0.517, with a minimum of (-12.860), a maximum of 18.222, skewness 3.521 and kurtosis +21.961. Comparatively, total debt had a mean of 5.585, minimum of 0.010, maximum of 369.197, skewness of 8.820 and kurtosis of +81.378. Growth had a mean of 1.043, minimum of 0, maximum of 27.088, skewness of 6.669 and kurtosis of +50.761.

An analysis of the mean shows that the sample of real estate firms prefer long term debt compared to short term debt with a mean of 4.864 and 0.721 respectively. An analysis of the standard deviation shows that total debt and long term debt are dispersed from the mean as 36.320 and 34.211 respectively are not close to their mean of 5.585 and 4.864 respectively.

4.3 Regression analysis

Regression analysis was used to test the relationship between capital structure (measured by return on assets (ROA)) and financial performance of real estate firms in Kenya. Return on assets (ROA) was the dependent variable while financial performance (represented by total debt, long term debt and short term debt) was the independent variable. Other control variables were the asset growth and asset size.

Table 4.2 Regression analysis table

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Significance
		Standard error	β		
1	(Intercept)	0.228858865	0.623374576	2.723838452	0.0007306564
	TD	0.179818294	-1.295281869	-7.203281946	0.03734511
	LTD	0.229578098	1.326748601	5.779073054	0.004955938
	STD	0.127665481	0.663457536	5.196843606	0.007317067
	Growth	0.068923822	-0.017181898	-0.24928823	0.0803516725
	Size	0.092106793	-1.455153993	-15.79855236	0.021173332

Source: Researcher's Findings

Table 4.2 above presents the results of testing the relationship between capital structure measured by ratio of total debts to total assets, ratio of long-term debts to total assets and financial performance measured by Return on Assets (ROA). The study sought to establish a linear regression function of the variables with return on assets as the dependent variable. From the above table the study established the following regression equation:

$$ROA_{i,t}(\text{performance}) = \mathbf{0.623} + \mathbf{1.327LTD}_{i,t} - \mathbf{1.455Size}_{i,t} - \mathbf{0.017Growth}_{i,t} - \mathbf{1.295TD}_{i,t} + \mathbf{0.663STD}_{i,t} + \epsilon_{i,t}$$

From the above equation the study found that holding total debt, long-term debt and short-term debt to constant zero, ROA (performance) of the firm would be 0.623. In table 4.2 above, the standardized coefficients are shown on the fourth column with an intercept of 0.623 which shows

that if all the three variables (total debt, long-term debt and long-term debt) were to be equated to zero then ROA will be 0.623. From table 4.2 above, total debt beta coefficient is -1.295 which implies that if the total debt of the firm was to be increased by 1 unit of natural logarithm of assets then a corresponding decrease of ROA by -1.295 will decrease too. These findings showed that there is a negative relationship between return on assets (ROA) and total debt.

The long-term debt beta coefficient is 1.327 which implies that if the long-term debt of the firm was to be increased by 1 unit of natural logarithm of assets then a corresponding increase of ROA by 1.327 will increase too. These findings showed that there is a positive relationship between return on assets (ROA) and long-term debt. The longer the debt usage by the firm the greater the return on assets due to debt tax shield. The same results are found for an increase in one unit of short-term debt, as it will translate to 0.663 increases to return on assets (ROA), due to the fact that short-term debts have immediate impact and are repaid with ease and thereby carry less risk.

4.4 Model results

Table 4.3 below illustrates the regression summary.

Table 4.3 Model results table

Model	R	R squared	Adjusted R squared	Standard error of estimate
1	0.583517434	0.340492596	0.320951636	2.449463636

Source: Researcher's Findings

The adjusted r squared is also known as the coefficient of determination and it shows how a change in the independent variable results affects the dependent variable. The adjusted r squared was found to be 0.321 which means that there was 32.1% variation in return on assets (ROA) due to changes in total debt, short-term and long-term debt. The correlation coefficient tells us the strength of the relationship between the variables. The study found out that the correlation coefficient r was 0.584 thus there is a significant positive relationship between total debt, short-term, long-term debt and return on assets (ROA). The r squared equally confirmed that there was a significant correlation between the return on asset (ROA) and total debt, short-term, long-term debt, with 34.04% of the return on assets (ROA) depending on the changes in short-term debt, long-term debt and total debt.

4.5 Inferential statistics

With inferential statistics, one is trying to reach conclusions that extend beyond the immediate data alone. For instance, we use inferential statistics to try to infer from the sample data what the population might think. Or, we may use inferential statistics to make judgments of the probability that an observed difference between groups is a dependable one or one that might have happened by chance in this study. Thus, we use inferential statistics to make inferences

from our data to more general conditions; we use descriptive statistics simply to describe what is going on in our data (Trochim, 2001).

4.5.1 Correlation analysis/matrix

The Pearsons correlation matrix is useful for analyzing data that is non-categorical in nature and uses interval measurement scale (Field, 2009). The relevant results are as follows.

Table 4.4: Correlation matrix table

	ROA	TD	LTD	STD	Growth	Size
ROA	1					
TD	0.416235	1				
LTD	0.422614	0.99828	1			
STD	0.223319	0.734004	0.692929	1		
Growth	-0.03569	-0.03357	-0.03319	-0.02835	1	
Size	-0.61934	-0.51528	-0.49708	-0.57878	-0.02114	1

Source: Researcher's Findings

Table 4.4 above indicates that there exists a positive relationship between return on assets and total debt (TD) of 0.416. Similarly the relationships between return on assets (ROA) and long-term debt (LTD), and that between return on assets (ROA) and short-term debt (STD) is positive i.e. 0.422 and 0.223 respectively. However, the relationship between return on assets and Growth is negative i.e. (0.036). Similarly the relationship between return on assets and size is negative i.e. (0.619). This implies that the study variables considered i.e. total debt (TD), long term debt (LTD) and short term debt (STD) play a crucial role of influencing financial performance of real estate firms in Kenya.

4.5.2 Analysis of variances (ANOVA) model analysis

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and forms a basis for tests of significance. The "F" column provides a statistic for testing the hypothesis that $H_1: \beta_1 \neq 0$, against the null hypothesis that $H_0: \beta_1 = 0$.

Table 4.5 Anova model table

Model	Sum of Squares	Df	Mean square	F	Significance
1	Regression	4	104.5451204	17.42455815	0.0150396
	Residual	135	5.999872106		
	Total	139			

Source: Researcher's Findings

The test statistic is the ratio: the mean square model term divided by the mean square error term.

When the mean square model term is large relative to the mean square error term, then the ratio is large and there is evidence against the null hypothesis. i.e

$104.5451204/5.999872106=17.42455815$ hence $\beta_1 = 0$ fails meaning $\beta_1 \neq 0$ and therefore there exists a significant positive relationship in the model.

4.6 Interpretation of the findings

The study sought to determine the relationship between capital structure and financial performance of real estate firms in Kenya. Long-term debt, short-term debt, total debt, size and growth were the independent variables representing capital structure while return on assets was the dependent variable representing financial performance. The return on assets (ROA) measures how effective the firm is utilizing its assets in making earnings. That is earning per unit of a given asset.

From table 4.2, Total debt has a negative relationship with Return on Assets consistent with studies by Abdulmalik, Yusuf and Muhammed (2014), Hasan, Ahsan, Rahaman, and Alam (2014) and Siro (2013). The table 4.2 results show that, long-term debt has a positive relationship

with Return on Assets consistent with studies by Chang, Wang, Lee and La (2014), Maigua (2014) and Oguna (2014) this result is in line with the. The table 4.2 results show that, short-term debt has a positive relationship with Return on Assets (ROA) consistent with studies by Yat Hung, Ping Chuen Albert and Chi Man Eddie (2002) Mwangi (2010) and Maigua (2014) this result is in line with the information asymmetrical theory.

From the findings on the adjusted R^2 the study reveals that there was variation of financial performance of real estate firms due to changes in total debt, short-term and long-term debt. The study found out that there was a significant positive relationship between short term debt (STD) and return on assets (ROA) and a negative relationship between long-term debt (LTD) and return on assets (ROA).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a discussion for the research findings, conclusions and the recommendations from the study. The discussions, conclusions, and recommendations were made in accordance with the research objective.

5.2 Summary

The study sought to determine the relationship between capital structure and financial performance of real estate firms in Kenya. The study focused on 28 real estate firms and collected data for 5 years from the annual reports of the firms. SPSS was then used to analyze the data using regression analysis, correlation analysis and descriptive analysis. The model was fit to explain the relationship as the F-statistic of 17.424 was significant at 5% level, $p = 0.015$. This model was therefore good enough to explain how return on assets (ROA) influence the relationship between capital structure and financial performance of real estate firms in Kenya.

The main findings of the study was that total debt was found to have a negative relationship while long-term debt and short-term debt was found to be positively related to Return on Assets as shown in table 4.2. The study found that the standardized coefficient was 0.416, 0.422 and 0.223 for total debt, long-term debt and short-term debt respectively, thus there was a positive relationship between them and the financial performance as measured by return on assets (ROA).

The R squared equally confirmed that there was significant correlation between the return on assets and total debt, Long-term debt and short term debt with 34.04% of the return on assets changes depending on the changes in total debt, short term debt and long term debt (table 4.3)

5.3 Conclusion

The study determined the relationship between capital structure and financial performance of real estate firms in Kenya. In conclusion the findings of the study reveal that total debt has a negative relationship with return on assets of real estate firms in Kenya for the period under study. The findings also revealed that long-term as well as short-term debt have a positive impact on return on assets (ROA) of real estate firms in Kenya for the period under study. From the findings the study concludes that capital structure decisions affect financial performance of real estate firms in Kenya therefore care should be taken by real estate fund managers in considering the level of debt. The capital structure decision is crucial for any business organization. The decision is important because of the need to maximize returns to various organizational subsidiaries, and also because of the effects of such a decision has on an organization's ability to deal with its competitive environment.

5.4 Recommendations for policy

The study recommends that debt is a good determinant of real estate financial performance therefore financial managers of real estate firms should reduce their debt levels as it has an effect on return on assets. The study also recommends that shareholders of real estate firms should be concerned when the level of long term debt rises as this will have an effect on their returns. The study recommends that the Capital Markets Authority should monitor the real estate sector as more listings are made on the Nairobi Securities Exchange.

5.5 Limitations of the study

There was a limitation on the time to conduct the research as it was part of an academic program. The collection of secondary data also posed a challenge as secondary data was collected from real estate firms that are not listed or publicly traded. This study concentrated on the real estate

sector therefore it is not replicable to other sectors of the Kenyan economy. There were limited sources of local research on the effect of capital structure in the real estate sector.

5.6 Suggestions for further research

This study concentrated on Kenyan firms, other markets in the east Africa region could be incorporated to the scope of the study. This study focused on the real estate sector, a suggestion for further research could be to replicate this to other sectors of the economy. This study used a five year period of analysis, a suggestion of further research could be to increase the period of analysis to ten years. The used three variables to represent capital structure, a suggestion for further research could be to include more variables to measure capital structure.

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APPENDIX I

Real Estate firms in Kenya as at December 2014

No.	NAME OF FIRM	ADDRESS AND CONTACTS
1.	Acorn Group Kenya	Lavington, Nairobi Tel 2592671 Email: info@acorngroupafrica.com
2.	Amalgamated Properties K Ltd	Hughes Building, Nairobi Tel 20 340666
3.	Amazon Valuers	Kenyatta Ave Nairobi Tel 0722 285 272
4.	Askim Management Services	Ruprani Hse, Nairobi Tel 2223678
5.	Bannie & Archer Valuers Ltd	Ambank Hse Nairobi Tel 254 20 223476
6.	Blueline Properties	Wendy Courts, Nairobi Tel 254 20 4441195
7.	Castle Land Properties Consultants	Equity Plaza, Nairobi Tel 254 20 240622
8.	Charcon Properties	Phoenix Hse, Nairobi Tel 0721 942 984 Email: info@charconproperties.com
9.	Chigwel Holding Ltd	Parklands Hse, Nairobi Tel 254 700 000 802
10.	Citi Scape Valuers Ltd	Occidental plaza, Westlands, Nairobi Tel 0708 848 481 Email: info@citiscapevaluers.com
11.	Continental Villas Ltd	Ambal Hse, Mombasa Tel 254 412 319795
12.	Crystal Valuers Ltd	Bruce Hse, Nairobi Tel 254 20 312024
13.	Daebak Investments	Langata Rd, Nairobi Tel 0725 327 431
14.	Daytons Valuers Ltd	Krishna Centre, Nairobi 254 722 291 159
15.	Deca Shelter Agencies Co. Ltd	Uniafric Hse, Nairobi Tel 254 20 2198084
16.	Developing Africa Ltd	Nairobi Tel 254 20 2325041
17.	Diamond Park Developers	Jamia Shopping Mall, Nairobi Tel 254 721 625 664
18.	Dominion Valuers Ltd	Hazina Towers, Nairobi Tel 254 20 2252334
19.	Dream Properties	I&M Building, Nairobi Tel 254 20 2466595
20.	East Gate Apartment Limited	Kimathi Hse, Nairobi Tel 254 0724 214 254
21.	Easy Properties Ltd (K)	Tulip Hse, Msa Rd, Nairobi Tel 0700 735 640 / 0733 893 030 Email: info@easypropertieskenya.com

22.	Ena Property Consultants Ltd	Mercantile Hse, Nairobi Tel 254 20 246703
23.	Euro Trust Real Estate	Kalair Centre 8, Nyali, Mombasa Tel 254 414470999 / 254 712 672 274
24.	Garun Real Estate Investments Ltd	Eastleigh, Nairobi Tel 254 721 883 188 Email: garuninvestment.ltd@gmail.com
25.	Gimco Ltd	Kiambere Rd, Nairobi Tel 254 20 2626933 Email: info@gimcoltd.com
26.	Habitat Realtors International Ltd	Rehema Hse, Nairobi Tel 254 722 772 295 / 254 736 705 330 Email: info@habitatrealtors.net
27.	Hadar Ltd	Nairobi Email: info@hadar.co.ke
28.	Hass Consult Real Estate	ABC Place, Nairobi Tel 254 20 4446914 Email: info@hassconsult.co.ke
29.	Hasseris Estate Management Services	Queensway House, Nairobi Tel: 254 20 2128881
30.	Hectres and Associates	Hughes Building, Nairobi Tel 020 240058
31.	Highland Valuers Ltd	Rehani House, Nairobi Tel 254 20 241975
32.	Home Afrika Ltd	Morning Park, Ngong Rd, Nairobi Tel 254 020 2772000 Email: info@homeafrika.com
33.	Horeria & Co. Ltd	Standard Building, Nairobi Tel 2249410
34.	Horizon Valuers	Uchumi Hse, Nairobi Tel 254 20 2230460
35.	Interlink Real Estate Ltd	Nacico Plaza, Nairobi Tel 254 731 313 070
36.	Ivory Homes Ltd	Gilfillian Hse, Nairobi Tel 254 732 660 340
37.	Jaken Agencies	Ruprani Hse, Nairobi Tel 020 2124609 / 020 2230775 / 0722 988 625
38.	Jimly Properties Ltd	Contrust Hse, Nairobi Tel 254 20 2242804
39.	Kenya Private Developers Association	Fatima Flats, Kilimani, Nairobi Tel 254 737 530 290 Email: admin@kpda.or.ke
40.	Kiragu and Mwangi Ltd	Mpaka Hse, Westlands, Nairobi Tel 254 727 111 444 Email: mail@kiraguandmwangi.co.ke
41.	Knight Frank Kenya Ltd	Lions Place, Nairobi Tel 254 20 4440174

42.	Komarock Ranching Sacco Ltd	Mwalimu Centre, Nairobi Tel 0727 806 687
43.	KKRUSS Real Estate Ltd	Gupta Building, Mombasa Tel 254 41 2003690 Email: info@kruss-ltd.com
44.	Lamka Properties	Nanak Hse, Nairobi Tel 020 343771
45.	Landmak Realtors Ltd	Anniversary Towers, Nairobi Tel 254 20 2220019 Email: info@landmark.co.ke
46.	Lloyd Masika Ltd	Norfolk Towers, Nairobi Tel 254 2215900 Email: info@lloydmasika.co.ke
47.	Lukenya Greens Ltd	Queens Way Hse, Nairobi Tel 254 20 8055101 Email: info@lukenyagreens.com
48.	Madison Properties Ltd	Twiga Towers Ltd, Nairobi Tel 254 724 089 225 Email: info@madisonpropertygroup.com
49.	Mamuka Valuers Management Ltd	Ruprani Hse, Nairobi Tel: 254 020 2212312 Email: info@mamukavaluers.com
50.	Manclen Management Ltd	Hughes Building, Nairobi Tel 254 20 311311
51.	Manyatta Real Estate	
52.	Masterways Properties	Old Mutual, Nairobi Tel 254 20 310459
53.	Mencia Management Ltd	Jethalal Chambers, Biashara Str. Nairobi Tel 254 20 341924
54.	Metrocosmo Valuers Ltd	Hughes Building, Nairobi Tel 254 20 228398
55.	Neptune Shelters Ltd	Mpaka Plaza, Nairobi Tel 254 20 4450747
56.	Norwich Union Properties Ltd	Norwich Union, Nairobi Tel 254 20 316113 Email: info@norwichunion-properties.com
57.	Palm Golding Properties Ltd	Westlands, Nairobi Tel 254 020 2370090 Email: kenya@palmgolding.co.ke
58.	Paragon Property Consultants	Twiga Towers, Nairobi Tel 254 20 2227060
59.	Paul Wambua Valuers	Electricity Hse, Mombasa Tel 254 726 802 530
60.	Pinnacle Valuers Ltd	Post Bank Building, Nairobi Tel 254 20 2211802
61.	Pink Properties Developers	Kenbanco Hse, Nairobi Tel 254 720 695 401
62.	Premier Reality Ltd	Madonna Hse, Nairobi Tel 254 4440258 Email:

		info@premier-realty.co.ke
63.	Prestige Estate Ltd	Rehema Hse, Nairobi Tel 254 20 2247571
64.	Real Management Services	Twiga Towers, Nairobi Tel 254 721 582227
65.	Realkn International Ltd	Consolidated Bank Hse, Nairobi Tel 254 20 343663
66.	Riparo Properties Limited	Lavington, Nairobi Tel 0727 008 017
67.	Shelter Management Valuers Ltd	Common Wealth Hse, Nairobi Tel 020 2251230
68.	Sparrow Property Services Ltd	Reliance Centre Wood vale, Nairobi Tel 254 20 4445578
69.	Sternon Real Estate	Sarit Centre, Nairobi Tel 254 20 8045650
70.	Summer Ville Development Company Ltd	Haile Selasie, Nairobi Tel 254 20 2729788
71.	Super Contractors Ltd	Medequip Centre, Nairobi Tel 254 20 552010
72.	Super Shelter Construction Ltd	Afya Centre, Nairobi Tel 254 20 217495
73.	Superior Construction Co. Ltd	Industrial Area, Nairobi Tel 020 558855
74.	Suraya Developers and Consultant	Lower Kabete Rd, Nairobi Tel 254 20 4185056
75.	Swapno Properties Construction Ltd	Lavington, Nairobi Tel 254 20 2190082
76.	Swing Kenya Ltd	Bruce Hse, Nairobi Tel 254 20 2222901
77.	Tafuta Development Company Ltd	Nyota Building, Nairobi Tel 254 20 246295
78.	Tagaka Holdings Ltd	Lower Kabete Rd, Nairobi 020 3751957
79.	Tamarind Properties	Haven court, Nairobi Tel 254 20 4442455 Email: sales@tamarindproperties.co.ke
80.	Temus Real Estate Solution	Ring Rd, Parklands, Nairobi Tel 254 20 4452461
81.	Thiomi Ltd	Liason Hse, Nairobi Tel 254 20 2710116
82.	Tilisi Developments Ltd	Tilisi Developments Ltd Maksons Plaza Parklands Road Nairobi, Kenya.
83.	Toco Properties Ltd	Kimathi Hse, Nairobi Tel 254 20 2215460
84.	Traca Management Services Ltd	Rattansi Koinange Str. Nairobi Tel 254 721 439

		984
85.	Trident Estate	Fortis Towers, Westlands, Nairobi Tel 254 700 002 222
86.	Tysons Ltd	Jubilee Insurance Hse, Nairobi Tel 254 20 2222011
87.	Urban Properties Consultant and Developers	Kimathi Hse, Nairobi Tel 020 2241298
88.	Valley Ranch Ltd	Eagle Nest Hse, Nairobi Tel 254 20 8022119
89.	Valley Zone Ltd	Ambank Hse, Nairobi Tel 254 20 2469381
90.	Verity Property Ltd	Soin Arcade, Nairobi Tel 254 20 2025353
91.	Vidmerck Ltd	NSSF Building, Mombasa Tel 254 20 2211308
92.	Villa Care Kenya Ltd	Rehema Hse, Westlands, Nairobi Tel 020 4447444 Email: info@villacarekenya.com
93.	Wainaina Real Estates Ltd	Hughes Building, Nairobi Tel 254 20 2227207
94.	Zenith Management Valuers Ltd	Phoenix Hse, Kenyatta Avenue, Nairobi Tel 254 20 2247435 Email: info@zenithvaluers.com

Source: Office of the Registrar of companies, 2014