DETERMINANTS OF CAPITAL STRUCTURE AND THEIR INFLUENCE ON VALUE OF INVESTMENT FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE, KENYA

\mathbf{BY}

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DECLARATION

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DEDICATION

I dedicate this research project to my family for their patience and their full support during this time when I was working on it. I also dedicate this research to scholars in the field of Finance and wish them well in their endavours.

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First, I thank the Almighty God for giving me the strength and courage throughout the period of my studies and for his guidance. My acknowledgement also goes to my University Lecturers and specifically Mr. James Ng'ang'a who has patiently given his profound guidance during this tie. Lastly, I wish to acknowledge my colleagues and classmates whom we have walked this journey together. God bless you all.

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LIST OF ABBREVIATIONS

AIM - Alternative Investment Markets Segment

CEE - capital employed efficiency

GMM - Generalized Method of Moment

HCE - human capital efficiency

KSE - Karachi Stock Exchange

MIMS - Main Investments Market

MM - Modigliani and Miller

NPV - Net Present Value

NSE - Nairobi Securities Exchange

NSE - Nigerian Stock Exchange OE

- operational efficiency

POT - Pecking Order Theory

SCE - efficiency of structural capitally

TSE - Taiwan Securities Exchange

USD - United States Dollar

VACA - capital employee efficiency

VAHU - human capital efficiency

VAIC - Value-Added Intellectual Coefficient

VIF - Variance Inflation Factor

ABSTRACT

The main goal of a firm is to maximize the wealth and firm's value, which means also to maximize the wealth of shareholders. Throughout the literature, debates have focused on whether there is an optimum capital structure for an individual Firm or whether the proportion or level of debt usage is irrelevant or relevant to the Firm's value. The purpose of this study was to assess the determinants of capital structure and their influence on value of investment firms listed at the Nairobi Securities Exchange, Kenya. The independent variables used in this study were leverage, liquidity, asset tangibility and growth opportunities, while the dependent variable was the value of the investment firms listed in the Nairobi Securities Exchange. This research was anchored on the following theories that explain the relationship between the determinants of capital structure and their influence on the value of firms: Modigliani & Miller's Proposition, Trade Off Theory and Pecking Order Theory. This study adopted descriptive research design, which involved analysis of existing data /information. survey of data, tests that allowed to test if the research area was operating as intended and finally statistical analysis of data collected. The population unit of analysis consisted of all the 6 investment firms listed in the Nairobi Securities Exchange falling into the Investment and Investment Services category. The study applied census sampling techniques where all the 6 firms were be considered for the study. The data collection techniques applied by this study were secondary data which included the financial statements for all the investment firms in Nairobi's Securities Exchange Handbook Series for the years 2000-2018. The collected data was analyzed using both the descriptive and the inferential statistics, and SPSS computer package version 21 was used in the analysis. The findings of this study indicate that liquidity, leverage and asset tangibility are not key determinants of value in investment firms listed at Nairobi Securities Exchange. However, growth opportunity is noted to be a key determinant of value in investment firms listed at Nairobi Securities Exchange. This study concludes that leverage and liquidity have a positive association with value of firms listed at the Nairobi Securities Exchange. On the other hand, asset tangibility and growth opportunities have a negative association with value of firms listed at the Nairobi Securities Exchange. This research study was limited to the Kenyan perspective. The study recommends further research to be undertaken for similar study using a purely different kind of determinants of capital structure to assess whether the findings will be consistent or hold true to the ones found in this study.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Basically, the main goal of a firm is to maximize the wealth and firm's value that means also to maximize the wealth of shareholders (Gharaibeh & Sarea, 2015). This signifies the firm's value as the main goal of a firm that can reflect the well-being of its shareholders. Thus, managers must be able to generate positive signals on the increase of the firm's value. One way of improving the firm's value is by managing the capital structure. This is because capital structure will determine the best mix of capital that the firm used to fulfill the operational needs of the firm so that the firm doesn't have high cost of capital (Ibrahim & Hussaini, 2015).

Optimal capital structure has been found to increase the firm's value by cash holding (Olakunle & Oni, 2014). Cash holdings (available cash) is one of the current asset's instrument that can be used to fulfill the manager's needs without thinking about shareholder's needs, therefore it can aggravate the conflicts between managers and shareholders (Khan, 2012). There are several theories linked to the structure of capital that are related to cash holdings, namely Theory of Pecking Order, Theory of Trade-off and Signalling Theory (Khodamipour, Golestani & Khorrami, 2013).

The pecking order theory suggests that companies/firms will go for the option of utilizing internal financing if it exist for its operations and will go for the option of debt and offering of new equities as latter options in that order (Dang, 2013). The theory of trade-off suggests that companies having liquidity as high are supposed to use more debt for the reason that they are in a position to meet their commitments/obligations in a timely way (Pervan & Visic, 2012). The independent variables in this study include; leverage, liquidity, asset tangibility and growth opportunities with the dependent variable of the study being value of listed investment firms in Nairobi Securities Exchange.

1.1.1 The Concept of Capital Structure

Capital structure refers to the composition of capital proportion as mobilized by a firm/institution. This mix or composition determines the total capital cost. Under normal circumstances the mix of capital will be the proportion of equity and debt (Akinsulire, 2014). The proportion of this equity and debt to total capital is arrived at by the firm in relation to its status financially and its capacity to mobilize such capital. The resolution on the structure of a firm's capital is very significant as it influences the the shareholders' wealth. Making a choice on the structure of capital by any firm is a critical decision as it is characterized by pros and cons which contribute importantly to the continuity of any business venture (Dang, 2013).

The contemporary capital structure theory was hypothesized by Miller and Modigliani (1958). As postulated by Myers (2001) there exists no common theoretical underpinning on the choice of equity and debt in a business, and there is no reason to anticipate for one. Various supported theories in relation to structure of capital enables people to comprehend the equity-debt combination chosen by business entities. The theories can be categorized into two; one on whether they suggest the being of the optimum ratio on equity debt- ratio for every institution (what is referred to as models

of static trade-off) or they state that they are not well-distinct targets for capital structure (Budiadriani, 2014).

Trade-off theories which have been proved as static comprehend the optimal structure of capital as an optimal result of a trade-off, for instance the trade-off amid financial distress costs and a tax shield for instance in theory of trade-off (Lan, 2012). As suggested theoretically, the structure of capital that is optimal is realized once the marginal PV of shield of tax on extra financing (debt) totals the same amount as the marginal PV of financial distress costs on extra financing (debt). Conversely, the theory of pecking-order proposes that the structure of capital can never be optimal. Institutions are expected to have a preference for financing their businesses internally through retained earnings as compared to financing externally. And when financing internally is deemed insufficient, the institutions could prefer debt rather than equity (Shah & Jame-Kausar, 2012).

For that reason, there is no distinct leverage that is deemed optimal, due to the fact that equity exists in two types which include, external and internal, one at the bottom and one at the top pecking order (Pervan & Visic, 2012). As a result, some conditional models of structure of capital are alive, however, minimal information is available in regard to their relevance empirically. Decisions on the structure of capital is among important decisions to be carried out by all firms/institutions when they are mobilizing their capital. Decisions which are deemed poor often end up in effects which are adverse. Numerous companies which are healthy financially have ended up losing as a result of decisions which are poor in capital structure (Mukherjee & Mahakud, 2012).

1.1.2 Capital Structure and the Value of Investment Firms

Berk and DeMarzo (2014) states that the value of a company refers the worth of its assets in addition to the worth of benefits enjoyed on tax because of credit/ debt less the worth of costs of bankruptcy linked to the debt. Thus the value of an institution includes both long-term credit/debt and equity. Equity takes into account reserves, share-premium, share capital that is paid-up and retained earnings or surplus. Cheng

and Tzeng (2012) explains capital that is paid-up to constitute the fraction of the capital that is called-up and has been paid-up by the owners of the business/firm.

Cheng and Tzeng (2012) elaborates that reserves to include monies separated from profits made by the firm, which do not cover any contingency, liability, or diminution in value of assets, commitment existent at the date of balance sheet. The reserves can be created by directors in a voluntary way or obligatory needed by law statutorily. Share premium refers to the extra monies resulting from the offering of stock/share at a price higher than its par value. Finally, retain earnings refer to surplus profits reinvested back into a firm so as to make additional resources for functions and unvaryingly cause a raise in firm value. Conversely, debt that is long term comprises of debentures, loans which are long term and bonds (Cheng & Tzeng, 2012).

According to Fosu (2013) postulates that firm value is the worth of the totals of its equity and debt and this is contingent only on the stream of revenue made by the company/firm's assets. The worth of the equity of a firm is the discounted worth of its earnings of shareholders referred to as net income. Specifically, the net income relative to the rate of capitalization of equity or the equity's anticipated rate of return. The net income is gotten by Lessing interest on credit from net operating income. Conversely, the debt value refers to the discounted worth of debt interest (Farooq & Masood, 2016).

1.1.3 Determinants of Capital Structure

Firms which are highly geared are less likely to take advantage of valuable opportunities of growth as compared to firms whose gearing levels are lower (Varuni & Sathyanarayanan, 2014). This is because of the overhang of debt which lessens the motivation of the management— shareholder agreement in control of the company to finance in opportunities of investment with positive NPV. Business owners have confidence in returns gotten from opportunities of investment may not get to the them in full as lenderd are sharing these returns. According to Mai (2016), a firm that applies finance using debt not only gives a shield of tax to the company but it in addition guarantees better efficiency due to restrictive agreements enacted by the debt providers

(financiers). Conversely, Akinyomi and Olagunja (2013) have hypothesized an opposite and negative link amid the value of a company and its debt level.

Majority of the models/ theories of structure of capital maintain that tangibility of assets, or the kind of assets possessed by a company/firm sometimes influences its selection of its structure and nature of capital. Tahu and Susilo (2017) forecast that the assets comprise the proportion of non-tangible assets to overall (total) assets and the proportion of goods added to gross equipment and plant to all (total) assets. There exists an affirmative link amongst leverage and tangibility and an inverse link amid leverage and non-tangibility. The theory of tradeoff hypothesizes a positive link amidst tangible assets and leverage. Assets that are tangible usually give high value of collateral in relation to assets that are intangible, which suggests that the assets can back more credit/ debt. Assets that are tangible minimize financial distress cost. Empirical research and literature suggest a positive association amid tangibility and leverage (Bas, 2012).

French and Fama (2000), Meckling and Jensen (1976) and Majluf and Myers (1984), contend that companies/firms anticipating more future opportunities in terms of growth ought to apply more financing in terms of equity, for the reason that a firm which is more leveraged is has a higher chance of passing up opportunities of investment which are more profitable. The model/ theory of trade-off postulates that institutions with higher opportunities of investment possess lower leverage due to the fact that they possess robust opportunities to get rid of substitution of assets and underinvestment which may result from agency conflicts of bondholder-stockholder (Tahu & Susilo,

2017). The theory of trade-off suggests an inverse link amidst opportunities of investment and leverage. Theory of pecking order proposes in addition that a institution's growth is inversely linked to its structure of capital. Opportunities of growth can be taken to be assets that increase the worth of an institution though they may be used as security and may not be liable to income tax. The problem/conflict of agency posits an inverse link amid an institution's growth and its structure of capital. Consequently, companies with great opportunities of growth might not give credit/debt primarily, and leverage is anticipated to be inversely linked to opportunities of growth (Chambers, Sezgin. & Karaaslan, 2013).

1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) is one of the most active security markets in Africa. It was formed in 1954. By virtue of being an institution of capital market, the NSE plays an imperative role in Kenya's economic growth process. It mobilizes

domestic savings thus facilitating the reallocation of dormant financial resources to the active sectors of the economy (Fredrick, 2015). The transfer of stocks between stockholders trading at the securities exchange improves liquidity in the market. This happens when long-term investments such as treasury bonds are traded (Mwaniki & Omagwa, 2017).

The market facilitates participation of locals as equity holders particularly in foreign firms which would like to do business in the country thus affording Kenyans a chance to have a stake in those business enterprises. Listed companies in the securities exchange market can use the market to raise funds for expansion and development. Besides being useful as an avenue of privatization of firms which may be facing various challenges, the NSE enhances the flow of international capital into an economy (Gakeri, 2012).

The NSE consists of 65 firms which are listed with a daily volume of trading of more than five million US Dollars with an overall total market capitalization of about fifteen billion US dollars. It consists of three market sections viz.; the Main Investments Market Segment (MIMS), the Alternative Investment Markets Segment (AIMS) and the Fixed Income Market Segments (FIMS). The MIMS is the main quotation market, the AIMS provide an alternative method of raising capital to small, medium sized and starter companies that are unable to meet the stringent listing requirements of the MIMS. The FIMS provides an independent market for fixed income securities such as treasury bonds, corporate bonds, preference shares and debenture stocks, as well as short term financial instruments such as treasury bills and commercial papers (Gatua, 2013).

Publicly listed companies have to provide information regularly to the stock exchange. They are more transparent, and they have better information disclosure making it easier

to get information about the prospects of listed companies. As a result, lenders are more willing to provide longer maturities to them as compared to privately owned firms (Bas, 2012). The NSE are grouped into twelve areas namely; manufacturing and allied, investment services, insurance, energy and petroleum, banking, automobile and accessories, commercial and services, construction/Building and allied, the growth

enterprise market segment, agricultural, investment, telecommunication and technology (Nairobi Securities Exchange, 2019).

1.2 Research Problem

The link amidst value of an institution/firm and its structure of capital has been a matter of significant discussion, both in in empirical research and in theory (Gatua, 2013). In various research works carried out, arguments have concentrated on the question of whether there is an optimum structure of capital for a single company, institution or firm or if the amount of debt application to the listed firm's value at Nairobi Securities Exchange is relevant or irrelevant (Mwaniki & Omagwa, 2017).

Numerous studies have been done on the determinants of capital structure and their influence on value of firms. Farooq and Masood (2016) empirically did a research on financial leverage influence on firms' value from the subsector of cement in Pakistan listed on the Karachi Stock Exchange, and the scholars established that leverage had affirmative, significant and contributory link with firm value. Fajaria and Isnalita (2018) studied the influence of firm liquidity, leverage, profitability and growth of firm value and the results showed that profitability and firm growth were confirmed to cause a raise in value of an institution. However, leverage and liquidity were confirmed to lessen the value of the firm.

Nyamasege *et al.* (2014) researched on the effect of asset tangibility on value of listed companies in Nairobi Securities Exchange and the research demonstrated that asset tangibility was positively related and was significant to the value of the firm. However, Sinayi *et al.* (2011) studied opportunities of growth in a research on the link amidst structure of capital, ownership structure and dividends and the researcher established a negative, important and nonlinear link amid structure of ownership and growth

opportunities for a company. However, though the studies made profound contributions in the areas they were carried out, their focus was not in Nairobi Securities Exchange but were rather carried out in different geographical contexts. This study attempted to study the determinants of capital structure and assessing their influence on value of investment firms listed at Nairobi Securities Exchange, Kenya.

1.3 Objective of the Study

The purpose of this study was to assess the determinants of capital structure and their influence on value of investment firms listed at the Nairobi Securities Exchange, Kenya.

1.4 Value of the Study

1.4.1 Policy

The Government through Nairobi Securities Exchange in the different sectors and other policymakers will be in a position to adopt recommendations from the research which could lead to fresh and novel direction in development and implementation of policies that could enhance proper regulations entailing the security markets. This research also seeks to pinpoint gaps in policy that can be applied to development of policy for the improvement of operating listed firms and the securities market. The findings brought out in the study can be used by management to improve operations through innovation and new ways of doing things. The shareholders will be in a position to understand which areas to build more investments on so as to enable their firms to achieve maximum productivity.

1.4.2 Practice

Students, academicians and researchers of finance studying value of the firm will find this study useful in building on their theoretical and conceptual approaches on the same. They will be in a position to use and apply this research from the public domains/ repositories like libraries, magazines, online open access academic platforms and journals once the findings of the research get published. They will be able to contribute to and add value on the identified gaps by the researcher. It will contribute to the corpus

of research works on firm value in a Kenyan perspective. The shareholders, management, employee and clients of the listed firms at NSE Kenya will be able to appreciate the findings on the determinants of capital structure drawing from the best practices in other countries. The clients will be able to air their concerns through information gathered in this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter outlines the framework in theory as done in the research and reviews past studies carried out on determinants of structure of capital and their influence on the value of firms. It presents the theoretical framework, determinants of value of investment firms, empirical literature, conceptual framework and literature review summary.

2.2 Theoretical Framework

This outlines the relevant theories which inform and explain the relationship between the determinants of structure of capital and their effect on the value of firms. The theories captured are Modigliani & Miller's Proposition, Trade Off Theory and Pecking Order Theory.

2.2.1 Modigliani & Miller's Proposition

A document on important influence as published by Modigliani and Miller in 1958 was Corporation Finance, the Theory of Investment and the Cost of Capital which presented key and rudimentary corporate finance basics (Modigliani, 1980). The scholars' suggestion on the irrelevance of structure of capital suggested that a company could not change its worth/value by altering or varying its structure of capital. Their original suggestion was founded on the supposition of a market which was perfect and had no taxes, costs related to financial distress or costs of transaction.

This outcome is acknowledged as the MM Proposition I having no corporate taxes, and is commonly taken to be as the basis of contemporary corporate finance (Hillier, 2013). Millers and Modigliani's discussion for this outcome was founded on what is referred

to as leverage that is homemade. The consequence of this leverage that is homemade is that those who invest have got no need for the firm to ask for lending for their funds, as an alternative they could too ask for lending on their own. Take into consideration a lender who feels the want to put their money in a firm that is levered, however, the lone investment opportunity existing is that of a firm that is unlevered. What the investor may do is to put his cash as he might have done in a firm that is levered and assume a position that is levered on an account margin, which permits the investor to purchase more securities for rented finances. It could be indicated that the pay-off and cost from this approach is similar to the pay-off and cost of putting in finances in an exact firm geared. Consequently, Modigliani and Miller suggest that the funder gets nil returns from leverage that specific unit/entity cannot acquire by themselves (Modigliani & Miller, 1958).

Modigliani and Miller advanced their original model and made considerations to the realities that taxes are present in an ideal world. Taking into account and adding taxes in the model provides companies that are partaking debt a tax benefit owing to tax shields and consequently should a firm consuming credit be valued over a similar but ungeared company. The shield of tax happens due to the fact payments of interest are taken to be a cost legally, which contradicts with payments of dividends completed once taxes are paid (Stulz, 1988). This therefore means that a firm with more debt proportion relative to a similar firm that is unlevered, need to pay lower cash flows in terms of taxes and could pay higher to its owners and debt holders. Hence, the firm that is levered ought to be valued higher than a firm that is ungeared. The worth of a firm that is geared is equal to the worth of a similar firm which is ungeared in addition to the PV of tax shield. This is referred to as MM Proposition I with corporate taxes. Eventually, this advancement of the proposition finalizes that so as to exploit the worth of the company, firm ought to be one hundred percent financed by debt. (Hillier, 2013).

This theory is relevant to this study in that it will inform on the relevance or irrelevance of taxes in arriving at the value of listed investment firms in Nairobi Securities Exchange. All the firms are subject to corporate taxes as a statutory requirement but with the argument of MM Proposition on irrelevance, the theory's underpinnings and

grounding will be used to better understand how the selected determinants of capital structure influences value of listed investment firms at Nairobi Securities Exchange.

2.2.2 Trade Off Theory

The Trade-off Theory presented by Miller and Modigliani (1963) contends that there is an optimum structure of capital, which considers tax savings benefits and bankruptcy costs anticipated as a result of debt rises. Founded on this theory, Meckling & Jensen (1976) did present the Theory of Agency Cost. Debt is a method of monitoring the management and of minimizing disagreement amid the agent and the principal. Discussions for the hypothesis of tradeoff are founded on the suggestion that the ideal debt maturity is predicted by the tradeoff amidst the charges on short-term debt that is rolled-over vis-a`-vis the normally higher rate of interest born by debt which is long-term. In most cases, the contentions depend on clear costs of transaction of varying types of borrowings/debt for instance costs associated with rollovers, flotation in addition to benefits of tax-shield and costs associated to implicit bankruptcy. The explanation expounding on tax-base proposed by Abraham Ravid and Brick (1985) and Brick and Abraham Ravid (1991) are possibly the most wells pelt out and famous examples.

The theory aligns in the works introduced by Miller and Modigliani (1958) on robust underpinning – that capital markets are deemed to be perfect and do not exist tax costs linked to transactions or costs associated with agency relationship - and reveal that structure of finances is balanced vis-à-vis the worth of the firm. Afterwards, Miller and Modigliani (1963) eased the neutrality postulation and took into consideration taxes: the worth of a firm/company that is indebted totals that of a debt which is not-corporate, in addition to the PV of the savings of tax from borrowings/debt and minus the PV of costs associated with potential difficulties in terms of finances. Thus, due to the fact interest can be subtracted from profits which are taxable, companies do possess motivation to apply debt instead of using equity. The worth of a geared company is more even though benefits of rebate on tax apply to the company on its own, apart from income deemed as personal (Miller, 1977).

Firms as it is, have a lower rate of tax that restrains at a certain level any policy on leverage subject to a refund on charges/costs of interest (Ang, 1991). The being of costs associated with bankruptcy (Stiglitz, 1969) encompasses a equilibrium of the value/worth of the company and its benefits in terms of tax; in theory, it leads to an level that is optimal for the debt when the associated marginal benefits with rebates on tax are the same as the bankruptcy marginal costs due to leverage. Likewise, abandoning the supposition of no costs of agency conflict permits for the theoretical being of a structure of capital that is optimal. The agency theory is founded on the assumptions that there exists variations of interest amid the agents who are business managers and the principal who are the shareholders therefore, causing costs of agency that influence financing. Conflicts of interest amid lenders and owners arise due to fact that the lenders have preference over the owners in the event of bankruptcy. A debt ratio that is optimal is attained when costs of agency are low (Jensen & Meckling,

1976).

This theory is relevant in this study as it captures capital structure. All the independent variables; leverage, liquidity, asset tangibility and growth opportunities constitute elements of capital structure and as such the theoretical underpinnings of Trade Off Theory can be used to help understand the independent variables ' and how they are likely to relate with value of listed investment firms at Nairobi Securities Exchange.

2.2.3 Pecking Order Theory

Myers and Majluf (1984) established the Pecking Order Theory (POT) founded on the information asymmetry amidst external providers of the firm and internal stakeholders (managers and owners). Professional in the business arena assume a policy financing, which purposes at reducing information asymmetry costs, and in particular, adverse selection, and go for the option of financing their operations internally rather than financing them using external means. This theory supposes that a leader in business abides with the hierarchy outlined: financing by self, issuance of non-risky borrowing(debt), issuance of risky borrowing/debt and issuance of equity as a final option. This approach minimizes a reduction in shares prices for the company; it restains the issuance of dividends so as to raise cashflows and minimizes the cost of

capital by restraining access to credit/loans as much as possible. Consequently, profitable companies do enjoy availability of extra internal financing (Lucas & McDonald, 1990).

The pecking order theory is founded on the assumption that a firm has three options of getting funding, which include cash flows which are generated internally, issue of equity and issue of debt. The theory postulates that a firm ought to fund its projects with cash flow generated internally first, then, they should carry out debt issue secondly and they should execute equity issue thirdly as the last option. The notion behind this sequence of funding arises from the idea of signaling value and information asymmetry (Hillier, 2013). Information asymmetry explains that the ideal financer and the company management are not possibly going to possess the similar information used to value the firm. Clearly, because the management carries out their functions in firm on a daily basis, the management ought to possess further information in regard to opportunities and projects which are current and therefore is privy to more information about the correct company/firm value. Nevertheless, the ideal investor is conscious that the management is privy to further information, which causes events done by the management to lead to effects of signalling in the market (Fama & French, 2002).

The theory proposes that if a firm wants financing from outside, it ought to at all times have preference to apply debt issuance so as to refrain from conveying to the market in signals that the firm is overvalued. This gives the impression of results which are extreme, same as suggested on the outcome of MM that in an environment of corporate taxes characterized by no costs of financial distress, a company needs to be one hundred per cent financed by debt. Nevertheless, in the rea world, costs associated with agency relationships and costs linked to financial distress are taken subject to this theory too, which indicates that the firm may offer debt but to a specific limit (Kremp & Phillippon, 2008).

The pecking order theory is relevant to this study in that it implies that the proportion of debt in the structure of a firm's capital ought to be less, because operations which have been funded internally increase its equity worth/value. If the investment firms a Nairobi Securities Exchange have assets which are tangible then these assets are easier

to value than assets which are intangible, and therefore ought to contribute to lower information asymmetry. Therefore, the underpinnings of this theory will help inform n the relationship between tangibility of assets and value of listed investment firms at NSE.

2.3 Determinants of Value of Investment Firms

Various factors have been found to be determinants of value of investment firms. For this study, other factors that have been reviewed include firm size, profitability, firm growth, intellectual capital and operating efficiency.

2.3.1 Firm Size

Firm size has been variously defined in the literature to refer to the total assets, scale of operations and number of employees among others. Firms which are bigger are presumed to possess more resources for their use and for that reason possess the ability to commit and apply these resources to multiple opportunities of investment. Lan (2012) asserts that increase in company size increases the performance of the bank. Almajali et al (2012) argued that the size of the firm can affect its financial performance. However, for firms that become exceptionally large, the effect of size could be negative due to bureaucratic and other reasons (Ulil, Bambang, Djumahir & Gugus, 2013). Several variables that might imply that a firm has grown too big for its operating community in size include; increasing at a higher rate compared the labor force provided by the community, giving over one third in taxes of the financing of the local government, and probability of causing demise of the community, if the firm happens to close down its operations. Firms sizes are assessed using various approaches like sales, market capitalization, asset and employment (Chrysovalantis, Iftekhar & Fotios, 2013). A lot of empirical studies have been conducted using firm size. Some of them used firm size as a control variable while others used it as a predictor variable in their studies. Firm size is used in this study as independent variable, because the study is on firm characteristics and size is among the proxies of firm attributes (Budiandriani, 2013).

2.3.2 Profitability

The concept of profitability is often used as an indicator of the company's fundamental performance as it represents performance management (Ibrahim & Hussaini, 2015). According to research developments in financial management, profitability dimensions generally have acausal relationship to the value of the company. While the value of the company as a concept can be explained by the value determined by the price of the stock traded capital markets (Mohammed & Usman, 2016). Institutions and firms that possess a high profitability level each year, have a tendency to use their own capital as compared with using debt (Kusuma, 2011). Another assumption states with return on a high asset, which means that the net profit of the company is high. Profitability ratio is the ratio to assess the company's ability to make a profit (Kashmir, 2012). This ratio also provides a measure of the effectiveness of management of a company. It is intended by the profits generated from sales and investment income, the point is the use of this ratio indicates the efficiency of the company.

2.3.3 Firm Growth

Growth opportunity is the prospect of the company to increase in size (Mai, 2016). Businesses anticipated to increase in a high magnitude in the future have a tendency to utilize securities to fund their projects. Since the opportunities of growth differs across companies, their decisions of financing by the management may also differ (Akinsulire, 2011). Another explanation of opportunities of growth refers to the difference of the total assets of a firm. A company that is anticipated to grow quickly in future has a tendency of selecting stock as a choice to fund its operations. In contradiction, companies projected to have a slow rate of growth may channel their efforts in splitting the slow growth risk with the financier by way of debt issuance which is usually long term (Mai, 2016). Growth in sales can be anticipated to affect the return rate and measures of market value whether in a simulated environment and actual businesses. It is ususally not clear whether growth in a single year can influence measures of market value and profitability in a subsequent year in any busness environments. Growth of assets, which may be applied as a proxy for expenditures for plant and equipment, intensity of research, might in addition influence growth of sales in a base or following

year, not directly influencing profitability and value of market (Safdar, Hazoor, Toheed & Ammara, 2013).

2.3.4 Intellectual Capital

Intellectual capital is expressed as an intellectual matter of knowledge, information, intellectual property, which is used to create the experience of welfare (Hausen & Sungsuk, 2013). Another view defines intellectual capital as a process management specialized technology to calculate the company's prospects in the future. Intangible assets category is something related to technology, consumer, contract, data processing, personal capital, marketing, location, and goodwill. This definition is broad and includes almost all dimensions of intangible assets (Shafana, Fathima & Inun, 2013). To achieve the company's success greatly influenced by the efforts of the company routine to maximize the values of the company's intellectual capital, intellectual capital will give the value of diversity. Values of different organizations such as the increase in profits from the acquisition of another company innovation, consumer loyalty, cost reduction and productivity improvement (Nora Riyanti Ningrum & Shiddig Nur Rahardjo, 2012).

2.3.5 Operating Efficiency

A key achievement of fundamental goals of an organization is to take full advantage of their future and present operational and financial performance due to the fact that they influence on the market price per share and as a result have an impact on wealth of owners (shareholders). A business practice that is common suggests that efficiency in operations (OE) does contribute significantly in enhancing future and current performance of the firm (Hausen & Sungsuk, 2013). Operational Efficiency is referred as the level to which variations in the cycle of conversion of cash, size of the firm, expenses of operating to ratio of sales revenue, cash flow for operations, ratio of total debt to total assets, and the ratio total asset turnover, and impact of operating risk on the anticipated firm performance. The word efficiency is perceived in both the literature of strategic management and industrial organization as the outcome of elements related to the firm which may include control of cost, innovation, share of market and skills of

management as contributors of current performance of the firm and its stability (Pourali & Arasteh, 2013).

2.4 Empirical Review

Different research works have been done on determinants of capital structure on the value of firms.

2.4.1 Leverage and Value of Firms

Farooq and Masood (2016) empirically carried out a study on the influence of leverage on value of nineteen listed firms from cement subsector of Karachi Stock Exchange, Pakistan from 2008-2012. The empirical findings demonstrated that financial leverage had significant link and affirmative with value of firm. Among the control variables, firm size was found to be non-significant and inversely linked with firm value. Tangibility of asset had inverse and important/significant link with value. The liquidity was established to bear an affirmative and important link with value in the cement firms.

Mita, Moeljadi and Indrawati (2017) studied the effect of leverage, profitability, information asymmetry, firm size on cash holding and firm value of manufacturing firms listed at Indonesian Stock Exchange. The data from a total of 56 firms was analyzed using path analysis. Results from the study demonstrated that leverage has negative effect on cash holdings, profitability had positive influence on cash holdings and firm's value. Cash holdings had negative influence on the firm's value. Cash holding mediate the relationship of information asymmetry and firm size on the Firm's Value.

Fosu (2013) carried out an analysis on the link amid structure of capital, competition of product market and performance of firms in South Africa. The researcher tested the effect of structure of capital on performance of firms and assessed the magnitude to which the link relies on the extent of competition of the product market. The study finding indicated that leverage in financing has an important/significant affirmative link

with performance of the firm. It was in addition established that competition of product market improves the influence of leverage on performance.

Khan (2012) assessed the link amidst decisions of structure of capital and performance of listed engineering companies in KSE, Pakistan. The research findings indicated that leverage on financing bore a important/significantly negative link with performance of the firm which was signified by Tobin's Q, Margin of Gross Profit and Return on Assets. The link amidst leverage in financing and performance of the firm was inverse and not important/significant. Size of asset did not have an important/significant link with the performance of the firm measured by GM and ROA but inverse/negative and significant link was forund to be with peformance.

Tzeng and Cheng (2012) studied the effect of leverage on the company's value and how the company's quality financing was influenced on this relationship. The researcher applied the Generalized Method of Moment (GMM) to estimate the effect of leverage on firm values and contextual variables influence on this relationship. Using 645 companies listed in Taiwan Securities Exchange (TSE) from 2000-2009. The findings revealed that, if cost and benefit of debt are considered simultaneously, the leverage is importantly and affirmatively linked to the value of company prioir to arriving at the company's structure of capital that is optimal. The results showed that the affirmative link of leverage to the value of the company has a tendency to be sturdy when the company's quality of financing is healthier.

2.4.2 Liquidity and Value of Firms

Gharaibeh and Sarea (2015) carried out empirical evidence from Kuwait on the impact of capital structure and certain firm specific variables on the value of the firm. The research was carried out by utilizing eight years of data from two hundred and thirty-nine observations from 2006 to 2013. The research utilized descriptive statistics, correlation, and multiple-regression analyses to investigate the effect of contributory factors on firm value. The outcomes of the findings demonstrated that structure of capital (leverage) is the greatest influencer on value of the firm. Risk of business, ratio

of dividends payout, size, value of the previous year, opportunities of growth and firm liquidity were demonstrated to bear significant effect on value firm.

Fajaria and Isnalita (2018) studied the link amidst of liquidity, profitability, leverage and growth on value of the firm. The investigation was carried out applying the method

documentation, in addition to applying purposive sampling procedure. This research data was analyzed by way of the program called SPSS, on three hundred and ninety-six observations. The population cases included one hundred and forty-six companies involved in manufacturing listed on the Stock Exchange from 2013 to 2016. From the research findings, high growth and profitability of the firms were demonstrated to raise of value of the firm. However, high liquidity and leverage were demonstrated to lessen the value of the firms.

Pourali and Arasteh (2014) carried out a empirical inquiry on the link amidst liquidity, and value of the firm. The key objective of the inquiry was to empirically research on the link amidst liquidity, corporate governance, and value of the firm in relation to the literature conducted in these contexts. The outcomes of the results for the study postulated a straightforward contributory link amidst the corporate governance and liquidity, and a robust positive/affirmative association on value of the firm by corporate governance.

Tahu and Susilo (2017) studied the effect of liquidity, profitability and leverage to the value of the firm with a moderating variable being dividend policy in firms involved in manufacturing at Indonesia Stock Exchange. The findings established that liquidity was not an important predictor though it had affirmative influence on firm value. The policy

of dividend was found not to be in a position to moderate the influence of liquidity on the firm value in a significant way. Leverage was found not to be significant and it bore a negative influence on value of the firmThe policy of dividend was found not to be in a position to moderate the influence of leverage on the firm value in a significant

way. Profitability was found to have an important/ significant and affirmative influence on company value. The policy of dividend was found not to be in a position to moderate the influence of profitaility on the firm value in a significant way.

2.4.3 Asset Tangibility and Value of Firms

Nyamasege *et al.* (2014) carried out an inquiry on the influence of asset tangibility on value of companies listed in Nairobi Securities Exchange. The researcher applied descriptive statistics to comprehend and describe the rudimentary characteristics of the raw data that was utilized and in specific they applied annual growth rates maximum, minimum, in addition mean, of every one of the research factors. To examine the influence of predictor variables on the response factor, analysis by way of simple regression was utilized on the assumption that all other factors remained constant. The simple regression model took the form of Y = a + bx. From the research outcomes, it was found that tangibility of assets had a positive link and statistically important to firm value of in the listed companies.

Oni and Olakunle (2014) did out a study on investigating the influence of tangibility of assets on structure of capital for Nigerian listed companies. The contributions in theory on trade-off, pecking order and agency theories were investigated in investigating the effect of tangibility of asset on patterns for financing for the listed Nigerian companies. The outcomes of the findings demonstrated that Nigerian companies usually do not assume perceived trends observed in developed countries. In investigating leverage of firms, Nigerian companies were demonstrated to bear a contributory non-statistical link amid tangibility of assets and leverage.

Mwaniki and Omagwa (2017) studied asset structure and financial performance of firms quoted under commercial and services sector at the Nairobi Securities Exchange, Kenya. A survey was carried out on all companies listed under commercial in 2014, for

a 5-year span, from 2010 - 2014. A standard multiple regression was utilized with the help of SPSS version 21 program. The outcome of the findings in the inquiry showed that structure of assets did have an important statistical influence on financial performance. Specifically, the research established that investments deemed long-term, reserves and PPE- Plant, Property and Equipment possess an important/significant

influence on financial performance, whereas assets deemed as current and those assets that are intangible were not found to bear any statistical significance/ importance on financial performance.

Setiadharma and Machali (2017) carried out a study on the effect of asset structure and firm size on firm value with capital structure as intervening variable. The samples of this study were 34 companies dealing with real estate and property and are listed in Indonesia Stock Exchange from 2010 to 2014. The findings of this research indicated a straightforward effect of structure of assets on the value of the firms. However, no indirect influence of structure of asset on the value of the company having structure of capital as moderating factor. There is no straightforward influence of size of the company/firm on its value and that there exists no non-straightforward influence of size of the firm on its value with structure of capital as moderating factor.

2.4.4 Growth Opportunities and Value of Firms

Sinayi *et al.* (2011) in their study investigated the influence of opportunities of growth on the link amidst structure of capital, structure of ownership and dividends with value of companies and did establish that there exists an important link amidst structure of

capital (leverage) and dividends with value of the institution and with relation to existence of opportunities of growth this link is inverse and important/significant. In addition, the outcomes of the results show that there is a non-linear important link amid structure of ownership and value of the companies and opportunities of growth do bear an important influence on this association.

Rahimian, Ghalandari and Jogh (2012) studied the role of opportunities of growth in the association between decisions on financing on value of firms in Tehran Securities Exchange. One hundred and thirty-five firms were chosen and studied as from 2006 to

2010. The data was gotten from their financial statements. The outcome in the findings of analysis of data indicated an important/significant link amidst structure of capital and dividend and value of the firm. Further, the results showed that in the existence of opportunities of growth, this association was inverse and significant, however, where opportunities of growth did not exist, the link was affirmative and important/significant. In addition, the outcomes of the findings indicated that there was a significant but non-linear link amid structure of ownership and value of the firm and that opportunities of growth applied an imperative influence on this association.

Andawasatya, Indrawat and Aisjah (2017) studied the effect of growth opportunity, profitability, firm size to firm value through capital structure of listed manufacturing firms on the Indonesian Stock Exchange. The population of the study constituted thirty firms which were arrived at by census approach for observation over five years. The outcome of the findings demonstrated that the betterment of opportunities for growth and size of the firm may enhance its structure of the capital; whereas the betterment of profitability might lessen the structure of capital. The betterment of opportunities for growth, size of the firm and profitability could raise significantly the value of the firm.

Sualehkhattak and Hussain (2017) carried out a study to assess whether opportunities of growth affect the association of the policy of dividends and structure of capital with value of one hundred and forty-eight non-financial institutions registered on Karachi Stock Exchange (KSE), for a span of 5 years from 2011-2015. By applying panel data regressions and t-test, the researcher established a statistically important and positive link amidst firm value and leverage, concentration of ownership and value of the

companies but no significant link amid payout of dividends and value of the companies. opportunities of growth was also found not to be significant.

2.5 Conceptual Framework

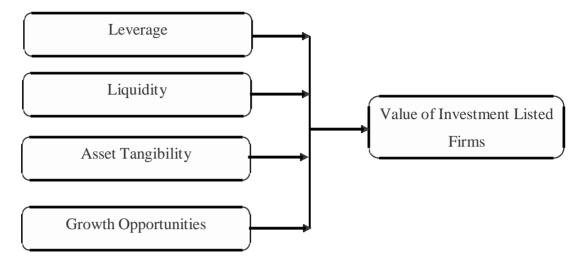


Figure 2.1: Conceptual Framework

Source: Researcher (2019)

Figure 2.1: Conceptual Framework

2.6 Critique of Literature

Firm characteristics like leverage, liquidity asset tangibility and growth opportunities have been considered though they were not studied as a portfolio as in this research. Based on the results of these studies, it appears that the environment in which a company operates could have an important influence on its capital structure (Rahimian, Ghalandari & Jogh, 2012).

Most reviewed studies examine the determinants of capital structure by applying only one or two reviewed variables and not as a portfolio of leverage, liquidity, asset

tangibility and growth opportunities. Farooq and Masood (2016) empirically carried out a study on the influence of leverage on value of nineteen listed firms from cement subsector of Karachi Stock Exchange. Mita, Moeljadi and Indrawati (2017) studied the effect of leverage, profitability, information asymmetry, firm size on cash holding and firm value of manufacturing firms listed at Indonesian Stock Exchange. Tzeng and Cheng (2012) studied the effect of leverage on the company's value and how the company's quality financing was influenced on this relationship.

Gharaibeh and Sarea (2015) carried out empirical evidence from Kuwait on the impact of capital structure and certain firm specific variables on the value of the firm. Fajaria and Isnalita (2018) studied the link amidst of liquidity, profitability, leverage and growth on value of the firm. Oni and Olakunle (2014) did out a study on investigating the influence of tangibility of assets on structure of capital for Nigerian listed companies. Setiadharma and Machali (2017) carried out a study on the effect of asset structure and firm size on firm value with capital structure as intervening variable.

2.7 Summary of Literature

Various studies; Farooq and Masood (2016), Mita, Moeljadi and Indrawati (2017), Gharaibeh and Sarea (2015), Fajaria and Isnalita (2018), Nyamasege *et al.* (2014), Mwaniki and Omagwa (2017), Andawasatya, Indrawat and Aisjah (2017), Sualehkhattak and Hussain (2017), have found that determinants of capital structure do have an influence on value of investment firms. Though there have been positive results and improved performance in the investment sector in Kenya as an outcome of putting in place proper measures of capital structure, challenges still remain in key areas.

Various researches demonstrate that there is a link amidst leverage, liquidity, opportunities of growth and asset tangibility and value of the firms. However, though the studies made profound contributions in the areas they were carried out, their focus was not in Nairobi Securities Exchange but were rather carried out in different geographical contexts. This study attempts to study the determinants of capital structure and assessing their influence on value of investment firms listed at Nairobi Securities Exchange, Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter states and explains the approach of the research process to collect, analyze and present data in investigating the determinants of capital structure and their influence on value of investment companies listed/registered at the Nairobi Securities Exchange (NSE). It also shows the population of study, research design, a test of reliability and validity, collection of data and its analysis criteria.

3.2 Research Design

Research design is referred to as a plan for the processes, implemented by a study for assessing the link amidst the response variable and predictor factors (Kothari, 2008). Descriptive design was applied for the research. Descriptive designs entails a explanation of every population item. It permits estimations of sections of a population that has comprises these characteristics. Descriptive research design involves; analysis of existing data /information, survey of data relating to experiences, tests that allows to test if the research area is operating as intended and finally statistical analysis of data that will be collected (Serakan & Bougie, 2010).

3.3 Target Population

Population as referred by Kumar (2005) is the entire groups of constituents from which interpretations are construed and means every probable element which is of importance in a research. The population unit of analysis entailed of the six listed investment firms in NSE falling into the Investment and Investment Services category. The research covered a time span of 9 years starting from 2009 to 2017. Listed firms in NSE are categorized as presented in Table Appendix II.

3.4 Sampling and Sampling Technique

Kothari (2014) describes sampling frame as a list of members of the research population from which a random sample may be drawn. The researcher applied a census approach where all the 6 firms will be considered for the study. A census approach was applied

in the study to ensure adequate information was obtained from the respondents due to the fact that the study population is not big.

3.5 Data Collection

Secondary data was applied in this research. These data included the financial statements (the balance sheet and the profit and loss account) for all the firms in Nairobi's Securities Exchange Handbook Series for the years 2000-2018. Financial statements especially the statement for financial position and statement for financial performance for the respective firms was used to obtain data for the determinants. A data collection sheet was utilized to collect the raw data. Naturally, this data set was processed and analyzed later to enable the empirical analysis.

3.6 Diagnostic Tests

Normality analysis helps to check that data is normally distributed (Moore & McCabe, 2004). The two well-known numerical tests of normality are the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The Shapiro-Wilk Test is more appropriate for small sample sizes (< 50 samples) but can also handle sample sizes as large as 2000. This study adopted Shapiro-Wilk Test to test for normality. If the significance value of the Kolmogorov-Smirnov Test or Shapiro-Wilk Test is greater than 0.05, the data was qualified as normal. If it is below 0.05, the data significantly deviates from a normal distribution (Cohen, 1992).

In regression, multicollinearity denotes those determinant variables that have high correlation with other determinant variables (Cox, 2006). Multicollinearity arises when the empirical model has several variables which are highly correlated to each other. Multicollinearity causes standard errors to increase which means that coefficients for certain predictor factors might not be significantly varying from zero. This means that

by increasing the errors of standard, multicollinearity causes certain factors to appear insignificant when they should in the real sense be significant. When multicollinearity does not arise those constants could be significant (Tabachnick & Fidell, 2007). The tests for confirming for multicollinearity that was used is Variance Inflation Factor (VIF). If VIF for any independent factor is equal to or more than 10, then there is collinearity linked with that factor and would be expunged from the regression equation/model (Cox, 2006).

3.7 Data Analysis

The gathered raw data was sorted, categorized, coded and then put in a table for easy examination. Collected raw data was investigated by way of inferential and descriptive analysis. Statistical software of SPSS version 22 was applied in the investigation. The raw data was input into the SPSS and tested by way of regression, correlation and descriptive analyses. For descriptive results, the research utilized trend analysis to assess the patterns for all the study variables in each investment company. For inferential findings, the research carried out analysis by utilizing multiple regression and Pearson's Correlation to establish the link amidst the response variable (firm value) and predictor variables: leverage, liquidity, asset tangibility and growth opportunities.

3.7.1 Analytical Model

Using the collected data, the researcher conducted analysis by way of a regression model to establish the extent of the link amid the firm value and the structure of capital. The research applied the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$
.

Denoted as: Y = Firm Value as assessed by the Tobins Q

 $\alpha = Y$ intercept of the regression equation.

 β_1 , β_2 β_3 , and β_4 =are the slope of the regression

 X_1 = Leverage

 $X_2 = Liquidity$

 X_3 = Asset Tangibility

 $X_4 = Growth$

Opportunities

 ϵ . = error term

The variables will be measured as:

i. Firm Value = Tobin's Q (Total Market Value/Total Asset

Value)

ii. Leverage = Total Debt/ Total Assets

iii. Liquidity = Current Assets/Current Liability

iv. Tangibility of Assets = Fixed Assets / Total Assets

v. Growth Opportunities = Value of stock – (Earnings / Equity)

3.7.2 Significance Tests

To carry out the significance tests, the t – test and the F - test was utilized at 95% level of confidence. The F statistic was used to investigate the significance of regression model whereas the t statistic was utilized to assess significance of coefficients of the research.

CHAPTER FOUR

FINDINGS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter presents the analyzed data, findings and discussion. Descriptive statistics results were presented first followed by correlation and regression results.

4.2 Descriptive Statistics

This section presents trend analysis for the calculated study variables: firm value, leverage, liquidity, asset tangibility and growth opportunities.

4.2.1 Centum Investment Company

The researcher sought to find out the trend of the study variables for each listed investment firm as presented in Figure 4.1. Centum Investment Company's firm value as presented by Tobin's Q was at 0.69 in 2009 and rose consistently to 8.86 in 2014 but drooped to 0.99 in 2017. The firm's leverage was 0.99 in 2009 which rose to 13.5 in

2014 but dropped to 1.94 in 2017. Liquidity as from 2009 was 4.57but had significantly dropped to -0.43 in 2017. Asset tangibility in the firm was at 0.96 in 2009 but dropped significantly to 0.00 in 2014 but rose again to 0.92. The firm's growth opportunities stood at 25.00 in 2009 but dropped to 20.00 in 2014. This however changed in 2015 as the opportunities rose to 63.5 in 2015 but again dropped to 34.50 in 2017.

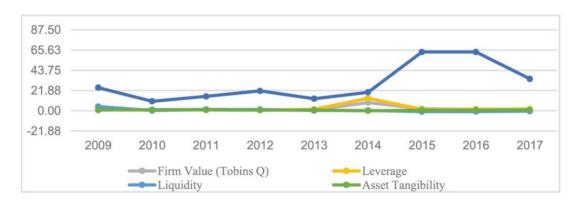


Figure 4.1: Centum Investment Company

Source: Research Data (2019)

4.2.2 Home Afrika Limited

Findings on trends on the study variables for Home Afrika Limited are presented in Figure 4.2. Home Afrika Limited's firm value as presented by Tobin's Q was at 0.65 in 2013 and dropped consistently to 0.09 in 2017. The firm's leverage was 0.16 in 2013 but dropped to 0.01 in 2017. Liquidity as from 2013 was 1.09 but had significantly dropped to 0.79 in 2017. Asset tangibility in the firm was at 0.21 in 2013 but dropped significantly to 0.15 in 2017. The firm's growth opportunities stood at 5.00 but dropped to 1.00 in 2017. Overall, there was a consistent decrease in all the variables under study.

6.25

5.00

3.75

2.50

1.25

0.00

2013

2014

2015

2016

2017

Firm Value (Tobins Q)

Leverage

Liquidity

Asset Tangibility

Figure 4.2: Home Afrika Limited

Source: Research Data (2019)

4.2.3 Kurwitu Ventures

Findings on trends on the study variables for Kurwitu Ventures are presented in Figure 4.3. Kurwitu Venture's firm value as presented by Tobin's Q was at 1.27 in 2014 and dropped consistently to 0.09 in 2017. The firm's leverage was 0.16 in 2014 but dropped to 0.49 in 2017. Liquidity as from 2014 was 13.66 but significantly

dropped to 0.78 in 2017. Asset tangibility in the firm was at 0.87 in 2014 but rose significantly to 0.98 in 2017. The firm's growth opportunities stood at 1.5.for the entire period from 2014 to 2017. Overall, there was a consistent decrease in all the variables under study apart from asset tangibility.

17.50

14.00

10.50

7.00

3.50

0.00

2014

2015

2016

2017

Firm Value (Tobins Q)

Leverage

Liquidity

Asset Tangibility

Figure 4.3 KurwituVentures

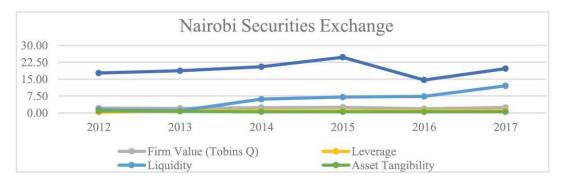
Source: Research Data (2019)

4.2.4 Nairobi Securities Exchange

Findings on trends on the study variables for Nairobi Securities Exchange are presented in Figure 4.4. Nairobi Securities Exchange's firm value as presented by Tobin's Q was at 2.18 in 2012 and rose consistently to 2.42 in 2017. The firm's leverage was 0.32 in 2012 but rose to 0.96 in 2017. Liquidity as from 2012 was 1.38 but significantly rose to

12.05 in 2017. Asset tangibility in the firm was at 0.84 in 2012 but dropped significantly to 0.49 in 2017. The firm's growth opportunities stood at 17.72 in 2012 but rose to 19.70 in 2017. Overall, there was inconsistent trend patterns for all variables.

Figure 4.4: Nairobi Securities Exchange



Source: Research Data (2019)

4.2.5 Olympia Capital Holdings Limited

Findings on trends on the study variables for Olympia Capital Holdings Limited are presented in Figure 4.5. Olympia Capital Holdings Limited's firm value as presented by Tobin's Q was at 0.21 in 2011 and dropped inconsistently to 0.08 in 2017. The firm's leverage was 0.66 in 2011 but dropped consistently to 0.08 in 2017. Liquidity as from 2011 was 4.51 but significantly dropped to 1.78 in 2017. Asset tangibility in the firm was at 0.47 in 2011 but rose significantly to 0.76 in 2017. The firm's growth opportunities stood at 5.05 in 2012 but inconsistently dropped to 3.40 in 2017. Overall, there was inconsistent trend patterns for all variables.

Figure 4.5: Olympia Capital Holdings Limited



Source: Research Data (2019)

4.2.6 Transcentury PLC

Findings on trends on the study variables for Transcentury PLC are presented in Figure 4.6. Transcentury PLC's firm value as presented by Tobin's Q was at 0.40 in 2009 and dropped inconsistently to 0.12 in 2017. The firm's leverage was 0.36 in 2009 but dropped consistently to 0.24 in 2017. Liquidity as from 2009 was 1.80 but significantly dropped to 0.40 in 2017. Asset tangibility in the firm was at 0.58 in 2009 but rose significantly to 0.69 in 2017. The firm's growth opportunities stood at 13.17 in 2012 but inconsistently dropped to 6.00 in 2017. Overall, there was inconsistent trend patterns for all variables.

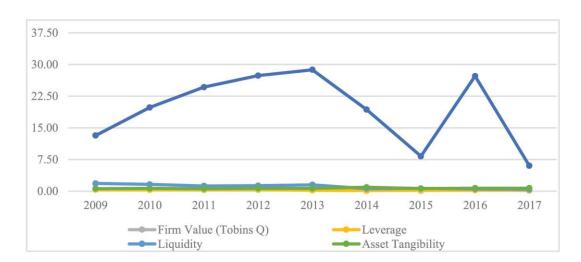


Figure 4.6: Transcentury PLC

Source: Research Data (2019)

4.3 Inferential Statistics

This section presents results of the study findings on the Pearson's Correlation results, fit of the overall model, Analysis of Variance and regression of coefficients.

4.3.1 Pearson's Correlation Analysis

Bivariate correlation is a measure that explains the relationship between two variables. It ranges from 1 to -1 where 1 indicates a strong positive correlation and a -1 indicates a

strong negative correlation a. The closer the correlation tends to zero the weaker it becomes. The findings on correlation analysis were presented in Table 4.1. The correlation between leverage and firm value for listed investment firms was strong and positive (0.732). The correlation between liquidity and firm value for listed investment firms was weak and positive (0.016). The correlation between asset tangibility and firm value for listed investment firms was weak and negative (-0.293). The correlation between growth opportunities and firm value for investment firms listed at Nairobi Securities Exchange was weak and negative (-0.190).

Table 4.1 Pearson's Correlation Analysis

Variable		Firm Value	Lever age	Liqui dity	Asset Tangibilit y	Growth Opportunities
Firm Value	Pearson Correlation	1				
Leverage	Pearson Correlation	0.732	1			
Liquidity	Pearson Correlation	0.016	0.204	1		
Asset Tangibility	Pearson Correlation	-0.293	-0.214	0.054	1	
Growth Opportunities	Pearson Correlation	-0.190	0.196	0.464	0.375	1

Source: Research Data (2019)

4.3.2 Model Fitness

The findings on model fitness of the overall model were presented in Table 4.2. The results indicate that the variables; leverage, liquidity, asset tangibility and growth opportunities were satisfactorily explaining firm value of listed investment companies at Nairobi Securities Exchange. This conclusion is supported by the R square of 0.652. This further means that the independent variables can explain 65.2% of the independent variable (firm value) of listed investment companies at Nairobi Securities Exchange.

Table 4.2 Model Fitness

Model	Coefficient	
R	0.807	
R Square	0.652	
Adjusted R Square	0.612	
Std. Error of the Estimate	956.456727	

Source: Research Data (2019)

4.3.3 Analysis of Variance (ANOVA)

ANOVA statistics presented on Table 4.3 indicate that the overall model was statistically significant. This was supported by a probability (p) value of 0.000. The reported p value was less than the conventional probability of 0.05 significance level and thus significant in the study. These results indicate that the independent variables; leverage, liquidity, asset tangibility and growth opportunities are good predictors of firm value of investment companies listed at the Nairobi Securities Exchange.

Table 4.3 Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	59940982.82	4	1498524 6	16.381	0.000
Residual	32018331.47	35	914809.5		
Total	91959314.3	39			

Source: Research Data (2019)

4.3.4 Regression of Coefficients

Regression of coefficients results were presented in Table 4.4. The results show that there is a positive relationship between leverage and firm value of listed investment firms (506.142). The findings indicate that there is a positive relationship between liquidity and firm value of investment firms listed at NSE (8.789). Asset tangibility was also found to have a positive relationship with firm value of investment firms

listed at NSE (71.505). However, the study results suggested a negative relationship between growth opportunities and firm value of investment firms listed at Nairobi Securities Exchange (-1.226).

These findings imply that an increase in leverage by one unit causes a proportionate increase in firm value of listed investment firms by 506.142 units. Further, an increase in liquidity by one unit causes aproportionate increase in firm value of listed investment firms by 8.789 units. An increase in asset tangibility by one unit causes a proportionate increase in firm value of listed investment firms by 71.505 units. However, an increase in growth opportunities by one unit causes a proportionate decrease in firm value of listed investment firms by 1.226 units.

From the findings, liquidity and growth opportunities were both statistically significant as their levels were below the probability conventional threshold of 0.05 (Leverage, 0.000 and Growth Opportunities, 0.007 respectively). However, liquidity and asset tangibility were found to be statistically insignificant as their levels were higher than the 0.05 conventional threshold (liquidity, 0.864 and Asset Tangibility, 0.918 respectively). These findings imply that liquidity and asset tangibility were not key predictors of firm value of firms listed at the Nairobi Securities Exchange.

Table 4.4 Regression of Coefficients

Variable	Unstandardized Coefficients	Std. Error	t	Sig.
(Constant)	497.66	491.406	1.013	0.318
Leverage	506.142	67.988	7.445	0.000
Liquidity	8.789	50.96	0.172	0.864
Asset Tangibility	71.505	689.424	0.104	0.918
Growth Opportunities	-1.226	0.429	-2.857	0.007

Source: Research Data (2019)

The regression equation was as follows;

Firm Value (Tobin's Q) = 497.66 + 506.142 Leverage + 8.789 Liquidity + 71.505 Asset Tangibility - 1.226 Growth Opportunities

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presented the summary of the study capturing the findings in line with the objectives. A conclusion on the relationship between the study variables was drawn in line with the objective. Suggestions for recommendations and areas for further studies were then drawn.

5.2 Summary of Findings

The study objective of the study was to assess the determinants of capital structure and their influence on value of investment firms listed at the Nairobi Securities Exchange, Kenya. Research findings indicated in Centum Investment Company, that there was an inconsistent increase in all the variables as indicated by the trend line. Further, at Home Afrika Limited there was a consistent decrease in all the variables under study. In Kurwitu Ventures, there was a consistent decrease in all the variables under study apart from asset tangibility. In Nairobi Securities Exchange, there was inconsistent trend patterns for all variables. For Olympia Capital Holdings Limited, there was inconsistent trend patterns for all variables. Finally, there was inconsistent trend patterns for all variables. Finally, there was inconsistent trend patterns for all variables. Finally, there was inconsistent trend patterns for all variables. Finally, there was inconsistent trend patterns for all variables of Transcentury PLC.

The first independent variable for the study was leverage. The correlation between leverage and firm value for listed investment firms was strong and positive. The results show that there is a positive relationship between leverage and firm value of listed investment firms. From the findings, liquidity was statistically insignificant as its significance level was higher the probability conventional threshold of 0.05. This implies that leverage is not a key determinant of value in investment firms listed at Nairobi Securities Exchange.

The second independent variable for the study was liquidity. The correlation between liquidity and firm value for listed investment firms was weak and positive. The findings indicate that there is a positive relationship between liquidity and firm value of investment firms listed at NSE. However, liquidity was found to be statistically insignificant as its level was higher than the 0.05 conventional threshold. The findings imply that liquidity was not a key predictor of firm value of investment companies listed at the Nairobi Securities Exchange.

The third independent variable for the study was asset tangibility. The correlation between asset tangibility and firm value for listed investment firms was weak and negative. Asset tangibility was also found to have a positive relationship with firm value of investment firms listed at NSE. However, asset tangibility was found to be statistically insignificant as its level was higher than the 0.05 conventional threshold. The findings implythat asset tangibility was not a keypredictor of firm value of investment companies listed at the Nairobi Securities Exchange.

The forth independent variable for the study was growth opportunities. The correlation between growth opportunities and firm value for investment firms listed at Nairobi Securities Exchange was weak and negative. However, the study results suggested a negative relationship between growth opportunities and firm value of investment firms listed at Nairobi Securities Exchange. From the findings, growth opportunities was statistically significant as its level was below the probability conventional threshold of 0.05. This implies that growth opportunity is a key determinant of value in investment firms listed at Nairobi Securities Exchange.

5.3 Conclusions

From the study findings, one can conclude that all independent variables; leverage, liquidity, asset tangibility and growth opportunities were satisfactorily explaining value of investment firms. It can also be concluded that leverage, liquidity and growth opportunities had a positive relationship with value of firms listed at the Nairobi

Securities Exchange. Furthermore, leverage and growth opportunities are good predictors of firm value of investment companies listed at the Nairobi Securities Exchange.

It can be concluded that leverage had a positive association with value of firms listed at the Nairobi Securities Exchange. Further, Leverage was positively related to firm value and was a key determinant of value of investment firms listed at the Nairobi Securities Exchange. It can be concluded that liquidity had a positive association with value of firms listed at the Nairobi Securities Exchange. Further, liquidity was positively related to firm value but was not a key determinant of value of investment firms listed at the Nairobi Securities Exchange.

It can be concluded that asset tangibility had a negative association with value of firms listed at the Nairobi Securities Exchange. Further, asset tangibility was positively related to firm value and was not a key determinant of value of investment firms listed at the Nairobi Securities Exchange. Finally, it can be concluded that growth opportunities had a negative association with value of firms listed at the Nairobi Securities Exchange. Further, growth opportunities were negatively related to firm value but was a key determinant of value of investment firms listed at the Nairobi Securities Exchange.

5.4 Limitations of the Study

The researcher adopted purely secondary data in this study. This data cannot be validated as it is what has been provided in the NSE website. The researcher had no way of altering the secondary data for any discrepancies or temporary differences.

The researcher adopted correlations and regression analyses which are bivariate and multivariate I nature meaning that two or three variables from different data sets are compared at a time. However, this is not realistic because there are almost always multiple relationships and effects on something in that the variables operate with a bigger context of macro and micro environment.

5.5 Recommendations and Areas for Further Study

This study is not exhaustive in nature and context and as such there is need for further research to be undertaken for similar studyusing a purely different kind of determinants of capital structure to assess whether the findings will be consistent or hold true to the ones found in this study. Another research can be done in different sub sector of listed firms like manufacturing and allied, insurance, energy and petroleum, banking, automobile and accessories, commercial and services, construction/Building and allied, the growth enterprise market segment, agricultural and telecommunication and technology. This study has been conducted in a Kenyan perspective. However, another study can be conducted in different stock exchange markets in different context like London Stock Exchange, Karachi Stock Exchange, just to assess if the findings will be consistent. Its context can also be narrowed to the banking sector so as to assess whether in a specific sub sector will have similar findings or there will be a disparity on the same.

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APPENDICES

Appendix I: Firms Listed at Nairobi Securities Exchange

- 1. WPP Scangroup Plc
- 2. Williamson Tea Kenya Ltd
- 3. Unga Group Ltd
- 4. Umeme Ltd
- 5. Uchumi Supermarket Plc
- 6. Trans-Century Plc
- 7. TPS Eastern Africa Ltd
- 8. Total Kenya Ltd
- 9. The Limuru Tea Co. Plc
- 10. The Co-operative Bank of Kenya Ltd
- 11. Stanlib Fahari I-REIT
- 12. Standard Group Plc
- 13. Standard Chartered Bank Kenya Ltd
- 14. Stanbic Holdings Plc
- 15. Sasini Plc
- 16. Sanlam Kenya Plc
- 17. Sameer Africa Plc
- 18. Safaricom Plc
- 19. Olympia Capital Holdings ltd
- 20. NIC Group Plc
- 21. New Gold ETF
- 22. National Bank of Kenya Ltd
- 23. Nation Media Group Ltd
- 24. Nairobi Securities Exchange Plc
- 25. Nairobi Business Ventures Ltd
- 26. Mumias Sugar Co. Ltd
- 27. Longhorn Publishers Plc
- 28. Liberty Kenya Holdings Ltd
- 29. Kurwitu Ventures Ltd
- 30. Kenya Re Insurance Corporation Ltd
- 31. Kenya Power & Lighting Co Ltd
- 32. Kenya Orchards Ltd
- 33. Kenya Airways Ltd
- 34. KenolKobil Ltd
- 35. KenGen Co. Plc
- 36. KCB Group Plc
- 37. Kapchorua Tea Co. Ltd
- 38. Kakuzi Plc
- 39. Jubilee Holdings Ltd
- 40. I&M Holdings Plc
- 41. Home Afrika Ltd
- 42. HF Group Plc
- 43. Flame Tree Group Holdings Ltd
- 44. Express Kenya Ltd

- 45. Eveready East Africa Ltd
- 46. Equity Group Holdings Plc
- 47. East African Breweries Ltd
- 48. Eaagads Ltd
- 49. East African Cables Ltd
- 50. Diamond Trust Bank Kenya Ltd
- 51. Deacons (East Africa) Plc
- 52. East African Portland Cement Co. Ltd
- 53. Crown Paints Kenya Plc
- 54. CIC Insurance Group Ltd
- 55. Centum Investment Co Plc
- 56. Carbacid Investments Ltd
- 57. Car & General (K) Ltd
- 58. BAT Kenya Plc
- 59. Britam Holdings Plc
- 60. BK Group Plc
- 61. Barclays Bank of Kenya Ltd
- 62. Bamburi Cement Ltd
- 63. B.O.C Kenya Plc
- 64. Atlas African Industries Ltd GEMS
- 65. ARM Cement Plc

Source: Nairobi Securities Exchange (2019)

Appendix II: Listed Companies according to Sector

Sector	Number of Firms
Agricultural	6
Automobiles & Accessories	1
Banking	12
Commercial and Services	13
Construction & Allied	5
Energy & Petroleum	5
Insurance	6
Investment	5
Real Estate Investment Trust	1
Investment Services	1
Manufacturing & Allied	8
Exchange Traded Funds	1
Telecommunication	1
Total	65

Source: Nairobi Securities Exchange (2019)