

**THE EFFECT OF LEASE FINANCING ON THE FINANCIAL PERFORMANCE OF  
ALL FIRMS LISTED IN NAIROBI STOCK EXCHANGE**

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## **DECLARATION**

I declare that this is my own original work and to the best of my knowledge it has not been submitted for a degree award in any other University or institution of higher learning.

Signature.....

Date.....

**FELISTAS MUUMBI**

This research project has been submitted for moderation with my approval as University Supervisor

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## **DEDICATION**

This project is dedicated to my family for their words of encouragement, for their push, for teaching me to be patient, persistent and that a task can only be accomplished if it is done one step at a time.

## **ACKNOWLEDGEMENT**

I would like to extend my appreciation and gratitude to all those that contributed tremendous inputs towards completion of this research project.

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To crown it all thanks to the almighty God for giving me sufficient grace.

## **ABSTRACT**

Lease Financing is one of the alternatives to straight-up purchasing if a firm is seeking the means to obtain necessary business equipment and supplies that have the possibility of endangering the firm's monetary flow and stockpile. A finance lease is a way of providing finance – effectively a leasing company (the lessor or owner) buys the asset for the user (usually called the hirer or lessee) and rents it to them for an agreed period. The general objective of this study was to establish the effects of lease financing on the financial performance of companies listed in Nairobi Securities Exchange. The population under study comprised of companies' annual financial reports for the companies listed in Nairobi Securities Exchange that use lease financing as a means of acquiring equipment's. The period of study was seven years (2007 to 2013). The study found that there is a positive significant relationship between lease financing and Return on Equity. This shows that lease financing has a positive influence on a firm's efficiency in generating profits from every unit of shareholders' equity. The study also found out that using lease financing, companies divert the money they could have used for making purchases of equipments to the working capital or to other investments. Lease financing is positive when it is used to generate a return on assets that is higher than the before-tax cost of debt, thereby enhancing the return on equity. This results in profitability and wealth maximization. According to the findings, there is a positive correlation between lease financing and Return on Equity.

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## **ABBREVIATIONS**

AGOA – African Growth and Opportunity Act

COMESA – Common Market for Eastern and Southern Africa

EAC – East African Community

FASB – Financial Accounting Standards Board

GDP – Gross Domestic Product

G4+1 Group – The Group of Four Plus One

IAS – International Accounting Standards

IASB – International Accounting Standards Board

ICTs – Information and Communication Technologies

NPV – Net Present Value

NSE – Nairobi Stock Exchange

ROA – Return on Assets

ROE – Return on Equity

SMEs – Small and Medium Enterprises

U.S. - United States

VAT – Value Added Tax

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

Leasing is referred to as asset based financing (Burgress, 2002). As lessors retain ownership of the assets they lease throughout the life of the contract, these leased assets are therefore an inherent form of collateral in such contracts (compared to traditional bank lending which will either be unsecured or make use of different types of collateral and typically not physical assets such as equipment which are inherent in leases). Conventional bank lending focuses on the loan repayment by the borrower from two sources: a primary source, the cash flow generation, and a secondary source, credit enhancements and collateral (if any). Leasing is focused on the lessee's ability to generate cash flows from the business operations to service the lease payments, as the lessor retains legal ownership of the asset (Bierman, 2005). Hence, leasing separates the legal ownership of an asset from its economic use. Ownership of the asset may or may not pass to the customer at the end of the lease contract. Contracts, where legal ownership of the asset passes directly to the customer at the start of the agreement, are not considered to be leases.

Organizationally and technically, leasing companies have to be able to assess the value of the physical assets being leased in order to sell on the secondary market, or lease again the assets that have not been eventually purchased by their customers (Moutot et al., 2007).

Leasing is often seen as substitute for medium to long term credit, but the answer to the question whether leasing and debt are substitutes or complements is not trivial and has in financial literature not resulted in a clear conclusion (Elgers and Clark, 2010). In traditional corporate finance the decision of buying versus leasing is mostly discussed in the context of the Modigliani and Miller (1958) world of perfect capital markets (where in general the capital structure is irrelevant for the determination of the firm value). But in real financial markets, there are market imperfections. In the area of access to finance for businesses, a market imperfection/failure is not only present during a deep recession or a financial crisis, but also on an on-going basis as a fundamental structural issue (Luke, 2001). The reasons for a market failure relate to insufficient supply of capital (debt or equity) and inadequacies on the demand side. This market failure is mainly based on asymmetric information (in the case of debt: information gap between lender and borrower), combined with uncertainty, which causes agency problems that affect debt providers' behavior.

### **1.1.1 Lease Financing**

Finance leases are sometime called capital leases. This term alludes to the fact that, for purposes of financial accounting, the lessee is required to reflect the leased equipment as a capital item in their balance sheet (Baker and Hayes, 2006). According to the IAS, which is the accounting standard applied in Kenya, a lease is a capital lease if it transfers substantially to the lessee all the risks and rewards incidental to the ownership of the equipment, whether or not ownership transfers to the lessee. Such a transfer of risks and rewards is presumed to occur if at the inception of the lease, the present value of minimum lease payments, including any initial payment, amount to substantially all (over 90%) of the value of the leased equipment. Generally,

a finance lease works very much like a loan in economic terms, although it is not loan in legal terms. Under a capital lease, the rents paid by the lessee during a fixed or minimum lease term sometimes called the primary period include the cost of the equipment together with interest. If the lease continues after the primary period, the rent reduces because the lessor has been paid back (Burgess, 2002).

In Kenya, a lease contract in which the risks and rewards associated with ownership of leased equipment are substantially transferred from the lessor to the lessee, but where the lessor retains ownership of the equipment, is classified, for income tax purposes, as a finance lease. This means that the lessor is not responsible for the merchantability and suitability of the leased equipment, and the lessee has to continue paying the lease installments even if the equipment does not perform as expected (Pritchard and Hindelang, 2003). The role of the lessor in a finance lease is limited to financing the lease. This class of leases was created to enable financial institutions, which traditionally do not have equipment knowledge, to be able to finance equipment leases without taking on risks associated with the technical suitability of the leased equipment (Berger and Udell, 2005).

### **1.1.2 Financial Performance**

Financial Performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. Financial performance is a term that is used also as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or

cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt (Imhoff *et al.*, 2004).

Since a finance lease is capitalized, both assets and liabilities (current and long-term ones) in the balance sheet increase. As a consequence, working capital decreases, but the debt/equity ratio increases, creating additional leverage (Stanton and Wallace, 2004). Working capital is a measure of solvency. It is the difference between current assets and current liabilities and is the net amount of working funds available in the short run. Utilizing leasing as a procurement tool conserves cash and preserves working capital (Yan, 2002).

Myers and Majluf (2002) demonstrate that information asymmetries may cause firms to follow a pecking order approach to financing. Due to asymmetries in the information available to managers relative to outsiders, managers may find it optimal to maintain reserve borrowing capacity and avoid external equity markets. Their arguments imply that firms will choose retained earnings before debt and use new stock offerings only as a last resort. The implication of the pecking order for capital structure is that individual capital structures will reflect historical profitability and growth rather than a predetermined optimal mix of debt and equity. Baskin (2009) provides empirical support for the pecking order among a sample of large U.S. firms. He finds debt ratios to be negatively related to profitability and positively related to growth in assets.

One of the most important economic differences between leasing and buying equipment is the way each is treated for income tax purposes (Yan, 2002). The lease-versus-buy decision can be made quickly for some businesses. Generally, those with high income tax liability will find no economic advantage in leasing. This is because a leasing company is presumably profitable

enough to take full advantage of the tax savings offered to purchasers of equipment and other assets. The leasing company buys the equipment for tax reasons (Uwe, 2008). Since the equipment still must be used, the company leases the equipment it owns to companies. Many businesses have higher after-tax costs for buying equipment than those faced by the leasing company, allowing the leasing company to pass some of its savings to business people and still make a profit.

The after-tax values of the leasing and buying costs have been considered, but the time these costs are incurred has not been taken into account. Ignoring their timing can lead to an incorrect decision because money has a time value. Time value is evident every time money is invested for a period of time to earn interest or borrowed for a period of time in exchange for interest payments (Standard and Poor's, 2002).

In addition to the economic depreciation of the contract asset, the tax depreciation is, through the payment of leasing payments, accelerated if compared with the basic depreciation rules which are applied when immediately making a purchase financed by borrowing. For companies with tax profits this leads to a bringing forward of tax costs and therefore to a deferral of taxable income and of taxes paid (Goodacre, 2003). It is important to note that one does not create additional tax costs when compared with purchase financed by borrowing, but rather the deductibility of the same costs is brought forward and this is important when it comes to defining a less expensive cost of capital (Craig and Schallheim, 2006).

Although measuring financial performance is considered a simpler task, it also has its specific complications. Here, too, there is little consensus about which measurement instrument to apply. Many researchers use market measures, others put forth accounting measures and some adopt

both of these. The two measures, which represent different perspectives of how to evaluate a firm's financial performance, have different theoretical implications and each is subject to particular biases. The use of different measures, needless to say, complicates the comparison of the results of different studies (Eisfeldt and Rampini, 2005).

In other words, accounting measures capture only historical aspects of firm performance. They are subject, moreover, to bias from managerial manipulation and differences in accounting procedures. Market measures are forward looking and focus on market performance. They are less susceptible to different accounting procedures and represent the investor's evaluation of the ability of a firm to generate future economic earnings. But the stock-market-based measures of performance also yield obstacles. According to Kurfi (2009), for example, the use of market measures suggests that an investor's valuation of firm's performance is a proper financial performance measure (Elgers and Clark, 2010).

### **1.1.3 Lease Financing and Financial Performance**

Equipment financing provides an excellent alternative source of capital and a flexible alternative to cash in the acquisition of business-critical assets and equipment. Equipment financing allows companies to procure equipment at a fixed rate, for a fixed period of time, without having to purchase the equipment from cash or working capital (Myers and Majluf, 2002). Leasing permits a company to avoid many of the uncertainties associated with equipment ownership and instead allows it to focus on using the equipment or assets to run and grow its business. Companies choose to lease equipment rather than purchase equipment for many reasons which include cash flow and conservation of capital (Erickson, 2004).



Pritchard and Hindelang (2003) find that firms facing high cost of external funds can economize on the cost of funding by leasing. Their results suggest that a low rated firm should use more lease financing compared to a highly rated firm after controlling the firm size and other factors. They also find that tax rate and leasing propensity is negatively correlated. Furthermore, based on their results, they suggest that a comprehensive analysis of capital structure should not disregard the role of leasing. Similarly, Kurfi (2009) find that leasing reduces bankruptcy costs than borrowing, and it becomes attractive financing option as bankruptcy potential of a firm

The preservation of cash flow compared to conventional financing is the most attractive benefit of leasing. A “true” lease can offer low cost financing because the lessor takes advantage of tax benefits that are passed to the lessee in the form of reduced payments. If the lessee cannot currently use tax depreciation to offset taxable income due to current operating losses, loss carry-forwards or alternative minimum tax, depreciation benefits may be effectively lost forever if the lessee purchases rather than leases (Craig and Schallheim, 2006). Leasing does not require the cash outlay for a large equipment purchase and can be used to overcome budget limitations. Existing cash position and lines of credit remain free and liquid for other working capital needs that have higher ROE and or ROA metrics.

In reality, the decision to use leasing has various consequences on the cash flows and therefore influences the cost of capital after taxation. It is clear that with the decision to use leasing the sums involved in direct payments for the asset and their timing are of considerable importance (McCue, 2007). It is also clear that such a decision influences the moments when the tax debt comes to the fore and, to a certain degree, can also influence the value of these debts. The cash flows of the company after taxation are different and these changes have to be taken into

consideration when estimating the effect on the cost of capital of the new asset. When the rates of taxation are different for the lessor and the leaseholder, the leasing operation makes it possible to transfer the effect of the tax shield to the company that can best use it (Kilpatrick and Nancy, 2007). In other situations, the leasing tax laws make it possible to reach advantageous conditions for both the leaseholder and the lessor, the advantage being divided in accordance with the contractual force of the two parties.

In the presence of strong and indisputable tax advantages of leasing, the rules of behavior governing the covering of financial requirements are clearly very simple. One simply uses the financial solution which produces the biggest tax advantages. Such solutions are known to the operators and highlighted by the leasing companies and by the banks in order to place their own products (Pritchard and Hindelang, 2003).

#### **1.1.4 Nairobi Securities Exchange**

Nairobi Stock Exchange started its operations in 1954 as an overseas stock exchange when Kenya was a British colony. In 1954, the Nairobi Stock Exchange was comprised as a voluntary organization of stockbrokers enrolled under the Societies Act. NSE facilitates the mobilization of capital for development and provides savers in Kenya with an alternative saving tool. Funds that would otherwise have been consumed or deposited in bank accounts are redirected to promote growth in various sectors of the economy as people invest in securities. Economic growth is promoted through improved efficiency in mobilization of savings as capital is allocated to investments that bring the most value to the economy

NSE encourages the broader ownership of firms. The opportunity accorded the general public to have ownership rights over listed enterprises helps to reduce large income inequalities through

the sharing of profits made by these enterprises, thereby facilitating the redistribution of wealth. The Exchange facilitates improved corporate governance. Public companies tend to have better management records than private companies because of the improvement of management standards and efficiency to meet the demands of shareholders and the NSE under its corporate governance rules.

Nairobi Securities Exchange (NSE) is categorized into three market segments; Main Investment Market Segment (MIMS), Alternative Investment Market Segment (AIMS) and Fixed Income Market Segment (FIMS) (NSE Handbook, 2009). Companies listed under this segment are further categorized in ten sectors that describe the nature of their business, namely: agricultural, commercial and services, telefirm ownership and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied and construction and allied. Currently, there are sixty one Companies listed in the Nairobi Stock Exchange.

## **1.2 Research Problem**

According to Moutot *et al.*, (2007) leasing is an alternative mechanism to facilitate access to finance; it enables the use of capital equipment in particular for enterprises without credit track record and with limited possibilities to provide collateral. Today, possessions commonly rented and leased by consumers include not only traditionally non-purchased items such as apartments, formal wear, limousines, and moving vans but also appliances, art, automobiles, cameras, computers, furniture, stereos, and jewelry (Contino, 2004).

According to Yan (2002) utilizing leasing conserves cash and preserves working capital in firms. Equipment financing provides an excellent alternative source of capital and a flexible alternative to cash in the acquisition of business-critical assets and equipment. In addition Yan (2002)

concludes that leasing allows firms with low or zero marginal tax rates to transfer unusable tax shields to taxpaying lessors in exchange for lower lease payments. This contradicts Bierman, (2005) argument that making use of leases, brings the aspect of risking resources like money and that it does not preserve the working capital in firms. This goes hand in hand with what Erickson (2004) states, that within the pecking order, leasing is predicted to be negatively related to profitability over time. Hence these differences between these authors motivate the researcher to pursue and find out the real effect of lease financing on financial performance.

Several local research studies have been conducted on lease financing in Kenya. For instance Nyachieng'a (2010) established that the lack of adequate knowledge prevented SMEs from generating lease from banks or leasing companies due to their weak accounting standards since majority did not have tertiary education. In addition, resource levels affected lease financing since most high lending financial institutions had policies that hindered SMEs from securing loans.

On the other hand, Muthee (2012) established that taxes and regulatory framework were key determinants for the growth of lease finance for motor acquisition and that there is need for government to review the tax regime, strengthen the regulatory framework, while industry stakeholders develop products that are firm, specific and with mitigated financial Risks.

Further, Fatuma (2012) established that competition affects market share of small-scale leasing businesses in Kenya and the competition was making Dansoo enterprise to share clients with competitors. Despite the increasing popularity of consumption without ownership, the academic literature regarding how this activity influences financial performance is limited. This study will

therefore seek to fill the research gap by investigating the effects of lease financing on the financial performance of the firms listed in NSE.

This study sought to answer the following questions;

- i. What is the effect of lease financing on return on assets in the companies listed in Nairobi Securities Exchange?
- ii. What is the effect of lease financing on return on equity in the companies listed in Nairobi Securities Exchange?

### **1.3 Objective of the Study**

The objective of this study will be to establish the effect of lease financing on the financial performance of all companies listed in the NSE.

### **1.4 Value of the Study**

This research study will be of great importance to the management of firms in Kenya willing to adopt lease financing, as it will provide information on how tax shield, resources and access to information influence lease financing.

To the investors and stakeholders of firms in Kenya, this study will provide information on how lease financing influences the financial performance of firms and hence they can make informed decisions in relation to investments.

To the government of Kenya and policymakers, this study will provide information that can be used to form policies that can govern the use of lease financing in companies in Kenya.

Policymakers can also use the findings of this study to form policies that can protect the investors and stakeholders in companies using lease financing.

To the researchers and academicians the study will provide information that can be used as literature review in studies related to lease financing. The study will also provide a base upon which further studies can be conducted on the effect of lease financing on financial performance in firms in Kenya.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter outlines a literature review on lease financing and financial performance. The chapter begins with a theoretical review followed by an empirical literature review, conceptualization of variables, conceptual framework, operationalization of variables and an operational framework.

#### **2.2 Theoretical Review**

##### **2.2.1 Financial contracting theory**

Traditionally, the theory of financial leasing has focused on the differential tax position of the lessee and the lessor as the primary rationale for leasing. The fundamental argument is that, if a firm is not in a full tax-paying position purchasing and depreciating an asset may be costly because it can use only a low capital or depreciation tax allowance (Imhoff, Robert and David, 2004). However, by leasing the asset, the lessor would claim the tax allowances, and the tax benefits could be transferred indirectly to the lessee through lower lease payments.

There has been an increasing tendency to view leasing in the broader context of financial contracting. While not denying the potential importance of taxes and the substantiality between leasing and debt, newer literature has placed greater emphasis on the relative abilities of different types of financial contracts to control agency costs (Gosman and Ernest, 2000). Financial

contracting theory suggests that company characteristics such as business risk and the nature of the investment opportunity should affect contracting costs and thus the choice to lease rather than to buy asset. Conflicts raised by the agency costs are referred to as the asset substitution problem which arises from the possibility that the borrowed funds may be used to finance other more risky projects or to be distributed as dividends to shareholders and can lead to the under investment problem that may result from the fact that lenders are likely to refrain from financing some positive NPV projects that are difficult to monitor because contracts or covenants cannot cover all contingencies (Goodacre, 2003). Leasing mitigate these conflicts because the asset is purchased by the lesser and hence the working capital of the company remains high.

### **2.2.2 Modigliani–Miller theorem**

The Modigliani–Miller theorem (of Franco Modigliani, Merton Miller) forms the basis for modern thinking on capital structure. The basic theorem states that, under a certain market price process (the classical random walk), in the absence of taxes, bankruptcy costs, agency costs, and asymmetric information, and in an efficient market, the value of a firm is unaffected by how that firm is financed. It does not matter if the firm's capital is raised by issuing stock or selling debt. It does not matter what the firm's dividend policy is. Therefore, the Modigliani–Miller theorem is also often called the capital structure irrelevance principle (Brealey and Myers, 2008).

The Theorem makes two fundamental contributions. In the context of the modern theory of finance, it represents one of the first formal uses of a no arbitrage argument (though the “law of one price” is longstanding). More fundamentally, it structured the debate on why irrelevance fails around the Theorem’s assumptions: (i) neutral taxes; (ii) no capital market frictions (i.e., no transaction costs, asset trade restrictions or bankruptcy costs); (iii) symmetric access to credit



markets (i.e., firms and investors can borrow or lend at the same rate); and (iv) firm financial policy reveals no information. Modigliani and Miller (1958) also assumed that each firm belonged to a “risk class,” a set of firms with common earnings across states of the world, but Stiglitz (1969) showed that this assumption is not essential. The relevant assumptions are important because they set conditions for effective arbitrage: When a financial market is not distorted by taxes, transaction or bankruptcy costs, imperfect information or any other friction which limits access to credit, then investors can costlessly replicate a firm’s financial actions. This gives investors the ability to ‘undo’ firm decisions, if they so desire. Attempts to overturn the Theorem’s controversial irrelevance result were a fortiori arguments about which of the assumptions to reject or amend. The systematic analysis of these assumptions led to an expansion of the frontiers of economics and finance.

### **2.2.3 Pecking Order Theory**

The pecking order has received strong empirical support. Baskin (2002) and Toy et al., (2001) find debt ratios to be positively related to the need for funds (growth) and negatively related to the availability of internally generated funds (profitability). As yet, a pecking order approach has not been applied to leasing. As a debt like instrument, leasing is expected to be positively related to growth and negatively related to profitability. Previous empirical studies of the determinants of leasing have omitted profitability and growth from their models, resulting in potentially serious misspecification problems. When the lease choice is framed within the financial pecking order, it is shown that for firms with similar profitability and growth, leases and debt are indeed substitutes.

Myers and Majluf (2006) demonstrate that information asymmetries may cause firms to follow a pecking order approach to financing. Due to asymmetries in the information available to managers relative to outsiders, managers may find it optimal to maintain reserve borrowing capacity and avoid external equity markets. Their arguments imply that firms will choose retained earnings before debt and use new stock offerings only as a last resort. The implication of the pecking order for capital structure is that individual capital structures will reflect historical profitability and growth rather than a predetermined optimal mix of debt and equity.

Baskin (2002) provides empirical support for the pecking order among a sample of large U.S. firms. He finds debt ratios to be negatively related to profitability and positively related to growth in assets. If historic profitability and growth influence lease use as well, they must be incorporated into the leasing models. The previous leasing literature ignores the effect of profitability and growth on leasing which results in model misspecification and makes significance tests questionable.

over time and positively related to asset growth as debt is. Although there are no generally accepted models of the determinants of lease use, most researchers agree on the importance of certain factors. One factor is the tax bracket of the lessee. Leasing allows firms with low or zero marginal tax rates to transfer unusable tax shields to taxpaying lessors in exchange for lower lease payments. Thus, tax bracket is predicted to be negatively related to leasing (Toy et al., 2001).

#### **2.2.4 Loanable Funds Theory**

Economists offer a simple model for understanding financial markets and how the real interest rate is determined. This hypothetical market, referred to as the loanable funds market, exists to

bring together “savers” and “borrowers.” Savers supply, and borrowers demand the part of savers' incomes that are not spent on goods and services. The real interest rate occurs at the point where the amount saved equals the amount borrowed (Allen *et al.*, 2000).

According to the law of supply, producers are only willing to offer more if they can collect a higher price because they face ever-increasing costs. In the loanable funds market, the price is the real interest rate. Savers, the producers of loanable funds, respond to the price by offering more funds as the rate increases and less as the rate decreases. Borrowers act as consumers of loanable funds — their behavior is explained by the law of demand. When the interest rate is high, they are less willing and able to borrow, and when interest rates are low, they are more willing and able to borrow (Eisfeldt and Rampini, 2005).

According to the expanded view of the loanable funds theory, savers are represented by households, businesses, governments, and the foreign sector. Borrowers also are represented by these same sectors (Hendel and Lizzari, 2002). Changes in the saving and borrowing behavior of the various sectors of the economy result in change in both the real interest rate as well as quantity of loanable funds exchanged. For example, a decision by foreign savers to save more in the United States results in a lower real interest rate and a greater quantity of loanable funds exchanged for the country. A decision by the U.S. government to borrow money and engage in deficit spending would increase the demand for loanable funds and result in a higher real interest rate and a greater quantity of loanable funds exchanged. The loanable funds theory of interest rate determination is useful for understanding changes in long-term interest rates.

### **2.2.5 Liquidity Preference Theory**

A theory stating that, all other things being equal, investors prefer liquid investments to illiquid ones. This is because investors prefer cash and, barring that, prefer investments to be as close to cash as possible. As a result, investors demand a premium for tying up their cash in an illiquid investment; this premium becomes larger as illiquid investments have longer maturities. This theory is more formally stated as: forward rates are greater than future spot rates (Craig and Schallheim, 2006).

Liquidity preference means the desire of the public to hold cash. According to Keynes, there are three motives behind the desire of the public to hold liquid cash: the transaction motive, the precautionary motive, and the speculative motive (Duke *et al.*, 2012).

The transactions motive relates to the demand for money or the need of cash for the current transactions of individual and business exchanges. Individuals hold cash in order to bridge the gap between the receipt of income and its expenditure. This is called the income motive. The businessmen also need to hold ready cash in order to meet their current needs like payments for raw materials, transport, wages etc. This is called the business motive. Precautionary motive for holding money refers to the desire to hold cash balances for unforeseen contingencies. Individuals hold some cash to provide for illness, accidents, unemployment and other unforeseen contingencies. Similarly, businessmen keep cash in reserve to tide over unfavorable conditions or to gain from unexpected deals (Erickson, 2004). Keynes holds that the transaction and precautionary motives are relatively interest inelastic, but are highly income elastic. The amount of money held under these two motives is a function of the level of income.

The speculative motive relates to the desire to hold one's resources in liquid form to take advantage of future changes in the rate of interest or bond prices. Bond prices and the rate of interest are inversely related to each other. If bond prices are expected to rise, i.e., the rate of interest is expected to fall, people will buy bonds to sell when the price later actually rises. If, however, bond prices are expected to fall, i.e., the rate of interest is expected to rise, people will sell bonds to avoid losses (Goodacre, 2003). According to Keynes, the higher the rate of interest, the lower the speculative demand for money, and lower the rate of interest, the higher the speculative demand for money.

## **2.3 Lease Financing**

### **2.3.1 Resources**

The amount of available resources appears to have both negative and positive effect on opportunity identification by entrepreneurs (Hoegl *et al.*, 2008). On the one hand, abundant resources enable experimentation, resulting in more new ideas and more innovation (Paladino, 2007). For instance, experienced administrators or finance managers can advise a firm on whether to go for credit or lease financing. On the other hand, resource constraints can spur necessity-driven creativity and lead to identifying promising opportunities (Katila and Shane, 2005). For instance, when a company has insufficient finances, it can explore all avenues to meet its needs and in the process get information on lease financing.

The effect of resource constraints on opportunity identification and resulting innovative performance are mixed. A lack of financial resources can limit firms' innovative performance as they cannot afford to develop (multiple) technologies or to experiment with new ideas. Missing specific capabilities, caused by a shortage of qualified managers and employees, also reduces

decision making processes on financing (Rao and Drazin, 2002). In particular small firms and young ventures experience that these resource constraints may have far-reaching consequences. For instance, small firms with financial constraints are not able to hire the necessary employee, which reduces their ability to weigh between credit and leasing.

However, resource constraints direct the attention of entrepreneurs toward opportunities related to the constraints they are experiencing. This effect could only be identified by relating different types of constraints to different sources of opportunities. As a consequence, a types-of-resources explanation (Mellahi and Wilkinson, 2010) does not offer a complete explanation of the effect of resource constraints on opportunity identification.

Lack of finances or access to credit is almost universally indicated as a key problem to the performance of small manufacturing companies. This affects financing choice by limiting the number of alternatives that can be considered. In some cases, even where credit is available, the entrepreneur may lack freedom of choice because the lending conditions may force the purchase of heavy, immovable equipment that can serve as collateral for the loan (Baker and Nelson, 2005). Credit constraints operate in variety of ways in Kenya where undeveloped capital market forces entrepreneurs to rely on self-financing or borrowing from friends or relatives. Lack of access to long-term credit for small enterprises forces them to rely on high cost short term finance (Baker, 2007).

There are various other financial challenges that face small enterprises. They include the high cost of credit, high bank charges and fees. The scenario witnessed in Kenya particularly during the climaxing period of the year 2008 testifies the need for credit among the common and low earning entrepreneurs (Bradley *et al.*, 2011). Numerous money lenders in the name of Pyramid schemes came up, promising hope among the ‘little investors,’ that they can make it to the

financial freedom through soft borrowing. The rationale behind turning to these schemes among a good number of entrepreneurs is mainly to seek alternatives and soft credit with low interest rates while making profits. Financial constraint remains a major challenge facing small manufacturing companies in Kenya

### **2.3.2 Access to information**

Small manufacturing companies need to have access to adequate information to equip them in making decisions on business financing and buying of equipments. The establishment of an active SMEs sector - and the effective utilization of quality business information - has been identified as crucial in attaining long-term and sustainable economic growth (Corps 2005). However, in most developing countries, the SMEs sector suffers from inadequacies in the provision of business information - which is only available from stand-alone institutions; is often slow and cumbersome to access; is limited in scope; and is not provided in an integrated manner. Okello-Obura *et al.*, (2008) argues that the SMEs depend, mostly, on informal institutions as they lack an awareness of important business information provision agencies or institutions. Access to information is insufficient. This is inconsistent with the requirement for effective competition in global market. The SMEs need tailor-made information solutions that is, business information services that assess, verify and apply information to a specific business problem like business financing.

In order to respond to the specific needs of the SMEs, business information services should create value by bringing together information from different sources - both local and international. This enables the integration of the business into national and global value chains. Okello-Obura *et al.*, (2008) argue that there is a need for collaboration between various industrial

and trade organizations, professional bodies, private enterprises and government departments to provide SMEs with a comprehensive range of business information, advice and facilities. This implies that the issue of quality information becomes evident. However, this is dogged by numerous challenges.

According to Moyi (2000), poor information quality can create chaos. Unless its root cause is diagnosed, efforts to address it can be worthless. According to Ladzani (2001), the priority ranking of the SMEs needs, clearly puts information provision at the top of the list of services to be provided. The SMEs development is hampered by an “information-poor” environment. SMEs perform better in information-rich environments (Moyi 2000 and Ladzani 2001).

SMEs get information from a variety of sources, such as their peers, competitors, suppliers and customers. Entrepreneurs are more likely to value - and use - information that comes from someone close to them who has a track record of practical credibility (Ladzani, 2001). This raises the question of which sources of business information are required for the SMEs and the problems of accessibility to the required business information. Will the sources only be restricted to formal sources, like libraries, radio stations, television stations etc., or will they include informal sources, like experienced business managers in the community, customers, etc.?

Accessing business information services has over the years been greatly enhanced with the emergence of various information and communication technologies. In developed countries, because of well-developed information and communication technologies (ICTs) infrastructure and easy access to computer hardware and software, SMEs enjoy easy access to business



information services (Chiwere and Dick 2008). ICTs can generate higher market shares either by reducing input costs and thus allowing firms to produce more of the same products, or by improving the quality of products or product packages, with, as a result, additional sales or higher-priced products. However, most of the small scale manufacturers in Kariobangi Light Industry do not use or do not know how to use computers.

### **2.3.3 Credit risk**

Capital structure theory concludes that the choice between debt and equity financing is not important on the value of firm (Erickson and Trevino, 2004). Firm follows a “pecking order” in raising money; finance internally (using retained earnings) first, then with debt, finally sell stock to raise money. Another view in the optimal capital structure literature is the trade-off theory between tax gains and bankruptcy costs. Capital structure theory has traditionally focused on the optimal levels of debt and equity (Baskin, 2009).

Firms facing high cost of external funds can economize on the cost of funding by leasing. Their results suggest that a low rated firm should use more lease financing compared to a highly rated firm after controlling the firm size and other factors. They also found that tax rate and leasing propensity is negatively correlated (Nyachieng'a, 2012). Furthermore, based on their results, they suggest that a comprehensive analysis of capital structure should not disregard the role of leasing. Similarly, leasing reduces bankruptcy costs than borrowing, and it becomes attractive financing option as bankruptcy potential of a firm increases (McCue, 2007).

Lessor must be able to remain solvent during the term of the lease and be able to service the lease contract payments, and manage collections, residual value realization, recovery of equipment upon lessee default. In addition, the Lessee (obligor) must be able fulfill the terms of

the lease (payments and maintenance of the equipment). This requires a standard credit analysis of the company to determine sufficient cash flow to service the scheduled payments and contractual obligations (insurance, maintenance, etc.) of the lease (Duke *et al.*, 2012).

## **2.4 Empirical Literature Review**

There are many studies that have been conducted on lease financing globally. Kurfi (2009) sought to examine lease financing practices and corporate capital structure of selected Nigerian manufacturing firms. The study sought to determine the extent to which the firms employ lease financing as a means of digital assets acquisitions and the effect on corporate capital structure. A survey method was adopted in selecting a sample of manufacturing firms listed in the Nigerian Stock Exchange. The financial statements of the sampled manufacturing firms for ten year period (1993-2002) were analyzed and also structured questionnaires and interviews were granted to the financial managers of the firms. The findings of the study reveal that: leasing is a veritable alternative for capital assets acquisitions and that lease constitute about 50% of their total fixed assets because most of the lease contracts are structured with provision for ultimate purchase by the lessee (the firm) after the primary lease term to finance capital assets acquisition.

Uwe (2008) argues that the separation of leases into operating and finance leases for accounting purposes can result in incentives to favor operating lease contracts, since they avoid on-balance-sheet debt. The IASB and FASB are conducting a long-term joint project on leasing, following the G4+1 group's research on possible improvements to lease accounting. One alternative is to treat all leases in a manner similar to today's finance leasing. He established that Germany shows notable changes in a variety of financial ratios, especially for assets and liability relations, which

may trigger management with incentives to dampen these effects. Of note for standard setters, the effect of operating lease capitalization should not be overstated, only minor effect can be observed for profitability ratios and market multiples often used for valuation purposes. Moreover, most industries remain almost unaffected and the relative ratio-based ranking of all sample companies does not change much.

Erickson and Trevino (2004) investigated the determinants of both short-term and long-term leasing in the airline industry. By examining leasing within a pecking order framework, profitability and growth are introduced as potentially important determinants of leasing. Financial leases were found to substitute for debt and to be used relatively more by firms with higher credit risk. On the other hand, short-term operating leases do not substitute for debt. Operating leases are used by smaller firms, non-tax paying firms and firms experiencing more rapid sales growth.

Duke *et al.*, (2012) did a study that illustrated the effect of the proposed new lease standard by the Financial Accounting Standards Board and the International Accounting Standards Board on existing outstanding operating leases. Specifically, the case examines the effect of the proposal that all firms report existing operating leases as capital leases upon the initial adoption of the proposed standard. By applying a constructive capitalization model to two firms who rely on operating leases for financing, FedEx and UPS, the study found that both companies would have to record billions of dollars of liabilities that had only appeared in the footnotes of their financial statements under the current lease standards. In addition, the firms would experience a decline in retained earnings and key financial ratios, such as the debt-to-equity, return-on-assets, and interest coverage ratios, by reporting operating leases as capital leases under the new proposed

standard. Furthermore, the magnitude of the lease capitalization effect is much smaller for UPS than for FedEx.

McCue (2007) conducted a study and in contrast to capital leases, which are reported on the balance sheet as debt, operating leases are a form of off-balance sheet financing only reported in the notes to the financial statement and have limited disclosure requirements. Following the perpetuity method of corporate finance, this study developed a capitalized operating lease value for hospitals. Evaluating the substitutability between lease and debt financing, the findings show a marginal displacement of debt by lease financing. Assessing the relationship of market, mission, operating, and financial factors on lease financing for all short-term, acute-care hospitals across the United States, the results indicate that investor-owned hospital management companies and hospitals located in markets are less likely to lease and that smaller hospitals with fewer unoccupied beds, higher proportion of government payers, low liquidity, and lower capital expenditures are more likely to lease.

Nyachieng'a (2012) conducted a study to establish and analyze whether policy and legal framework, access to information, level of education and resources are factors that determined access to lease financing in Kenya among small and medium enterprises. The study employed the use of descriptive research design where by data collected was presented without the researcher influencing the findings in anyway. The target population for this study was 50 entrepreneurs of SMEs in Kisii Municipality. The findings of the study indicated that the respondents lacked access to information and as a result lacked access to credit. The study concluded that lack of adequate knowledge prevented SMEs from generating lease from banks or leasing companies due to their weak accounting standards since majority did not have tertiary

education. As a result of this it was difficult for leasing firms to obtain information about prospective borrowers.

These findings clearly show that there is immense of literature on lease financing globally and locally. However, none of these studies focused to establish the effect of lease financing on the financial performance, a research gap. This study is therefore motivated to fill this gap by focusing on all firms in Kenya.

## **2.5 Summary of Literature Review**

From the discussions above, it can be noted that pecking order theory, the agency theory, the free cash flow theory, the trade-off theory and the static trade off theory offer the theoretical framework on lease financing and the resultant financial performance. They have offered a useful framework in understanding leasing and the resultant industry value.

Empirical studies in the area of lease financing and market industry offer a broad set of both consistent and contradictory results. Both conservatism and risk taking tendencies have been observed in the various studies conducted.

Lease financing is a factor that has been discussed in several studies and also in general literature. We still have gaps in the knowledge of effect of lease financing on the financial performance. The area is still being explored by researchers in the context of previous empirical work.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the methodology of the study. It outlines how the study was carried out. The chapter presents the research design, the population, sample, data collection instruments, and data analysis and processing.

#### **3.2 Research Design**

Research design refers to the method used to carry out a research. This research study used a descriptive research design. This design involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data. Descriptive studies portray the variables by answering who, what, and how questions (Babbie, 2002). According to Cohen et al. (2003), descriptive design is a process of collecting data in order to test hypothesis or to answer the questions of the current status of the subject under study. Its advantage is that, it is used extensively to describe behavior, attitude, characteristic and values.

#### **3.3 Target Population**

According to Mugenda and Mugenda (2003) a study population is a well-defined or specified set of people, group of items, households, firms, services, elements or events which are being investigated. Thus the population should fit a certain specification, which the researcher is studying and the population should be homogenous. The target population of this study was all the 61 companies listed in Nairobi Securities Exchange. The period of study was seven years (2007 to 2013).

### **3.4 Sample Size**

A subset containing the characteristics of a larger population. Samples are used in statistical testing when population sizes are too large for the test to include all possible members or observations. A sample should represent the whole population and not reflect bias toward a specific attribute. The sample size of this study will be all the companies listed in NSE that are using lease financing. There are 14 companies listed in the NSE that use lease financing.

### **3.5 Data Collection Instruments**

The research relied upon secondary data obtained from Nairobi Securities Exchange and companies' annual reports. Such data was collected by use of data collection sheets and included Net income (profit after tax), shareholders equity, amount used on leasing and average total assets. According to Cooper and Schindler (2003) secondary data is the data that has been already collected by and readily available from other source. Secondary data analysis saves time that would otherwise be spent collecting data and, particularly in the case of quantitative data, provides larger and higher-quality databases that would be unfeasible for any individual researcher to collect on their own.

### **3.6 Data Analysis and Processing**

Data analysis was done after data collection. This study used descriptive and inferential statistics to establish the influence of lease financing on financial performance. Descriptive statistics include mean, median, variance and standard deviation. Inferential statistics used in this study include correlation analysis and regression analysis.

The Regression equation was;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where;

Y = Return on Assets /Return on Equity

$\beta_0$  = Constant Term

$\beta_1$  is Beta coefficients

$X_1$  is lease financing

$\varepsilon$  = Error term.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

Net Income = Total Revenue - Total Expenses

Shareholder's Equity = Share Capital + Retained Earnings - Treasury Shares

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

Total Assets = Capital + Liabilities

### **3.7 Data Validity and Reliability**

Pilot survey is a small scale replica and rehearsal of the main study. It assists in determining the suitability and ease of use of the research instruments and the operational aspects of



administering the questionnaire. The purpose of a pilot test is to discover possible weaknesses, inadequacies, ambiguities and problems in any aspect of the research process.

Validity will be achieved by pre-testing the instrument to be used to identify and change any ambiguous, awkward, or offensive questions and technique as emphasized by Cooper and Schindler (2003). The validity of the research instruments will be established by seeking opinions of experts in the field of study especially the supervisors.

Reliability on the other hand will be ensured by using an internal consistency technique will be applied by use of Cronbach's Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicated good reliability (Mugenda & Mugenda, 2003). The pilot data will not be included in the actual study.

## CHAPTER FOUR

### DATA ANALYSIS, AND PRESENTATION OF FINDINGS

#### 4.1 Introduction

This chapter represents the results and findings of the study based on the research objectives. The study sought to determine the relationship between lease financing and the financial performance of companies listed in Nairobi Securities Exchange. The study also sought to establish the effect of lease financing on return on assets and return on equity in companies listed in Nairobi Securities Exchange. The results are presented in the form of summary tables. Regression analysis are used to analyze the data to answer the research objectives.

#### 4.2 Data Presentation

This study covered 14 companies listed in Nairobi Securities Exchange that were using lease financing. The study obtained data on Net income (profit after tax), shareholders equity, amount used on leasing and average total assets for the seven years (2007 to 2013).

**Table 4.1: Descriptive Statistics of the Variables**

		Statistic	Std. Error
Lease Financing (in millions)	Mean	429.2551	30.40313
	Median	434.5000	
	Variance	90586.357	
	Std. Deviation	300.97567	
	Minimum	22.00	

	Maximum	1477.00	
Return on assets (1/2)%	Mean	4.0096	.14282
	Median	3.7800	
	Variance	1.999	
	Std. Deviation	1.41385	
	Minimum	1.10	
	Maximum	7.70	
Return on Equity (1/4)%	Mean	28.7237	.82235
	Median	29.7000	
	Variance	66.274	
	Std. Deviation	8.14087	
	Minimum	4.30	
	Maximum	45.97	

As indicated in table 4.1 above, the 14 companies that were using lease financing had spent an average of Ksh 429.2551 million. The minimum value of lease financing was Ksh 22 million while the maximum amount was Ksh 1,477 million. The standard deviation was high at 300.98 million.

In relation to return on assets, the 14 companies that were using lease financing had an average of 4.01. The standard deviation was at 1.414, the minimum value was at 1.1.% and the maximum value was at 7.7%.

In relation to return on equity, the 14 companies that were using lease financing had an average of 28.72. The standard deviation was at 8.14, the minimum value was 4.3 and the maximum value was 45.97.

#### 4.2.1 Lease Financing and Return on Equity

The study sought to establish the effect of lease financing on return on assets in companies listed in Nairobi Securities Exchange.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

#### 4.2.2 Correlation Analysis

**Table 4.2: Return on Equity Correlations**

		Return on Equity %	Lease Financing (in millions)
Pearson Correlation	Return on Equity (%)	1.000	.242
	Lease Financing (in millions)	.242	1.000
Sig. (1-tailed)	Return on Equity (%)	.	.008
	Lease Financing (in millions)	.008	.
N	Return on Equity (%)	98	98
	Lease amount (in millions)	98	98

A correlation is a number between -1 and +1 that measures the degree of association between two variables. A positive value for the correlation implies a positive. A negative value for the correlation implies a negative or inverse association. According to the findings, there is a

positive association between lease financing and Return on Equity. This is shown by a correlation coefficient of 0.242 and a p-value of 0.008, which is less than 0.05 (significance level).

### 4.2.3 Regression Analysis

The regression equation for lease financing (independent variable) and Return on Equity (Dependent Variable).

The regression equation is;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y = Return on Equity;  $\beta_0$  = Constant Term;  $\beta_1$  is Beta coefficients;  $X_1$  is lease financing and  $\varepsilon$  = Error term.

**Table 4. 3: Return on Equity Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.242 <sup>a</sup>	.059	.049	7.94015

a. Predictors: (Constant), Lease Financing (in millions)

b. Dependent Variable: Return on Equity (%)

The independent variable (lease financing) explains a variation 4.9% of Return on Equity in the 14 companies that were using lease financing as represented by the  $R^2$ . This therefore means that other factors not studied in this research contribute 95.1% to Return on Equity.

**Table 4.4: Return on Equity ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	376.145	1	376.145	5.966	.016 <sup>b</sup>
	Residual	6052.409	96	63.046		
	Total	6428.554	97			

a. Dependent Variable: Return on Equity (1/4)%

b. Predictors: (Constant), Lease amount (in millions)

The table 4.4 shows the analysis of variance. The results indicated that the model was significant since the p-value is 0.016 which is less than 0.05 thus the model is statistically significant in predicting how lease financing influences Return on Equity. The F critical at 5% level of significance was 3.92 (1,96). Since F calculated (5.966) is greater than the F critical. This shows that the overall model was significant.

**Table 4.5: Return on Equity Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25.915	1.402		18.485	.000
	Lease amount (in millions)	.007	.003	.242	2.443	.016

a. Dependent Variable: Return on Equity (%)

The regression equation was;

$$Y = 25.915 + 0.07 X_1 + \varepsilon$$

The findings presented show that there is a positive significant relationship between lease financing and Return of Equity as shown by a coefficient of 0.07 (p-value=0.016). This shows that a unit increase in lease financing would lead to a 0.07 improvement in Return on Equity.

#### 4.2.4 Lease Financing and Return on Assets

The study also sought to establish the effect of lease financing on return on assets and return on equity in companies listed in Nairobi Securities Exchange.

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

#### 4.2.5 Correlation Analysis

**Table 4. 6: Return on Assets Correlations**

		Return on assets (%)	Lease Financing (in millions)
Pearson Correlation	Return on assets (%)	1.000	.282
	Lease Financing (in millions)	.282	1.000
Sig. (1-tailed)	Return on assets (%)	.	.002
	Lease Financing (in millions)	.002	.
N	Return on assets (%)	98	98
	Lease Financing (in millions)	98	98

According to the findings, there is a positive association between lease financing and Return on Assets. This is shown by a correlation coefficient of 0.282 and a p-value of 0.002, which is less than 0.05 (significance level).

#### 4.2.6 Regression Analysis

The regression equation for lease financing (independent variable) and Return on Assets (Dependent Variable).

The regression equation is;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y = Return on Assets;  $\beta_0$  = Constant Term;  $\beta_1$  is Beta coefficients;  $X_1$  is lease financing and  $\varepsilon$  = Error term.

**Table 4. 7: Return on Assets Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.282 <sup>a</sup>	.080	.070	1.36333

a. Predictors: (Constant), Lease Financing (in millions)

b. Dependent Variable: Return on assets (%)

The independent variable (lease financing) explains a variation 7.0% of Return on Assets in the 14 companies that were using lease financing as represented by the  $R^2$ . This therefore means that other factors not studied in this research contribute 93.0% to Return on Assets.



**Table 4. 8: Return on Assets ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.468	1	15.468	8.322	.049 <sup>b</sup>
	Residual	178.433	96	1.859		
	Total	193.901	97			

a. Dependent Variable: Return on assets (1/2)%

b. Predictors: (Constant), Lease Financing (in millions)

The table 4.8 shows the analysis of variance. The results indicated that the model was significant since the p-value is 0.049 which is less than 0.05 thus the model is statistically significant in predicting how lease financing influences Return on Assets. The F critical at 5% level of significance was 3.92 (1,96). Since F calculated (8.322) is greater than the F critical. This shows that the overall model was significant.

**Table 4. 9: Return on Assets Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.440	.241		14.291	.000
	Lease Financing (in millions)	.001	.000	.282	2.885	.049

a. Dependent Variable: Return on assets (%)

The regression equation was;

$$Y = 3.440 + 0.01 X_1 + \varepsilon$$

The findings presented show that there is a positive significant relationship between lease financing and Return of Assets as shown by a coefficient of 0.01 (p-value=0.049). This shows that a unit increase in lease financing would lead to a 0.01 improvement in Return on Assets.

### **4.3 Summary and Interpretation of the findings**

The study sought to determine the relationship between lease financing and the financial performance of companies listed in Nairobi Securities Exchange. The study also sought to establish the effect of lease financing on return on assets and return on equity in companies listed in Nairobi Securities Exchange.

Finance leases typically entail the lessee, who is the customer or borrower, identifies a given asset (equipment, vehicle, software, etc.) and the lessor, who is the finance company, purchases the identified asset and becomes its legal owner. The lessee, in turn, will be able to use the asset throughout the determined leasing period, paying a series of rentals or installments for the use of that asset. At the conclusion of the leasing period, the lessor would have recovered a large portion (or all) of the initial cost of the identified asset, in addition to interests earned from the rentals or installments paid by the lessee.

In the recent past, lease finance has been consented as one of the cornerstones of modern financial sources and a field of crucial decision for corporate organizations globally and in Kenya. The study established that there is a positive significant relationship between lease financing and Return on Equity. Return on equity measures the rate of return on the ownership interest (shareholders' equity) of the common stock owners. This shows that lease financing has a

positive influence on a firm's efficiency in generating profits from every unit of shareholders' equity. ROE shows how well a company uses investment funds to generate earnings growth. By using lease financing, companies divert the money they could have used for making purchases to the working capital or to other investments. For instance, most of the companies that use lease financing among the companies listed in Nairobi Securities exchange are Banks. By using lease financings, Banks divert money that they could have used to buy machines and buildings to opening more branches and in increasing their loan portfolio.

The study also established that there is a positive significant relationship between lease financing and Return on Assets. The return on assets is a company's net income divided by its average of total assets. The return on assets formula looks at the ability of a company to utilize its assets to gain a net profit. Net income in the numerator of the return on assets formula can be found on a company's income statement. Net income is the amount earned by a company after subtracting out the expenses incurred, including depreciation and taxes. Lease financing reduces the taxes of a company which is a factor in calculating return on assets.

The impact of the use of lease financing on a firm's profitability can be positive or negative. Lease financing is positive when it is used to generate a return on assets that is higher than the before-tax cost of debt, thereby enhancing the return on equity. This results in profitability and wealth maximization.

This study found that lease financing influences Return on Equity positively. These findings agree with Salam (2013) findings that lease financing has a positive effect when it is used to generate a return on assets that is higher than the before-tax cost of debt, thereby enhancing the return on equity. This results in profitability and wealth maximization.

The findings also agree with Correia et al. (2003) findings that the final impact of positive lease financing is on the return on equity, which increases at a rate faster than if the firm had no debt.

The study also found that the average Return on Equity in this study was 28.7237%. According to Baker and Hayes (2006) ROEs between 15% and 20% are generally considered good. This shows that lease financing was influencing Return on Equity positively.

The study also found that lease financing influences Return on Assets positively. These findings agree with Graham and King (2011) argument that lease financing affects Return on Assets positively. Return on Assets is a financial ratio that shows the percentage of profit that a company earns in relation to its overall resources (total assets).

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary

Finance leases typically entail the lessee, who is the customer or borrower, identifies a given asset (equipment, vehicle, software, etc.) and the lessor, who is the finance company, purchases the identified asset and becomes its legal owner. The lessee, in turn, will be able to use the asset throughout the determined leasing period, paying a series of rentals or installments for the use of that asset.

Lease finance has been adopted by various companies listed in Nairobi Securities Exchange. The study established that there is a positive significant relationship between lease financing and Return on Equity. Return on equity (ROE) measures the rate of return on the ownership interest (shareholders' equity) of the common stock owners. This shows that lease financing has a positive influence on a firm's efficiency in generating profits from every unit of shareholders' equity. ROE shows how well a company uses investment funds to generate earnings growth. By using lease financing, companies divert the money they could have used for making purchases to the working capital or to other investments. Lease financing has a positive effect when it is used to generate a return on assets that is higher than the before-tax cost of debt, thereby enhancing the return on equity. This results in profitability and wealth maximization. The study also found that the average Return on Equity in this study was 28.7237%, which is considered good.

The study also established that there is a positive significant relationship between lease financing and Return on Assets. The return on assets is a company's net income divided by its average of

total assets. The return on assets formula looks at the ability of a company to utilize its assets to gain a net profit. The ROA figure gives investors an idea of how effectively the company is converting the money it has to invest into net income. Net income in the numerator of the return on assets formula can be found on a company's income statement. Net income is the amount earned by a company after subtracting out the expenses incurred, including depreciation and taxes. Lease financing reduces the taxes of a company which is a factor in calculating return on assets. Return on Assets (ROA) shows the percentage of profit that a company earns in relation to its overall resources (total assets). The higher the ROA number, the better, because the company is earning more money on less investment.

## **5.2 Conclusion**

This study concludes that 14 companies listed in Nairobi Securities Exchange have been using lease financing for more than 7 years. The study concludes that there is a positive association between lease financing and Return on Assets. In addition, a unit increase in lease financing would lead to a 0.07 improvement in Return on Equity. Return on Equity shows how well a company uses investment funds to generate earnings growth. The study also concludes that using lease financing, companies divert the money they could have used for making purchases to the working capital or to other investments. In addition, by using lease financings, banks divert money that they could have used to buy machines and buildings to opening more branches and in increasing their loan portfolio. Further, lease financing has a positive effect when it is used to generate a return on assets that is higher than the before-tax cost of debt, thereby enhancing the return on equity.

This study concludes that there is a positive association between lease financing and Return on Assets. The study found that an increase in lease financing would lead to a 0.01 improvement in Return on Assets. The return on assets is a company's net income divided by its average of total assets. The return on assets formula looks at the ability of a company to utilize its assets to gain a net profit. Thus higher values of return on assets show that business is more profitable. This ratio should be only used to compare companies in the same industry. The reason for this is that companies in some industries are most asset-insensitive that is they need expensive plant and equipment to generate income compared to others. Their ROA will naturally be lower than the ROA of companies which are low asset-insensitive. An increasing trend of ROA indicates that the profitability of the company is improving. Conversely, a decreasing trend means that profitability is deteriorating.

The study further concludes that the impact of the use of lease financing on a firm's profitability can be positive or negative. Lease financing is positive when it is used to generate a return on assets that is higher than the before-tax cost of debt, thereby enhancing the return on equity. This results in profitability and wealth maximization. Evidence from this study found that firm performance of companies listed in Nairobi Securities Exchange depend on lease finance activities, suggesting that firms in Kenya should be consistently involved in their lease finance practices because lease finance has a significant impact on improving their financial performance. Although lease finance institutes in Kenya are faced with insufficient funds problems which militate against their efforts to grant sufficient loans to firms, yet their tendencies to augment the financial needs of firms is considerably acknowledge. This study is useful for businesses and services in Bangladesh.

### **5.3 Recommendations to Policy and Practice**

The study found that lease financing influences return on assets (ROA) and return on equity (ROE). This study therefore recommends that companies listed in Nairobi Securities Exchange as well as other companies in Kenya should make use of lease financing so as to improve their financial performance.

The study also recommends that the CBK as well as the government of Kenya should make the leasing business more favorable so as to enable more firms in Kenya to use lease financing. This will help to improve their financial performance and hence their contribution to the economy of the country.

This study also recommends that the government of Kenya and policy makers should formulate policies that would increase the number of lessors in Kenya. This would enable more companies in Kenya to obtain lease financing.

Since it is a growing business in Kenya, investors should consider investing in the leasing business. This is because many companies today are considering leasing as compared to obtaining a loan of purchasing as it is a more flexible way of financing. Hence the investor can fix their need of an asset and they can get it through lease financing.

The study recommends that financial leasing should be encouraged for newly founded, small and medium-sized enterprises, entrepreneurs and all users with a weaker credit worthiness that is the users who do not dispose of means they could offer in the name of securing the loan as financial reasons in relation to other forms of financing as it stems from the lessor being a formal-legal owner of the lease object over the term of the lease contract, which enables him or her to run a



greater risk in terms of potential client's creditworthiness. This type of financing is therefore adequate.

This study also recommends that leasing companies in Kenya should increase their scope so as to provide more services to companies listed on Nairobi Stock Exchange and other firms in Kenya. This should be encouraged as new equipments are more efficient in respect to power and space usage compared to old equipment and also the equipment come with warranty coverage and this will reduce maintenance, servicing, technical technological upgrade, costs of replacing parts and training of the staff who will use the equipment.

#### **5.4 Limitations of the study**

This research study was limited to companies listed in Nairobi Securities Exchange and hence its findings cannot be generalized to other companies in Kenya.

In addition, the study used secondary data and hence there was a challenge in the completeness of data. For instance, some companies' financial reports were missing some financial measures such as Return on Equity and Return on Assets.

The study looked at only two measures of financial performance (Return on Equity and Return on Assets). Other factors that may have been included in the model include working capital and net profit.

This study use a regression model only to examine the relationship between the independent variable (lease financing) and dependent variables (Return on Equity and Return on Assets). Other models and tests may be used to tests whether the relationship really exists.

## **5.5 Suggestions for Further Studies**

This study was limited to companies listed in Nairobi Securities Exchange. This study therefore suggests that further studies should be conducted on the effect of lease financing on the financial performance of manufacturing companies in Kenya or SMEs in Kenya.

The study suggests further studies on the relationship between lease financing and tax in companies listed in Nairobi Securities Exchange.

The study also recommends that further studies should be conducted in area of factors influencing the adoption of lease financing in companies listed in Nairobi Securities Exchange.

The study further recommends that further studies should be conducted on the effect of lease financing in the performance of public institutions in Kenya.

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## **Appendix I: Companies listed in NSE**

### **AGRICULTURAL**

- 1.Eaagads Ltd
- 2.Kapchorua Tea Co. Ltd
- 3.Kakuzi
- 4.Limuru Tea Co. Ltd
- 5.Rea Vipingo Plantations Ltd
- 6.Sasini Ltd
- 7.Williamson Tea Kenya Ltd

### **COMMERCIAL AND SERVICES**

- 8.Express Ltd
- 9.Kenya Airways Ltd
- 10.Nation Media Group
- 11.Standard Group Ltd
- 12.TPS Eastern Africa (Serena) Ltd
- 13.Scangroup Ltd
- 14.Uchumi Supermarket Ltd
- 15.Hutchings Biemer Ltd
- 16.Longhorn Kenya Ltd

### **TELECOMMUNICATION AND TECHNOLOGY**

- 17.Safaricom Ltd

### **AUTOMOBILES AND ACCESSORIES**

- 18.Car and General (K) Ltd

19.CMC Holdings Ltd

20.Sameer Africa Ltd

21.Marshalls (E.A.) Ltd

## **BANKING**

22.Barclays Bank Ltd

23.CFC Stanbic Holdings Ltd

24.I&M Holdings Ltd

25.Diamond Trust Bank Kenya Ltd

26.Housing Finance Co Ltd

27.Kenya Commercial Bank Ltd

28.National Bank of Kenya Ltd

29.NIC Bank Ltd

30.Standard Chartered Bank Ltd

31.Equity Bank Ltd

32.The Co-operative Bank of Kenya Ltd

## **INSURANCE**

33.Jubilee Holdings Ltd

34.Pan Africa Insurance Holdings Ltd

35.Kenya Re-Insurance Corporation Ltd

36.Liberty Kenya Holdings Ltd

37.British-American Investments Company ( Kenya) Ltd

38.CIC Insurance Group Ltd

## **INVESTMENT**

39.Olympia Capital Holdings ltd

40.Centum Investment Co Ltd

41.Trans-Century Ltd

## **MANUFACTURING AND ALLIED**

42.B.O.C Kenya Ltd

43.British American Tobacco Kenya Ltd

44.Carbacid Investments Ltd

45.East African Breweries Ltd

46.Mumias Sugar Co. Ltd

47.Unga Group Ltd

48.Eveready East Africa Ltd

49.Kenya Orchards Ltd

50.A.Baumann CO Ltd

## **CONSTRUCTION AND ALLIED**

51.Athi River Mining

52.Bamburi Cement Ltd

53.Crown Berger Ltd

54.E.A.Cables Ltd

55.E.A.Portland Cement Ltd

## **ENERGY AND PETROLEUM**

56.KenolKobil Ltd

57.Total Kenya Ltd

58.KenGen Ltd

59.Kenya Power & Lighting Co Ltd

60.Umeme Ltd

**GROWTH ENTERPRISE MARKET SEGMENT**

61.Home Afrika Ltd