EFFECT OF INVESTMENT DECISION ON THE PERFORMANCE OF FIRMS LISTED IN THE NAIROBI SECURITIES EXCHANGE

BY

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DECLARATION

I, the undersigned, declare that this research project is my original work and that it has not been presented in any other institution for academic purposes.

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Signature:……………..   **Date:……………….**

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

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DEDICATION

This work is dedicated to my parents Mr Billy Mwencha and Mrs Hebisiba Machuki for their

parental, spiritual, financial and emotional support they have given me. I also will not forget my

son Blasious Mugendi who has been also a source of inspiration.

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LIST OF ABBREVIATIONS

ATS-Automating Share Trading System

BBO-Broker Back Office System

CAPM-Capital Asset Pricing Model

CDS-Central Depositor System

CMA-Capital Market Authority

EBIT-Earnings Before Interest and Taxes

EMH-Efficient Market Theory

MIT-Millennium Information Technology

MPT-Modern Portfolio Theory

NSE-Nairobi Securities Exchange

RAPM-Reliance on Accounting Performance Measures

RONA-Return on Net Assets

ROE-Return on Equity

ABSTRACT

There are numerous factors that affect the decision making of an investment plan. The main purpose of investing is to earn a return. If the future returns from all available investments were known with certainty, an investor would certainly choose that investment which offers the highest rate of return over the required period of time but in practice the world is uncertain. The importance of Investment decisions on financial performance of firms cannot be over emphasized since many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives. Studies on the relationship between various financing decisions and performance have however produced mixed results. It is against this background that this study was carried out. The main objective of the study was to establish the Effect of Investment Decision on the performance of firms listed in the Nairobi Securities Exchange. The study employed a descriptive research design. The target population of the study as at 31st December 2013 was all the 61companies listed at the Nairobi Securities Exchange, under the main segment. The study adopted a census approach because of the small number of non-financial companies in the NSE. Both descriptive and inferential statistics were used in data analysis. The study utilized panel data which consisted of time series and cross-sections. Results revealed good, significant and positive correlations between ROA and all the predictor variables, that is., Investment Decision, Financial Leverage and Liquidity.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The current research intends to gain a deeper understanding about how investment decisions affect the performance of firms listed in the NSE. The term 'investing" could be associated with the different activities, but the common target in these activities is to "employ" the funds during the time period seeking to enhance the investor's wealth. Decision making on the other hand is a process that involves a sequence of actions with the identification of an investment related problem issue or opportunity and ends in the approval of an investment project (Boonstra 2003). This study aims at investigating the process of investment decision at the company's level as generally shown that it is a multi-criteria process taking into account numerous factors. These are economic and risk factors, but also political and social environment and government regulations (Enoma and Mustapha 2010). It also seeks to investigate the existing relationship between Investment decisions and Firm's financial performance.

There are numerous factors that affect the decision making of an investment plan. Some of the organizational factors that influence the decision making of investments include; Size of company: Buonanno et al 2005 argue the importance of this factor when adopting an investment plan; stating that a different approach should be applied on the industry the organization falls under. Furthermore, "a direct relationship between the size of organizations and the percentage of organizations where a similar investment plan has been implemented". Top Management Support: this factor is considered one of the most important factors in the decision making; it also helps the organization in delivering a successful investment plans. According to Wang

(2007), the function of top management involves developing an understanding of the capabilities and limitation of the proposed system, setting goals, and then communicating the organization Strategy to all employees which can increase the benefits of the investment plan adoption. Organizational culture*:* Influences the adoption of investment plan in organizations. Its significance in the decision making phase of adopting a investment plan is well noted by managers in various organizations. Boynton & Zmud (1984) states that culture has always been one of the prime concerns for organizations right from the inception of organizations, since human actors are involved in the daily operations of the business. According to Boynton & Zmud (1984), an organizations' culture is closely linked to the success it can expect to achieve thus while planning, they should consider the organizations' current culture and anticipate how this culture may impact or be used to affect investment plan efforts. Organizational culture is defined as a possession, a fairly stable set of taken for-granted assumptions, shared beliefs, meanings, and values that form a kind of backdrop for action.

1.1.1 Investment Decision

The main purpose of investing is to earn a return. If the future returns from all available investments were known with certainty, an investor would certainly choose that investment which offers the highest rate of return over the required period of time but in practice the world is uncertain. Investors are generally risk averse and risk is an important consideration in the decision making process. Every firm has strategies to achieve, which might be developing a new product, exploring anew market, or beginning a new line of business.. It involves decisions to commit the firm's funds to the long term assets. Capital budgeting or investment decisions are of considerable importance to the firm since they tend to determine its value by influencing profitability and risk. The investment decisions of a firm are generally known as the capital

budgeting, or capital expenditure decisions. A capital budgeting decision may be defined as the firm's decisions to invest its current funds most efficiently in the long term assets in anticipation of an expected flow of benefits over a series of years. The long term assets are those that affect the firm's operations beyond the one year period.

The firm's investment decisions would generally include expansion, acquisition, modernization and replacement of the long term asset. Sale of division or business is also as an investment decision. Decisions like the change in the methods of sales distribution, or an advertisement campaign or a research and development programmed have long term implications for the firm's expenditures and benefits, and therefore, they should also be evaluated as investment decisions. It is important to note that investment in the long term assets invariably requires large funds to be tied up in the current assets such as inventories and receivables. As such, investment in fixed and current assets is one single activity. A company may add capacity to its existing product lines to expand existing operation. For example, the Company Y may increase its plant capacity to manufacture more "X". It is an example of related diversification. A firm may expand its activities in a new business. Expansion of a new business requires investment in new products and a new kind of production activity within the firm. Sometimes a company acquires existing firms to expand its business.

1.1.2 Financial Performance

This can be defined as a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues. This term is also used 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. *Financial*

performance (e.g. profitability, growth) is used, in the vast majority of existing studies, to measure business performance (Murphy & Zoltan 1996).

The financial performance measures used by firms listed in Nairobi Securities Exchange include: Value added Technique which is a key element in the performance measurement system. It is calculated as the difference between the operating result and the cost of capital of the average net assets. Alternatively, the value added of the industrial divisions can be determined by using the main value drivers: return on sales (quotient of EBIT and revenue) and net assets' productivity (quotient of revenue and net assets).

Return on sales- one of the main factors influencing value added technique. It is of particular importance for assessing the industrial divisions' profitability. The combination of return on sales and net assets' productivity results in return on net assets (RONA). If RONA exceeds the cost of capital, value is created for our shareholders.

Return on Equity (ROE) is a percentage determined by dividing profit to equity i.e. pretax profits from the profit and loss statement and equity or net worth from statement of financial position. The result represents the return you have made on the amount of money that you invested in your business. Over several years, if your return on equity is lower than a certain minimum industry requirement over several years, you may consider selling your business and investigating the proceeds in bonds. As a consequence your return would be similar, your risk and the work much less (Tyson and Schell, 2008).

1.1.3 Effect of Investment Decision on Financial Performance

The importance of Investment decisions on financial performance of firms cannot be over emphasized since many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives (Statman 1988). Investment decision is the main cause of financial distress Memba & Nyanumba, (2013).

Financing decisions result in a given capital structure and suboptimal financing decisions can lead to corporate failure. A great dilemma for management and investors alike is whether there exists an optimal capital structure The objective of all financing decisions is wealth maximization and the immediate way of measuring the quality of any financing decision is to examine the effect of such a decision on the firm's performance. Financial leverage refers to the proportion of debt in the capital structure. Capital structure has for long been regarded as an important parameter from a financial economics standpoint since it is linked with a firm's ability to meet the demands of various stakeholders

Firms can obtain funds from either external or internal sources. Internal sources of funds include retained earnings while external sources include loans from financial institutions, trade credit, issuance of loan stock, and issuance of equity shares. The creation of a capital structure, therefore, can influence the governance structure of a firm which, in turn, may influence the ability of a firm to make strategic choices .Financing decisions which results into a given capital structure constitutes one category of managerial decisions

1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange was established in 1954 as a voluntary association of stockbrokers and was registered under the Societies Act .The Exchange is the largest in East African Community (EAC) and currently ranked second in Africa, after the Egyptian Exchange. It is now one of the most active capital markets in Africa. As a capital market institution, it plays an important role in the process of economic development. It helps mobilize domestic savings thereby bringing about the reallocation of financial resources from dormant to active agents. Long-term investments are made liquid, as the transfer of securities between shareholders is facilitated. The Exchange has also enabled companies to engage local participation in their equity, thereby giving Kenyans a chance to own shares. Companies can also raise extra finance essential for expansion and development.

To raise funds, a new issuer publishes a prospectus, which gives all pertinent particulars about the operations and future prospects and states the price of the issue. Nairobi Securities Exchange also enhances the inflow of international capital. They can also be useful tools for privatization programmes. It is generally accepted that firms declaring stock distributions of 25 per cent or greater consider them as stock splits which, therefore, have no effect on retained earnings. Stock distributions of less than 25 per cent are considered as stock dividends that reduce the retained earnings account. Trading is now mainly conducted from the brokers' offices through the WAN. However, brokers under certain circumstances can still conduct trading from the floor of the NSE.In 2008, the NSE All Share Index (NASI) was introduced as an alternative index. Its measure is an overall indicator of market performance. The Index incorporates all the traded

shares of the day. Its attention is therefore on the overall market capitalization rather than the price movements of select counters.

The NSE launched the NSE Smart Youth Investment Challenge to promote stock market investments among Kenyan Youths. The objective of the challenge is threefold: To occupy the minds of the youth positively and draw them away from the negative energy created by the current political, economic and social situation in the country, Encourage the culture of thrift and saving funds amongst the university students and encourage the youth to invest their savings in the capital markets.

1.2 Research Problem

Investment decision and financial performance are very important aspects in the field of finance. The difficulty facing companies when structuring their finance is to determine its impact on performance, as the performance of the business is crucial to the value of the firm and consequently, its survival. Managers have numerous opportunities to exercise their discretion with respect to capital structure decisions. The capital structure employed may not be meant for value maximization of the firm but for protection of the manager's interest especially in organizations where corporate decisions are dictated by managers and shares of the company closely held .Even where shares are not closely held, owners of equity are generally large in number and an average shareholder controls a minute proportion of the shares of the firm. This gives rise to the tendency for such a shareholder to take less interest in the monitoring of managers who left to themselves pursue interest different from owners of equity.

Organizations are now using every aspect of their core competencies and even creating new competencies to remain competitive. This has been replicated in all industries particularly in the airline where Kenya Airways operates. The government and the private sector have invested heavily in creating an enabling environment for doing business in Kenya and, indeed, some companies have performed exceedingly well as a result. Several companies, however, are experiencing declining performance and some have even been delisted from the NSE in the last decade. For example Shares in Kenya's only publicly traded sugar company 'Mumias Sugar company' decreased by more than 50 percent over the past two years. The Nairobi Securities Exchange on June 10 removed the company from its benchmark due to several challenges which include capacity underutilization, lack of regular factory maintenance, poor transport infrastructure and weak corporate governance.

Momentous efforts to revive the ailing and liquidating companies have focused on financial restructuring. However managers and practitioners still lack adequate guidance for attaining optimal financing decisions yet many of the problems experienced by the companies put under statutory management were largely attributed to financing(Chebii et al 2011). This situation has led to loss of investors' wealth and confidence in the stock market. Studies on the relationship between various financing decisions and performance have produced mixed results. It is against this background that this study was carried out.

Several studies have been done on the effect of investment decision on financial performance Kaumbuthu (2011) Carried out a study to determine the relationship between capital structure and return on equity for industrial and allied sectors in Nairobi Securities Exchange during the period 2004 to 2008.Capital structure was proxied by debt equity ratio while performance

focused on return on equity. The study applied regression analysis and found a negative relationship between debt equity ratio and ROE. The study focused on only one sector of the companies listed in Nairobi Securities Exchange and paid attention to only one aspect of financing decision. The results of the study may , therefore not be generalized to other sectors. The present thesis covers all non-financial companies listed on the Nairobi Securities Exchange to determine the effects of financing decisions on firm financial performance. In a study to examine the impact of investment decision on performance of firms, Adekunle (2009) used debt ratio to proxy capital structure while return on asset and return on equity were used as measure firms' performance. The result of the study indicated that debt ratio has a significant negative impact on the firms' financial measure of performance. The study, however, did not consider other financing decisions in the analysis, including mediating effect of internal cash flow available.

The aim of the research is to answer the following research question: What is the Effect of Investment Decision on the performance of firms listed in the Nairobi Securities Exchange?

1.3 Objective of the Study

To establish the Effect of Investment Decision on the performance of firms listed in the Nairobi Securities Exchange.

1.4 Value of the Study

The results of this study will enable Companies and managers to formulate appropriate strategies in the investment of stocks in order to tap the full potential in growing stock market in a liberalized economy. This will in turn create a competitive edge. This study is intended to make a significant contribution to the study of investment decisions of companies and especially on its

practice among listed companies in Kenya. This study will help Investment Analysts. Knowledge of investment decisions of companies' indices and the relationship to profitability of firms will help them make better and informed investment decisions. The regulators will use the results to implement the necessary corrective measures to bridge the existing gaps and enhance the expected performance of the NSE. This study will also contribute to knowledge in the academic fields, research institutions, learning institutions and individuals.

The findings will also be beneficial to pension administrators in advising pension trustees to make informed decisions on investment of pension funds. Finally, the findings of this study will be of good value to potential local and international investors considering possibility of setting up fund management and insurance companies in Kenya. The researchers believe that if the study achieves its objectives, it shall benefit the Kenyan Investors by directing them to the best decision to make, and the ones that might result into better firm's performance, if any relationship between the Decision used and the performance of the firm exists. Academically, this research is an attempt to give a deeper insight into Investment decision types, which might benefit the academic aspect of the investment decision field, as well as this study shall recommend more questions and further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter expounds on the content discussed in chapter one. It also discusses literature reviewed on investment decisions pension in any economy. For the Kenyan scenario the review concentrated on the stock market investment. The conceptual framework and a review of past studies done in this area are included. The literature review was conducted from textbooks, journals, periodicals, seminar material, past research studies and internet search.

2.2 Theoretical Review

The theories underpinning this study include the Modern Portfolio Theory, Efficient Market Hypothesis and the Behavioral Finance Theory.

2.2.1 Modern Portfolio Theory

Markowitz (1952), an American economist developed a theory of "portfolio choice," which allows investors to analyze risk relative to their expected return.. Markowitz's theory is today known as the Modern Portfolio Theory, (MPT). The MPT is a theory of investment which attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. Although the MPT is widely used in practice in the financial industry, in recent years, the basic assumptions of the MPT have been widely challenged.

The Modern Portfolio Theory, an improvement upon traditional investment models, is an important advance in the mathematical modeling of finance. The theory encourages asset diversification to hedge against market risk as well as risk that is unique to a specific company.

The theory (MPT) is a sophisticated investment decision approach that aids an investor to classify, estimate, and control both the kind and the amount of expected risk and return; also called Portfolio Management Theory. Essential to the portfolio theory are its quantification of the relationship between risk and return and the assumption that investors must be compensated for assuming risk. Portfolio theory departs from traditional security analysis in shifting emphasis from analyzing the characteristics of individual investments to determining the statistical relationships among the individual securities that comprise the overall portfolio.

The MPT mathematically formulates the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower risk than any individual asset. The possibility of this can be seen intuitively because different types of assets often change in value in opposite ways. But diversification lowers risk even if assets' returns are not negatively correlated-indeed, even if they are positively correlated. (Taleb, 2007)

By combining different assets whose returns are not perfectly positively correlated, MPT seeks to reduce the total variance of the portfolio return. MPT also assumes that investors are rational and markets are efficient. The fundamental concept behind the MPT is that assets in an investment portfolio should not be selected individually, each on their own merits. Rather, it is important to consider how each asset changes in price relative to how every other asset in the portfolio changes in price. Investing is a trade-off between risk and expected return as shown in

Figure 1. Generally, assets with higher expected returns are riskier (Taleb, 2007). For a given amount of risk, the MPT describes how to select a portfolio with the highest possible expected return. Or, for a given expected return, the MPT explains how to select a portfolio with the lowest possible risk (the targeted expected return cannot be more than the highest-returning available security, of course, unless negative holdings of assets are possible).

2.2.2 The Efficient Market Hypothesis

The efficient market hypothesis was developed by Fama (1970).It asserts that financial markets are "informationally efficient". That is, one cannot consistently achieve returns in excess of average market returns on a risk-adjusted basis, given the information available at the time the investment is made.

There are three major versions of the EMH hypothesis: "weak", "semi-strong", and "strong". The weak EMH asserts that prices of traded assets (for example, stocks, bonds, or property) already reflect all past publicly available information. The semi-strong *EMH* opines that prices reflect all publicly available information and that prices change to reflect new public information. The strong EMH additionally claims that prices instantly reflect even hidden or "insider" information. There is evidence for and against the weak and semi-strong EMHs, while there is powerful evidence against the strong EMH (Andrei, 2000).

Extensive researches have revealed signs of inefficiency in financial markets. Critics have blamed the belief in rational markets for much of the late-2000s global financial crisis. In response, proponents of the hypothesis have stated that market efficiency does not mean having no uncertainty about the future, rather the market efficiency is a simplification of the world

which may not always hold true, and that the market is practically efficient for investment purposes for most individuals.

2.2.3 Behavioral Finance Theory

According to Lintner (1998), behavioural finance is 'the study of how humans interpret and act on information to make informed investment decisions'. The emergence of behavioural finance has presented a new realm for analyzing the ways in which investors make decisions that includes psychological factors; as well as providing new grounds upon which to question conventional methods of modeling determinants of investor behaviour.

Brabazon (2000) suggests that the finite aspects of behavioural finance can be split into two different classification groups. The first is that of heuristic decision processes (a common sense rule), where an individual investor through instinctive psychological processes can result in decisions that according to the standard finance model, are not rational. Brabazon (2000) explains that these decision processes are those with which humans attempt to make mental 'short cuts'. These short cuts have been vital for the survival of the human race, especially useful when decision making time is limited. Decision makers in this instance tend to form decisions by observing patterns that may not be relevant or even truly apparent (Brabazon, 2000). They may assume that a recent trend in price movements will definitely continue into the future.

This may result in individual investors devoting too much attention to popular stocks that have recently been performing well. Statman (1999) explained that being duped into making investment decisions based upon this imperfect theory of small numbers is something that the standard finance investor would never do; that an investors regarding past performances of stocks as evidence of future returns is a realistic possibility contrary to the standard finance

model of an investor. Nofsinger (2002) explains how this psychological factor affects individual investors' decisions and opined that regret aversion results in a 'disposition effect' where investors sell well performing stocks too soon and hold poorly performing stocks for too long. Regret aversion may also result in what is known as herding investing in a popular stock if everyone else believes that it is a good one. Responsibility of it failing will be shared with the other investors who originally expected it to do well also.

2.3 Determinants of Financial Performance

What are the determinants of Financial Performance at firm level? This question has been raised since the Modigliani and Miller theorem (1958) postulated that there has been no relation between the financial structure and financial policy for real investment decisions under certain conditions; and extended this to neoclassical models of investment. According to the *q*-theory of Tobin (1969) and extended into a proposed model by Hayashi (1982), investment demand could be predicted by the ratio of the market value of a firm's capital stock to its replacement cost under perfect market assumptions (symmetric information, no transaction costs, no default risk, and no taxation); and its market value could also explain further investment opportunities.

However, Akerlof (1970) indicated that this theorem will only be correct in a world of perfect capital markets. It cannot interpret investment decisions at the micro level if there is asymmetric information in the market.

2.3.1 Investment Decision

These types of strategies are reflected through what is called investments within the firm, and these investments add value to the firm, and increase the shareholders wealth (Penman, 2010). An efficient allocation of capital is the most important finance function in the modern times. A wrong investment decision could lead to a company making losses and therefore shutting down.

2.3.2 Organizational Factors

Organizations are generally characterized by high business complexity in regardless of the size, either big or small, which is a critical need for coordination and control of the business activities which in turn, is related to the complexity of the information system. There are numerous factors that affect the decision on investments.

Some of the organizational factors that influence the Financial Performance of investments are; *Size of company*: Buonanno, et al 2005 argue the importance of this factor when adopting an investment decision; stating that a different approach should be applied on the industry the organization falls under. Furthermore, "a direct relationship between the size of organizations and the percentage of organizations where the investment has been implemented"(Buonanno, et al 2005).

Top Management Support: this factor is considered one of the most important factors in the Financial Performance; it also helps the organization in delivering a successful decisions. According to Wang (2007), the function of top management involves developing an understanding of the capabilities and limitation of the proposed investment, setting goals, and then communicating the organization Strategy to all employees which can increase the benefits of the adoption.

2.3.3 Financial Literacy

Financial literacy has been discussed by many researchers from different aspects. Different research organizations have conducted research to identify the level of financial literacy of

investment decision makers. A research conducted by the OECD (2005) examined the level of financial literacy in 12 major countries of the world including UK, USA, European countries, Japan and Australia. The research concluded that the level of financial literacy for most of the respondents is very low. Chen and Volpe (1998) in order to further extend their work conducted a research on the financial literacy of nearly 1000 college graduates in different USA universities. They also examined the relationship between financial literacy level and demographic factors, academic disciplines and work experience. The study results pointed that there is significant difference among subgroups of academic discipline, years of work experience and class rank and financial literacy. Students belonging to non business disciplines, students related to lower classes, and with having little work experience were found to be less literate. The study also found that males were far more literate than females, and also US students were more informed as compared to non US students.

Volpe et al. (2002) found that in order to succeed at the stock market, the investors engaged in online trading should be more knowledgeable and informed as compared to other investors, because they lack information about what is happening inside the stock market and they may also become the victims of information asymmetry. Therefore, the researchers investigated the level of investors' literacy of nearly 500 investors dealing in online trading. They also examined the level of difference in financial literacy among various groups of online investors using the demographic factors and experience in online trading as variables. The research concluded that the level of financial literacy varied in demographic factors. They inferred that the females are far less literate, and older online investors were performing much better than younger ones.

Moreover, their research study also concluded that the investors with higher income were more literate as compared to investors with less income.

2.3.4 Accounting Information

The study by Mirshekary and Saudagaran (2005) examined how investors use the information disclosed in financial statements and also they examined the significance of various information sources on investment decision making. Their study was based on primary research. They sent their survey to various financial user groups in Tehran – stock brokers, private investors, bankers and institutional investors. They were required to assign ranking to each financial statement. The respondents ranked the companies' annual audit report as the most influential source of information. After this, oral information was ranked as the second and information published in daily newspapers ranked as the third most influential source of information. Furthermore, advice given by friends, brokers and rumors were ranked as the least influential. The researchers concluded that investment decision makers use annual financial statement of different companies for investment decision making purposes.

Shareholders understand accounting information as an input for investment decisions. Investment analysts often work as the middlemen between corporations as information providers and other users of accounting information. They gather, analyze and deduce accounting numbers and disseminate the results to the users of financial statements data. On the basis of these findings and interpretations, many investment decisions are made. Investment analysts are the most important for the fact that if they become the victims of interpreting financial information

wrongly this may lead the others to make wrong investment decisions. This makes investment analysts a very interesting user category for a study.

2.3.5 Openness to Experience

The openness to experience is the factor, which also effects the Financial Performance. It is linked to the way how individuals perceive the world. Many facets relating to this factor have been pointed out, like imagination and depth, ingenuity, intellect, competences, reflection, introspection, quickness, creativity .The fundamental nature of this factor is related to intellectuality and curiosity. Many researchers have tried to focus on this area of psychology. According to some of the researchers, well educated people feel that technological problems are less risky and they are scientifically better able to understand the complexities of these problems. Thus, it could be inferred that open minded individuals see various issues and problems under different angle as compared to others. The real meaning of this factor which could be the determinant of investment decision making is that it is close to the notion of open mind and the idea of "live and let live." Thus, it could be projected that more open people would be less risky and problematic than others. Thus the following hypothesis is proposed as:

2.3.6 Information Asymmetry

Flow of information like decisions made by government bodies, media news etc. causes the stock prices to move up or down. Due to this behavior of stock market and due to new information, stock investors make their investment decisions (Warneryd, 2001). Prior to negative earnings surprises, those investors decrease their holdings that have insider information as compared to those investors who don't have this information. Also the investors who possess private

information about future prospects of the firms, trade more actively as compared to the investors without such information (Baik et al 2010). Information about the firms irrespectively of its sources enables the investors to form opinion about the value of a firm (Nwezeaku, Okpara, 2010). Accordingly, various types of information flowing towards stock markets play a pivotal role for the investment decisions. Many studies have been conducted on finding the impact of information flooding on stock prices both if it is a hidden source or known public source of information (Warneryd, 2001). Information asymmetry (i.e., the situation when some relevant information is known to few people and not to the others) is one of the core factors that could affect the stock market due to the weakness of rules and regulations on the disclosure of financial information (Cheng, 2003). Due to this reason, in this research study, we have included it as an important independent factor affecting the investment decision making. There are 2 types of risk sources through which information is affecting the value of stocks. These are objective and subjective risks. Subjective risk is what an individual investor perceives as an unwanted event. And objective risk is the actual loss in a given period of time.

2.3.7 Organizational Readiness

Organizational Readiness can be underlined under the resources as a company assesses. Resources in terms of costs and expertise are two important factors that should be considered before any investment. Cheng (2003) highlighted that the financial and technological readiness as perceived elements. Moreover, "fast communication, proper structure to implement, enough financial resources, rich and competent knowledge and skills, and top management support are factors for organizational readiness" (wang et al., 2008). In turn, these perceived measures will result in a positive outcome on the attitude towards a decision on investing

2.3.8 External Pressure or Support

The external pressure according to Grandon and Pearson (2004) are pressure elements in that have impact on the attitude behavior. Namely these factors are competition, and reliance on their suppliers already using similar strategies and the public sector (wang et al. 2008). The external support, on the other hand, is the backup that a company gets when outsourcing. According to Wang et al. (2008), external support embraces training, maintenance, and updating. Furthermore, he stresses that the higher the pressure and the support are, the more positive impact will have on Financial Performance.

2.3.9 Corporate governance

Corporate governance refers to the ways and means by which publicly listed companies are controlled and directed (Charkham, 2005). Investors critically observe the firm-level corporate governance and to understand the corporate attributes is of great importance for them. Firm-level corporate governance has impact on the institutional investment decision making (McCahery et al., 2010). Klapper and Love (2004) gave dimensions to measure firm level corporate governance as Discipline, Transparency, Independence, Accountability, Responsibility, Fairness, and Social Awareness.

2.4 Empirical Review

Bischoff (1971) compared the alternative models of investment which are accelerator, neo-classical, liquidity and market value at firm level. He compared the models for the 1953-1968 period using quarterly data from the U.S economy; Separate regressions were estimated for

equipment and structures. In the case of both equipment and structures investment, the modified neo-classical model was found to to be the best followed by accelerator model.

Grabowskwi and Mueller(1972) Carried out a testing of the managerial and stockholder welfare models of firms expenditures using data for 66 firms for the 1959-1966 period and their empirical results indicated the managerial variant of the model to be far superior to the stock holder welfare maximization version.

Clark (1979) undertook an investigation of the alternative investment models for the 1954-1973 periods using quarterly data for the U.S economy, with separate regressions for equipment and structures. Like the results obtained by Bischoff (1971), Clark found modified neoclassical model followed by accelerator model to be the best for structures as well as equipment. Clark therefore concluded that output was the primary determinant of non-residential fixed investment in the economy; variables like the rental price of capital services interest rates and tax rates proved to be the most helpful.

Bernanke et al, (1988) carried out non-nested specification tests of time series investment models at the level of the economy; Separate equations were estimated for equipment and structures using quarterly U.S data for the 1955-1983 period. The conventional goodness-of-fit statistic indicated that no one model of investment uniformly outperformed all other models. Of the four models, the accelerator and the modified neoclassical model were found to be the best models for equipment investment.

Fazzari et al. (2000) investigated the effect of financing constraints on the investment-to-cash-flow sensitivity. After controlling for investment opportunities with Tobin's q, they employed

the dividend rate so as to distinguish firms that were facing financial constraints from those that were not. They found that cash-flow could affect investment because of imperfections of the capital market, the asymmetric information and the lemon problem. Alternatively, the effect of investment on cash flow is considered as a policy problem of welfare reduction, a capital market failure or an inefficient fund that is similar to problems mentioned in previous studies.

Amisi (2013) examined the relationship between financial literacy and the influence of the factors that affect the investment decision. The objective of the study was to establish the effect of financial literacy ~ investment decision making by pension fund managers. The study attested hat the parastatals are not performing well and that and privatization was the key to enhancing efficiency and profitability in the parastatals

2.5 Summary of Literature Review

Almost all the testing of alternative models of investment has been undertaken in the literature has been confined to the level of aggregate economy. One addition to the research Agenda has been the estimation of separate models for structures and equipment in influencing overall investment expenditures as well as its composition between equipment and structures.

Making investment decision is even more critical and difficult in a stock market and such decisions need better insight and understanding. Investment decision may have effect due to psychological and behavioral factors (Evans, 2006 and Waweru et al., 2008). Traditional finance expects investor to be rational but behavioral finance believes that investors in stock markets act irrational. While making decisions in market the investors' process available information. Their emotions, psychology, and behavioral biases lead to systematic errors in the manner in which

they process information .In complex and uncertain situation individuals use rules of thumb for making decisions and is referred to heuristics

CHAPTER THREE

RESEARCH METHODOLOGY

3.1: Introduction

This chapter presents the methodology used to carry out the study. It describes the type of research a method is a set of tools and techniques for gathering and analyzing data for the aim of new knowledge (Holme & Solvang, 1997). The procedures and techniques are the steps involved in solving the problem at hand or simply finding different approaches in discovering new insights to the issue at hand (Holme & Solvang, 1997). The method of choice in academic writing is very important because it guides the author/ researcher in achieving appropriate results in relation to their research objectives. Numerous literatures presents abundant ways of methods to proceed in carrying out a study and in this part justification will be made by the authors of the chosen methods used

3.2 Research Design

The study employed a descriptive research design. A descriptive research is a process of collecting and analyzing data in order to answer questions regarding the current status of the subjects in the study. The main purpose of the explanatory survey is formulating a problem for more precise investigation. Thus explanatory research has as its primary objective the development of insights into the problem. This method was preferred because it allows generalization of research findings.

3.3 Target Population

Target population in statistics is the specific population about which information is desired. The target population of the study as at 31st December 2013 was all the 61companies listed at the

Nairobi Securities Exchange, under the main segment. The study adopted a census approach because of the small number of non-financial companies in the NSE. A census approach enhances validity of the collected data by including certain-rich cases for study. Appendix: Companies Listed in NSE

3.4 Data Collection Procedure

The study utilized panel data which consisted of time series and cross-sections. The data for all the variables in the study was extracted from published annual reports and financial statements of the listed companies in the NSE. The data was obtained from the NSE hand books and the data extracted included income statement, Statement of financial position and notes to the accounts.

3.4 Data Analysis

The study is descriptive statistics, correlation analysis and regression models tested for strength of the predictor variables.

3.4.1 Analytical Model

There are several models which could be used in analyzing quantitative data; logit, probit, discriminant analysis and regression models. Logit, probit and discriminant analysis models are suitable when the dependent variable is binary (Field, 2009). Therefore regression model was preferred for this study as recommended by Muthen and Muthen (2007) because the dependent variable is continuous. Firm Performance, was clearly assessed in terms of Return on Assets(Y).

$Y = \alpha + \beta_1 x_1 + \beta_2 X_2 + \beta_3 X_3 + E$

Where,

Y = Financial Performance as measured by Return on Assets of the company

X_1 = Investment Decision as measured by the amount of new investment

X_2 = Financial Leverage of the company as measured by the Debt to Equity ratio

x_3= Liquidity as measured by current assets to current liabilities ratio of the company .

$\propto$ = The Intercept or constant

$\beta 1 \dots \beta 3$ = the regression coefficients of the independent variables.

E= Error term

3.4.2 Test of Significance of the Model

Analysis of Variance (ANOVA) was used to test the significance of the model. **R2** was used to indicate the measure of variability in the performance that is accounted for by the predictor variables. The adjusted **R** squared indicated the variance that was obtained if the population was used rather than the sample.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Both descriptive and inferential statistics were performed to achieve the study objectives. Whereas in the former, the description of pertinent attributes of the study variables are provided, including means, standard deviations, minimum and maximum values, inferential analysis entailed the use of both Pearson correlation and regression analysis.

4.2 Descriptive Statistics

The study first found it necessary to evaluate the performance of the firms' Investment Decision variables under consideration, that is, Investment Decision as measured by the amount of new investment, Financial Leverage as measured by the Debt to Equity ratio and Liquidity as measured by current assets to current liabilities ratio of the company. Their mean, standard deviation, minimum and maximum values were determined as indicated in Table 4.1.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Investment Decision	61	.00	1.00	0.400	4.480
Financial Leverage	61	-4.486	2.813	0.464	0.082
Liquidity	61	10.154	16.276	13.113	1.504
Valid N (listwise)	61				

Source: Research Findings

The amount of new investment was used as a dummy variable, taking the value of 1 if firms had at least 5 new investments over the last 5 years, and zero if less than 5 new investments over the same period. On average, most firms were found to have less than 5 new investments over the last 5 years, as indicated by a mean value of 0.400 and a standard deviation of 4.480 implying a variance of about 4 companies. The Financial Leverage as indicated by the Debt to Equity ratio

had a mean of 0.464, minimum value of -4.486 and a maximum of 2.813 with a standard deviation of 0.082. This indicates that, on average, the companies surveyed are highly geared with a significant proportion of their financing coming from investor financing (shareholders). Liquidity as measured by current assets to current liabilities ratio of the listed company recorded a mean value of 13.113, a minimum of 10.154 and a maximum of 16.276 with a standard deviation of 1.504. The relatively high ratios generally indicate a large margin of safety for most firms.

4.3 Inferential statistics

Under the advance analysis, correlation analysis was first used to measure the degree of association between different variables under consideration. While the regression analysis was used to determine the impact of the investment decision variables on firms' financial performance, the t- test statistics was used to ascertain whether there is a significant difference in Investment Decision and the performance of firms listed in the Nairobi Securities Exchange.

4.3.1 Pearson's Correlation Coefficient Analysis

In this section, the study measured the degree of association between the investment decision variables and firms performance that is, if the investment decision proxies (Investment Decision, Financial Leverage and Liquidity) will increase firms performance. Table 4.2 presents the correlation coefficients for all the variables considered in this study.

Table 4.2: Pearson's Correlation Coefficients Matrix

	ROA	Investment Decision	Financial Leverage	Liquidity
ROA	1			
Investment Decision	0.227(**)	1		
Financial Leverage	0.458(**)	.624(**)	1	
Liquidity	0.869(**)	.447(**)	.409(**)	1

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

Source: Research Findings

Table 4.2 shows that at 0.01 confidence interval, there were good, significant and positive correlation between ROA and: Investment Decision (R = 0.227), Financial Leverage (R= 0.458) and Liquidity (R= 0.869). There was also good, significant and positive correlation between Financial Leverage and Investment Decision (R = .624); Liquidity and Investment Decision (R = .447) as well as between Financial Leverage and Liquidity (R = .409).

4.3.2 Regression Analysis

The study further used panel data regression analysis to investigate the relationship between Investment Decision and the financial performance of firms listed in the Nairobi Securities Exchange. A simple definitional model was used in this regard as shown below:

$$ROA = \alpha + \beta_1(\text{Investment Decision}) + \beta_2(\text{Financial Leverage}) + \beta_3(\text{Liquidity}) + \varepsilon$$

The regression statistics also produced the coefficients of determination and analysis of variance (ANOVA). Whereas the former was used to show the strength of the relationship, the latter was performed to show whether there is a significant mean difference between dependent and independent variables. The ANOVA was conducted at 95% confidence level.

Table 4.3: Model Goodness of Fit

R	R^2	Adjusted R^2	Std. Error of the Estimate
0.754	0.279	0.157	0.0358

a. Predictors: (Constant), Investment Decision, Financial Leverage, Liquidity
b. Dependent Variable: ROA

Source: Research Findings

The study used regression analysis to establish the relationship between ROA and pertinent investment decision factors including Investment Decision, Financial Leverage and Liquidity. A correlation value (R) of 0.75 was produced depicting a significant linear dependence of ROA on investment decision factors including Investment Decision, Financial Leverage and Liquidity.

An adjusted R-squared of 0.157 further revealed that Investment Decision, Financial Leverage and Liquidity only explain 15.7 percent of the variations in ROA while 84.3 percent is explained by other factors not accounted for in the model.

Table 4.4: Analysis of Variance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4.279	3	2.856	4.112	.013a
Residual	12.801	61	.332		
Total	17.080	64			

Source: Research Findings

The ANOVA statistics was performed to ascertain the differences in the means of the dependent and independent variables and to show whether a relationship exists between the two. The P-value of 0.013 implies that ROA has a significant joint relationship with Investment Decision, Financial Leverage and Liquidity which is significant at 5 percent level of significance, which also showed the significance of the regression analysis done at 95% confidence level.

Table 4.5: Regression Coefficient Results

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.493	.013		6.689	.022
Investment Decision	.122	.084	.101	1.934	.008
Financial Leverage	.115	.056	.097	2.378	.031
Liquidity	.189	.176	.131	.991	.026

a. Dependent Variable: ROA
Source: Research Findings

The coefficients of determination in table 4.5 above reveal a positive relationship between ROA and all the Predictor variables, that is, Investment Decision, Financial Leverage and Liquidity. In this regard, the established regression equation was:

ROA = 6.493 + .122 (Investment Decision) + .115 (Financial Leverage) + .189 (Liquidity) Significant tests (T-tests and P-values) revealed that all of these relationships were significant; thus, the study to establish the effect of investment decision on the performance of firms listed in the Nairobi Securities Exchange. The regression results show that, when Investment Decision, Financial Leverage and Liquidity have zero values, the space allocation value would be 6.493. It is also established that a unit increase in Investment Decision, while holding other factors (Financial Leverage and Liquidity) constant, would result in a .122 increase in ROA. This statistic had a t-value of 1.934 with a P value of at .008 showing that the statistic is significant at 95% confidence level. Holding other factors constant, a unit decrease in Financial Leverage would cause an increase in ROA by .115 while a unit increase in Liquidity would lead to a .189

increase in ROA. T-values of 2.378 and .991 and P values of .031 and .026 were also established at 95% confidence level hence the relationships were statistically significant. This implies that among other factors, Investment Decision, Financial Leverage and Liquidity positively and significantly influence affect the performance of firms listed in the Nairobi Securities Exchange.

4.4 Interpretation of the Findings
The findings reveal a positive relationship between investment decision as measured by the amount of new investment, and firms' financial performance. The implication is that the higher the number of new investments, the more profitable a firm gets. The scenario can be attributed to new income and/or revenue streams. The relationship is however rather weak, which can be attributed to other underlying factors including the initial investment costs and the length of time over which profitability from the new investments can actually be realized. Taken together, these results suggest that firms with higher growth opportunities accumulate more capital and that the stock market has a key role in channeling funds toward investment projects. Similar findings are reported by Stella (2011) who argued that if successful, there comes a time for all big business and developing SMEs when they need new investments to expand or innovate further. The finding is further supported by Wurgler (2008) and Bekaert et al. (2007) who assert that as in the most important contributions on finance and growth, investment decisions, particularly business expansion, matters for profitability.

The data analysis further shows the statistical results regarding financial leverage and the financial performance. Most commonly used measure of financial leverage is the calculation of financial ratios, of which in this study, the debt to equity ratio was analyzed. Gearing ratio demonstrates the level of financing provided by internal financer's fund (owner's) to external

financer funds. The highly geared companies with high leverage ratio are more flexible to respond in unfavorable circumstances as they are exposed to risk of fixed payment even in downturns. High levels of equity provide a margin and can be viewed as a determinant of financial strength hence the high profitability ratios among firms with low Debt to Equity ratio. Empirical evidence seems to be in support of this assertion. Shleifer and Vishny (2011) in a review article, cite the works of Kaplan and Minton (2008) and Kang and Shivdasani (2009), who found higher incidence of management turnover in Japan in response to poor performance in companies that have a principal banking relationship relative to companies that do not.

Liquidity is also strongly and positively related with firms' financial performance; the higher the liquidity therefore, the higher the profitability. The finding is of the implication that firm managers ought to maximize firm's financial performance by achieving a trade-off between the liquidity and profitability of the firm in order to avoid bankruptcy and stay profitable. High liquidity ratios indicate high working capital and the subsequent ability to finance new profitable ventures and business growth. The finding has empirical support from Raheman and Nasr (2007) who discussed the impact of working capital management on profitability of a firm. They also highlighted that the basic objective of a firm is to maximize profit but maintaining liquidity is also an important objective adding that there will be a serious problem if firm increase profit at the cost of liquidity as both objectives are important for the firm. Dash and Hanuman (2009) were also concerned about working capital management and they analyzed the liquidity-profitability trade-off model named as goal programming model. They supported that proper flow of fund is needed to run any business arguing that a firm has conflicting objectives regarding liquidity and profitability so the goal programming model determines how targeted

levels of profitability and liquidity would be achieved by maintaining current and fixed assets and at the same time minimizing opportunity cost. Their model proposed that working capital and inventory must be streamlined to profitability.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the research findings. The implications from the findings and areas for further research are also presented. The findings from the study are presented in comparison to what other scholars have said as noted under literature review.

5.2 Summary

Two types of data analysis were performed in the analysis of the study variables, descriptive and inferential analysis. In descriptive statistics, the description of pertinent attributes of the study variables are provided, including means, standard deviations, minimum and maximum values, inferential analysis entailed the use of both Pearson correlation and panel data regression analysis.

The study first evaluated the descriptive statistics for the investment decision variables, whereby it was revealed that on average, most firms were found to have less than 5 new investments over the last 5 years, as indicated by a mean value of 0.400 and a standard deviation of 4.480 implying a variance of about 4 companies. The Financial Leverage as indicated by the Debt to Equity ratio had a mean of 0.464, minimum value of -4.486 and a maximum of 2.813 with a standard deviation of 0.082. This indicates that, on average, the companies surveyed are highly geared with a significant proportion of their financing coming from investor financing (shareholders). Liquidity as measured by current assets to current liabilities ratio of the listed company recorded a mean value of 13.113, a minimum of 10.154 and a maximum of 16.276 with

a standard deviation of 1.504. The relatively high ratios generally indicate a large margin of safety for most firms.

Inferential statistics were further conducted by both correlation and regression analyses whereby correlation analysis was first used to measure the degree of association between different variables under consideration while the regression analysis was used to determine the impact of the corporate governance variables on firms' performance. Results revealed that at 0.01 confidence interval, there were good, significant and positive correlation between ROA and: Investment Decision (R = 0.227), Financial Leverage (R= 0.458) and Liquidity (R= 0.869). There was also good, significant and positive correlation between Financial Leverage and Investment Decision (R = .624); Liquidity and Investment Decision (R = .447) as well as between Financial Leverage and Liquidity (R = .409).

Regression analysis further revealed that a positive relationship between ROA and all the Predictor variables, that is, Investment Decision, Financial Leverage and Liquidity. Results show that a unit increase in Investment Decision, while holding other factors (Financial Leverage and Liquidity) constant, would result in a .122 increase in ROA. Holding other factors constant, a unit decrease in Financial Leverage would cause an increase in ROA by .115 while a unit increase in Liquidity would lead to a .189 increase in ROA.

5.3 Conclusion

The findings reveal that the amount of new investments significantly determines the firms' financial performance. It follows then that more innovative companies with respective to the introduction of new products, services, branches and technologies are likely to experience higher profitability as compared to the less innovative.

Financial leverage may enhance the profit after taxes due to lower interest rates and ultimately the higher earnings may result in the higher Earnings per share or dividend payout ratios which may increase the firms' profitability. Even if the marginal earnings as the result of lower interest rates and tax shields are retained for the company's growth, it may maximize the company's value in the long term and may lead towards the achievement of wealth maximization objective for which the real owners invest.

Most companies listed in the NSE are not only marketable and capable of financing short term investment opportunities owing to the relatively high liquidity ratios in respective companies; they are also largely risk averse as regards liquidity based takeovers. This, points to the implication that management has incentives to minimize the liquidation risks of the companies. With decreasing board power, the management may tend to be stable and in a position to resist takeover.

5.4 Recommendations for Policy

The results of this study have significant policy implications at the firm, industry, and macro levels. Firstly, this study found out that performance increased as investment decision, financial leverage and liquidity increased. The study therefore recommends that corporate managers should provide avenues to increase their innovativeness and subsequent new investments, financial leverage, in particular their Debt-To-Equity ratio and their liquidity ratios in order to enhance profitability. This study further recommends that the government should regulate the financial sector through various monetary and fiscal policies in order to reduce the cost of borrowing given that companies who rely on external borrowing to finance their cash

requirements are likely to perform poorly. The high interest rate in Kenya is an impediment to the projected growth of the corporate sector as envisioned by Kenya Vision 2030.

Secondly, the management of NSE listed companies should adopt aggressive financing policy in order to improve performance as measured by return on assets. This means that the managers of the companies listed in the NSE, should concentrate on using more current liabilities to finance assets. The CMA should create redeemable long-term financing products which could be traded in the stock market. This is because this study provides evidence that the use of more long-term financing enhances return on assets compared to the use of short term financing. Thirdly, corporate managers should follow a conservative investment policy in order to enhance the performance of their companies. This implies that the managers should maintain a higher level of investment in liquid assets relative to non-current assets.

5.5 Limitations of the Study

A number of challenges were experienced in the course the study. The study only covered a period of 5 years; 2009-2013 hence may not be applicable across all times and the findings are thus limited to the 5 years under study. A true reflection of the case in all times in the country may therefore not be possible based only the 5 years studied as variations are possible with time. The associations in the model of the study have further been presented as only either strong or weak, but the attributes bend the relative strengths have not been accounted for. The researcher therefore recommends a causality study to ascertain the causes of the observed strengths and weaknesses in the relationships.

5.6 Suggestions for Further Research

There is need for further studies to carry out similar study over a longer time period. This is with the assumption that the data for a longer time will provide results that are better than those provided by the data used in this study. The possible higher objectivity that arises based on the sample period may be settled covering a longer period.

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COMPANIES LISTED IN THE NSE AS AT 31ST DECEMBER 2013

NAME OF COMPANY	SECTOR	NAME OF COMPANY	SECTOR
1.EAAGADS LTD	Agricultural	21.Marshalls (E.A)Ltd	Automobile
2.Kapchorua Tea	Agricultural	22.Barclays Bank Ltd	Banking
3.Kakuzi	Agricultural	23.CFC Stanbic Holding	Banking
4.Limuru Tea	Agricultural	24.I&M Holdings	Banking
5.Rea Vipingo	Agricultural	25.Diamond Trust Bank	Banking
6.Sasini Ltd	Agricultural	26.Housing Finance Co.	Banking
7.Williamsom Tea	Agricultural	27.Kenya Commercial Bank	Banking
8.Express Ltd	commercial services	28.National Bank Of Kenya	Banking
9.Kenya Airways Ltd	commercial services	29.Standard Chartered Bank	Banking
10.Nation Media Group	commercial services	30.Equity Bank	Banking
11.Standard Group	commercial services	31.Co-operative Bank of Kenya	Banking
12.TPS Eastern Africa	commercial services	32.NIC Bank	Banking
13.Scan Group Ltd	commercial services	33.Jubilee Holdings	Insurance
14.Uchumi Supermarket Ltd	commercial services	34.Pan Africa Insurance	Insurance
15.Hutchings Biemer Ltd	commercial services	35.Kenya Re-Insurance	Insurance
16.Longhorn Kenya	commercial services	36.Liberty Kenya Holdings	Insurance
17.Safaricom Ltd	Telecommunication	37.British-Ameriacan Investments	Insurance
18.Car and General K Ltd	Automobile	38.CIC Insurance	Insurance
19.CMC Holding	Automobile	39.Olympia Capital Holdings	Investment
20.Sameer Africa Ltd	Automobile	40.Centum Investments	Investment

NAME OF COMPANY	SECTOR	NAME OF COMPANY	SECTOR
41.Trans-Century Ltd	Investment	53.Crown Berger	Construction
42.B.O.C Kenya	Manufacturing	54.E.A Cables	Construction
43.British American Tobacco	Manufacturing	55.E.A Portland Cement	Construction
44.Carbacid Investments	Manufacturing	56.Kenol Kobil Ltd	Energy
45.East African Breweries	Manufacturing	57.Total Kenya Ltd	Energy
46.Mumias Sugar	Manufacturing	58.KenGen Ltd	Energy
47.Unga Group Ltd	Manufacturing	59.Umeme LTD	Energy
48.Eveready East Africa	Manufacturing	60.Kenya Power and Lighting	Energy
49.Kenya Orchads	Manufacturing	61.Home Afrika Ltd	Growth Enterprise Market
50.A.Baumann Co.Ltd	Manufacturing		
51.Athi River Mining	Construction		
52.Bamburi Cement	Construction		

Source; NSE 2013

| | 2009 | | | | 2010 | | | | 2011 | | | | 2012 | | | | 2013 | | | |
	ROA	New investment	D/E ratio	Liquidity	ROA	New investment	D/E ratio	Liquidity	ROA	New investment	D/E ratio	Liquidity	ROA	New investment	D/E ratio	Liquidity	ROA	New investment	D/E ratio	Liquidity
EAAGADS LTD	0.051	0	0.814	11.402	0.053	0	0.915	11.423	0.055	0	0.936	11.917	0.056	1	1.036	12.012	0.055	0	0.936	12.008
Kapchorua Tea	0.045	0	0.923	10.568	0.048	0	0.931	10.464	0.051	0	1.031	10.623	0.054	0	1.131	10.625	0.055	0	1.231	10.629
Kakuzi	0.044	0	0.861	12.613	0.045	0	0.881	12.641	0.048	0	0.683	13.008	0.051	0	0.727	13.011	0.05	1	0.725	13.024
Limuru Tea	0.036	0	0.955	10.406	0.037	0	0.971	11.506	0.042	0	0.772	11.714	0.044	1	0.689	11.71	0.046	0	0.692	11.708
Rea Vipingo	0.045	0	0.834	10.482	0.041	0	0.947	11.082	0.044	0	0.845	10.957	0.043	0	0.696	10.959	0.045	0	0.699	10.966
Sasini Ltd	0.037	0	0.895	10.346	0.045	0	0.903	10.154	0.045	0	1.303	10.561	0.049	0	1.354	10.565	0.048	0	1.357	10.565

DATA

Company																						
Williamsom Tea	0.036	0	0.614	10.569	0.039	0	0.691	10.477		0.041	0	0.542	10.511	0.046	0	0.498	10.509		0.047	0	0.501	10.511
Express Ltd	0.035	0	0.923	11.639	0.042	0	0.942	12.039		0.039	1	0.823	12.246	0.042	1	0.86	12.242		0.043	1	0.859	12.243
Kenya Airways Ltd	0.041	0	-1.925	14.993	0.041	1	-2.401	15.19		0.043	1	-2.312	15.22	0.045	1	-3.317	15.219		0.046	1	-2.317	15.223
10.Nation Media Group	0.052	1	0.856	13.257	0.059	1	0.843	13.512		0.061	1	0.755	13.491	0.065	1	0.755	13.5		0.063	1	0.756	13.513
Standard Group	0.057	1	-2.082	14.042	0.056	1	0.589	14.331		0.066	1	0.476	14.337	0.069	1	0.578	14.334		0.069	1	0.581	14.339
TPS Eastern Africa	0.046	0	0.601	11.049	0.053	0	0.813	11.142		0.057		0.756	11.138	0.06		0.811	11.141		0.059		0.809	11.148
Scan Group Ltd	0.048	0	0.876	10.926	0.044	0	0.657	11.02		0.049	0	0.757	11.117	0.051	0	0.609	11.12		0.052	0	0.605	11.123

	Sameer Africa Ltd	CMC Holding	Car and General K Ltd	Safaricom Ltd	Longhorn Kenya	Hutchings Biemer Ltd	Uchumi Supermarket Ltd
	0.046	0.047	0.059	0.06	0.052	0.051	0.061
	1	1	1	1	0	0	1
	1.529	0.293	1.489	-2.472	2.131	0.534	0.281
	13.631	13.831	14.821	15.855	12.332	12.242	15.864
	0.046	0.052	0.061	0.062	0.054	0.053	0.062
	1	1	1	1	1	0	1
	1.631	0.831	1.511	-2.497	2.813	0.586	0.691
	13.93	13.981	15.021	15.956	12.002	12.245	15.964
	0.046	0.057	0.066	0.068	0.058	0.058	0.066
	1	1	1	1	1	0	1
	1.327	0.64	1.112	-3.333	0.723	0.412	0.723
	14.048	13.813	15.033	16.051	12.015	12.259	16.101
	0.046	0.059	0.067	0.071	0.062	0.061	0.065
	1	1	0	1	1	0	1
	1.337	0.572	1.114	-4.336	0.721	0.41	0.801
	14.052	13.809	15.033	16.276	12.015	12.26	16.113
	0.047	0.059	0.066	0.071	0.059	0.06	0.067
	1	1	1	1	1	0	1
	1.34	0.575	1.119	-4.486	0.724	0.413	0.789
	14.057	13.813	15.033	16.069	12.018	12.266	16.117

3

Company																				
Unga Group Ltd	0.041	1	1.913	11.636	0.047	1	1.912	11.804	0.049	1	2.012	11.856	0.053	1	2.023	11.86	0.054	1	2.024	11.857
Mumias Sugar	0.052	1	0.215	12.746	0.056	1	1.913	12.955	0.063	1	2.013	13.001	0.065	1	2.115	13.012	0.065	1	2.115	13.056
East African Breweries	0.053	1	0.243	14.913	0.055	1	0.341	15.01	0.061	1	0.327	15.316	0.065	1	0.35	15.319	0.064	1	0.352	15.32
Carbacid Investments	0.042	1	0.471	14.043	0.043	1	0.913	14.043	0.048	1	0.893	14.157	0.05	1	0.922	14.157	0.055	1	0.924	14.165
British American Tobacco	0.046	1	0.539	12.913	0.049	1	0.634	13.01	0.05	1	0.412	13.223	0.054	1	0.421	13.219	0.055	1	0.425	13.215
B.O.C Kenya	0.048	1	0.503	11.634	0.049	1	0.671	11.7	0.051	1	0.541	11.84	0.053	1	0.556	11.843	0.054	1	0.558	11.598
Trans-Century Ltd	0.047	1	0.478	12.371	0.059	1	0.509	12.511	0.06	1	0.461	12.659	0.064	1	0.459	12.664	0.065	1	0.46	12.701

Company																						
Eveready East Africa	0.055	0	1.872	11.621	0.057	0	1.653	11.72		0.062	0	1.187	11.841	0.065	0	1.195	11.844		0.066	0	1.191	11.813
Kenya Orchads	0.043	0	2.391	11.551	0.046	1	2.371	11.551		0.05	1	1.588	11.549	0.052	1	1.584	11.556		0.05	1	1.589	11.524
A.Baumann Co.Ltd	0.047	0	1.472	12.701	0.047	0	1.541	12.717		0.054	0	1.212	12.821	0.057	0	1.209	12.813		0.058	0	1.217	12.808
Athi River Mining	0.064	1	0.814	12.013	0.064	1	0.831	12.213		0.069	1	0.645	12.105	0.071	1	0.643	12.11		0.07	1	0.643	12.269
Bamburi Cement	0.065	1	-1.823	13.276	0.063	1	-1.831	13.289		0.069	1	0.924	13.311	0.072	1	-2.921	13.312		0.072	1	-2.921	13.347
Marshalls (E.A)Ltd	0.053	1	2.261	13.063	0.051	1	2.587	13.563		0.054	1	2.413	13.574	0.058	1	1.913	13.58		0.059	1	1.918	13.571
Barclays Bank Ltd	0.063	1	-0.555	13.084	0.063	1	-0.564	13.375		0.068	1	-0.423	13.381	0.073	1	-0.413	13.386		0.074	1	-0.417	13.39

Bank																						
CFC Stanbic Holding	0.063	1	0.923	13.953	0.064	1	0.941	14.051		0.069	1	0.708	14.112	0.072	1	0.708	14.114		0.072	1	0.71	14.146
I&M Holdings	0.066	1	0.436	12.052	0.065	1	0.321	12.052		0.069	1	0.112	12.131	0.07	1	0.11	12.207		0.073	1	0.114	12.224
Diamond Trust Bank	0.055	1	0.913	11.357	0.057	1	0.756	11.558		0.062	0	0.834	11.614	0.064	0	0.813	11.614		0.064	0	0.818	11.686
Housing Finance Co.	0.047	1	0.697	11.452	0.048	1	0.614	11.753		0.053	1	0.708	11.811	0.056	1	0.702	11.813		0.056	1	0.698	11.808
Kenya Commercial Bank	0.057	1	-2.258	14.529	0.057	1	-2.271	14.712		0.061	1	-3.261	14.756	0.063	1	-3.258	14.841		0.064	1	-3.258	14.833
National Bank Of Kenya	0.054	1	-1364	13.51	0.059	1	-2.334	13.713		0.062	1	-2.43	13.914	0.065	1	-3.426	14.089		0.064	1	-3.427	14.087
Standard Chartered Bank	0.051	1	-2.476	12.941	0.055	1	-2.543	13.001		0.058	1	-2.616	13.563	0.061	1	-3.611	13.563		0.06	1	-2.614	13.574

	Equity Bank	Co-operative Bank of Kenya	NIC Bank	Jubilee Holdings	Pan Africa Insurance	Kenya Re-Insurance	Liberty Kenya Holdings
	0.062	0.052	0.043	0.038	0.013	0.034	0.028
	1	1	1	1	1	1	0
	-2.576	-2.481	-1.548	0.831	0.852	0.752	0.693
	15.542	13.861	12.261	12.975	10.673	10.008	10.683
	0.046	0.059	0.046	0.038	0.038	0.035	0.037
	1	1	1	1	1	1	0
	-2.542	-2.561	-1.561	0.861	0.874	0.673	0.608
	15.356	13.898	12.261	13.075	10.673	10.008	10.683
	0.051	0.062	0.048	0.041	0.04	0.041	0.042
	1	1	1	1	1	1	0
	-2.542	-2.656	-1.444	0.671	0.877	0.567	0.519
	15.321	14.391	12.275	13.082	10.677	10.012	10.716
	0.054	0.065	0.05	0.039	0.041	0.039	0.045
	1	1	1	0	1	1	0
	-3.533	-2.653	-1.438	0.669	0.881	0.569	0.521
	15.338	14.402	12.281	13.113	10.681	10.009	10.711
	0.055	0.065	0.05	0.04	0.042	0.042	0.046
	1	1	1	1	1	1	0
	-3.54	-3.655	-2.443	0.675	0.889	0.57	0.521
	15.344	14.511	12.289	13.154	10.697	10.013	10.716

Company																						
American Investments	0.038	0	0.659	10.231	0.039	0	0.683	10.331		0.04	0	0.681	10.346	0.043	0	0.683	10.35		0.046	0	0.685	10.327
CIC Insurance	0.032	0	0.819	12.469	0.036	0	0.895	12.965		0.038	0	0.834	13.007	0.04	0	0.838	13.013		0.039	0	0.841	13.013
Olympia Capital Holdings	0.033	0	0.873	12.571	0.034	0	0.814	12.679		0.037	0	0.823	12.713	0.039	0	0.825	12.723		0.037	0	0.839	12.734
Centum Investments	0.043	1	0.724	12.542	0.047	1	0.823	12.749		0.052	1	0.845	12.767	0.054	1	0.84	12.745		0.04	1	0.841	12.748
Crown Berger	0.024	0	0.991	13.571	0.032	0	0.925	13.571		0.036	0	0.831	13.624	0.037	0	0.829	13.124		0.036	0	0.833	13.133
E.A Cables	0.036	0	0.509	14.742	0.039	1	0.856	14.155		0.042	1	0.871	14.346	0.046	1	0.869	14.386		0.041	1	0.874	14.391
E.A Portland Cement	0.046	0	0.478	13.254	0.048	0	0.682	13.369		0.051	0	0.671	13.377	0.051	0	0.656	13.377		0.05	0	0.659	13.356

Company																						
Kenol Kobil Ltd	0.046	1	0.999	13.573	0.049	1	0.801	13.688		0.052	1	0.796	14.17	0.051	1	0.801	14.687		0.051	1	0.796	14.698
Total Kenya Ltd	0.057	1	0.619	13.011	0.058	1	0.676	13.423		0.062	1	0.656	13.423	0.061	1	0.652	13.455		0.063	1	0.656	13.455
KenGen Ltd	0.048	1	0.563	14.195	0.051	1	0.581	14.195		0.055	1	0.579	14.202	0.057	1	0.583	14.234		0.056	1	0.591	14.267
Umeme LTD	0.055	0	0.902	13.923	0.056	0	0.934	14.005		0.06	0	0.826	14.136	0.063	0	0.819	14.163		0.063	0	0.823	14.374
Kenya Power and Lighting	0.045	0	0.929	14.536	0.048	1	0.931	14.741		0.055	1	0.932	14.755	0.055	1	0.928	14.836		0.057	1	0.935	15.275
Home Afrika Ltd	0.039	0	0.652	12.513	0.037	0	0.971	12.567		0.039	0	0.856	12.572	0.041	0	0.853	12.612		0.042	0	0.858	13.648