

**EFFECT OF FINANCIAL RISKS ON INSTITUTIONAL
EFFICIENCY AMONG COMPANIES LISTED IN THE NAIROBI
SECURITIES EXCHANGE**

BY

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DECLARATION

This research project is my original work and has not been submitted for examination in any other University.

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DEDICATION

To my Mother Alice Wanjiku, it is through your encouragement, prayers and selfless assistance that made this possible.

ABSTRACT

The growth and development of the financial institutions are dependent on the effective and efficient management of its risks and opportunities. The search for precise tools to measure and manage the risk is an on-going process, which indicates that sufficient models and theories have not yet been made. Since the last financial crisis, there has been more pressure for regulation towards risk management at financial companies worldwide in order to decrease the consequences of a future crisis. The fact that most companies listed in the Nairobi Securities Exchange operate within a defined common bond exposes them to a relatively high degree of financial risks compared to corporate firms. Indeed many companies listed in the Nairobi Securities Exchange have in the past experienced some crisis in their operations and sustainability as a result of lack of risk identification and management mechanisms. Despite the well-established literature on the conventional financial institutions, studies on the relationship between financial risk management and efficiency of the firm remain scanty. The purpose of this study was to determine the effect of financial risks on institutional efficiency among companies listed in the Nairobi Securities Exchange. This study applied descriptive research design. Data was collected from all the 63 companies listed at the Nairobi securities exchange. Secondary data was used in this study for the last 5 years starting year 2011 to 2015. Quantitative analysis was used through descriptive statistics. In addition, a multivariate regression model was applied to determine the effect of financial risks on institutional efficiency. Categorical Data Envelopment Analysis (DEA) was used to measure institutional efficiency of the companies listed in the NSE. The study found that foreign currency contribute most to the institutional efficiency followed by interest rate risk, then credit risk while liquidity risk had the least effect on institutional efficiency among companies listed in Nairobi Securities Exchange. Due to the importance of foreign currency in the investment decisions, care should be exercised in determining the correct and comparable foreign currency of each company. Strategies to facilitate a favorable financial risks management at the NSE companies should be adopted by management for a good institutional efficiency. The government as companies regulator through the CMA should adopt policies that ensure increased efficiency among NSE listed companies. Strict conditions of minimum liquidity and capital should continue being emphasized on to ensure none of the companies have lower of the two.

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ABBREVIATIONS & ACRONYMS

| | | |
|--------------|---|---------------------------------|
| APT | - | Arbitrage Pricing Theory |
| CAPM | - | Capital Asset Pricing Model |
| CBK | - | Central Bank of Kenya |
| EaR | - | Earnings at Risk |
| EMH | - | Efficient Market Hypothesis |
| ERM | - | Enterprise Risk Management |
| GCC | - | Gulf Cooperation Council |
| GDP | - | Gross Domestic Product |
| MFI s | - | Micro Finance Institutions |
| MPT | - | Modern Portfolio Theory |
| NSE | - | Nairobi Securities Exchange |
| RAROC | - | Risk Adjusted Return on Capital |
| RBS | - | Risk Based Supervision |
| RMP s | - | Risk Management Practices |
| ROA | - | Return on Assets |
| ROE | - | Return on Equity |
| SDF | - | Stochastic Discount Factor |
| USA | - | United States of America |

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The financial crisis and global economic that exploded in the United States of America (USA) and the spread of this calamity worldwide hoisted questions on the efficiency of risk management practices (RMPs) used by financial organizations, including those used by banks that are well-established. Risk management crash is regarded as one of the major causes of the calamity. Steven (2013) observed that company financial risk management tries to control a business' presentation to products, vitality, loan costs, coinage and different viewpoints driven by the monetary market. As per Tapiero (2014), monetary risk management is characterized as the act of creating financial esteem in a business by utilizing financial instruments to oversee divulgence to chance, essentially advertise hazard and credit chance. Like to general risk management, the financial risk management includes recognizing the sources, measuring it, and additionally plans to handle them (Conti and Mauri, 2008).

Organization financing can end up being a noteworthy money related hazard to a business because of various reasons: the alternative between drifting rate obligation and settled rate, the time of the obligation and additionally the general measure of obligation financing are potential reasons for monetary dangers. Most associations need to be flexible and at a similar minute lower the costs for financing (Börner, 2011). The time of credits is huge in connection with the advantages that are financed with the advance. Here, much of the time a divergence between the periods can be watched. Long haul

resources are financed with flexible rate and transient advances, prompting to a shortfall in trade streams out times of rising the rates of intrigue. This reality over can bring about more terrible positioning of an association and awful conditions to get future troubles about follow-up financing over whatever is left of the lifetime of the advantage can happen.

Currently, a large part of financial stability work focuses on identifying the factors that contribute to financial risk and assessing and monitoring changes in company's risk profiles. The companies that are quoted on organized exchange serve as key indicators about the macro financial risks (Akhtar, 2011). The following feedback loop, in which financial risk manipulates the actual macro setting through the credit channel, typically remains unmodeled. To the degree study has focused on the influence of financial risks on the business performance, this has mostly been confined to variables related to stock market performance and the yield curve. Explicit financial risks, or risk variables pertaining to individual companies, are usually not taken into account. One of the major lessons of the existing international financial risks is the need to better internalize the cost of systemic risk resulting from financial strains. This requires a novel approach that helps mitigate the pro-cyclical tendencies of asset prices and risk and takes better account of various types of spillovers, while continuing to monitor the health of individual companies (Bernanke, 2005).

1.1.1 Institutional Efficiency

Efficiency shows how well a business utilizes its resources to produce services and goods. It focuses on inputs, outputs as well as the rate. That is, production at which inputs

is utilized to produce the output. Steven (2013) indicated that effectiveness is enhanced when more outputs of a particular quantity are created with fewer or the same inputs, or when equal amount of output is created with fewer inputs. Goddard, Molyneux and Wilson (2009) argued that the more efficient the financial system is, the better the economy. A business that is competent may have competitive advantage against the rival companies producing less competently in the matching industry. An efficient business will show increased profitability with less input of resources. Thus, to keep pace in an inevitably aggressive world, a business needs to keep running as proficiently as could be expected under the circumstances since any organization that is not working productively will be bankrupt (Hansen, 2009).

Effectiveness estimation is one part of an organization's performance. Institutional productivity can be measured concerning boost of yield, minimization of cost or augmentation of benefits. By and large, institutional proficiency is imperative to organizations themselves as it has coordinate association with productivity (present and future), aggressiveness, and dissolvability (Okuto, 2011). Partner theory recommends that the capacity of a business is to create as much worth as plausible for partners. To succeed and be reasonable after some time, supervisory must keep up the interests of shareholders, groups, workers, providers and clients and also going in the comparable bearing. Stakeholder management might be corresponded to traditional thoughts of authoritative accomplishment through explanatory contention. Taken a toll effectiveness allude to how close an association's genuine cost are to the cost of best-practice firm delivering same yield. Fetched effectiveness reflects administrative capacity to drive

down generation costs, controlled for yield volumes and information value levels. Taken a toll wastefulness may emerge in light of the fact that directors utilize more contribution than would a best-rehearse firm (specialized wastefulness) or on the grounds that they utilize an info blend that does not minimize cost for a given input vector (allocative wastefulness) (Berger, 2000).

1.1.2 Financial Risks

Financial risk defines the corporate ability to meet expected and unexpected demand for cash through continuing cash flow (Panigrahi, 2013). The financial risk is the risk at which the corporate institutions do not have enough cash to use for its own obligation. However, if a company does not hold enough cash, experiences to not pay suppliers, banks, and other parties on time (Boermans, 2011). The goal of financial risk management is not to forbid or avoid chance taking movement, but rather to guarantee that the dangers are intentionally brought with full information, clear reason and seeing so it can be measured and moderated. It likewise keeps a foundation from misery unsuitable misfortune making it fall flat or physically harm its aggressive position (Buttimer, 2008).

The use of effective monetary risk management identified with the amplexness of arrangements and saves as per Basel gauges. Total hazard presentation is evaluated through Risk Adjusted Return on Capital (RAROC) and Earnings at Risk (EaR) technique. These techniques are utilized by organizations to evaluate the cost of Economic Capital and expected misfortunes that may win in the most dire outcome imaginable and afterward likens the capital pad to be accommodated the potential

misfortune. RAROC is the initial move towards analyzing the organization's whole monetary record on a stamp to market premise, if just to comprehend the risk return exchange off that have been made. With a specific end goal to improve the supervisory instrument, a few banks have set up, an arrangement of Risk based supervision. Under hazard based supervision (RBS), directors are required to focus their endeavors on guaranteeing that money related foundations utilize the procedure essentially to recognize measure and control chance introduction. The RBS is relied upon to center supervisory consideration as per the hazard profile of the bank (Ameer, 2010).

1.1.3 Relationship between Financial Risks and Institutional Efficiency

Institutional efficiency can be influenced by factors that can be controlled by the firm, as well as by factors that are not under the control of such firms. Controllable factors include everything related to management of inputs and outputs or transforming inputs into outputs (Ahmed, Akhtar & Usman, 2011). Financial risk which is caused by variation in interest rates, currency exchange rates; default and poor liquidity management may have negative effects on the efficiency of the commercial institutions. Athanasoglou et al (2005) notes that financial risk has some effects on business performance as indicated by total assets, total deposit, net interest, margin and net income. Bobakovia (2013) further asserts that the competence of a firm relies on its capability to predict and circumvent risks, and possibility of provisions to cover losses brought about by risk that arises.

In addition, credit risk is expected to have a positive relationship with efficiency which implies that firms with higher debt to asset ratio tend to have higher efficiency score

(Abraham et al., 2012). Mukherjee et al. (2012) argued that liquidity of asset constitutes the most crucial element of firm efficiency depicting how significant it is in maintaining organizational efficiency. Bikker & Metzmakers (2015) indicated that the ultimate objective of risk management implementation in commercial organizations is to maintain proper financial performance and efficiency. This is because aspects of financial risk management promote early warning system of monitoring relevant indicators; as well as stimulating and making provisions for possible realistic strains on the system by conducting stress testing.

1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) as noted by Ngugi (2010) is a securities market that has been characterized by humble beginnings and has grown considerably over time when Kenya was still a British colony. Because of the critical role in Kenyan economy and at large the East African Community, NSE becomes an important reference for this study owing to variety of stocks traded in the market. There are a number of reasons why listed firms in Kenya diversify their portfolios. Other listed firms experience diminishing growth prospects in present industry. Most medium sized firms diversify their portfolios as a way of cost saving opportunities in order to capture strategic fits and financial economies by spreading business risk leveraging their brand name. This has been attributed by the turbulent nature of the business environment that is characterized by risks and uncertainties (Kinyugo, 2014). Through diversification of unrelated businesses firms are able to counter challenges of risks that might lead to financial losses as a result of relying on one line of business.

According to Kamwaro (2013), financial risks and corporate liquidity affects investment portfolio choice of investment companies listed in the Nairobi Securities Exchange. Thus, there is need for the management of investment companies to have solid organization structure to influence their corporate liquidity which impact on their investment portfolio choice. Njure (2014) expressed that there is a weak positive relationship between liquidity risk and investment among the listed nonfinancial companies in Kenya. However, Njure's argument was only based on the nonfinancial companies listed in the NSE and not to financial companies.

1.2 Research Problem

The development and growth of the financial organizations are dependent on the efficient and effective management of its risks and opportunities. Many organizations have collapsed even when ERM is in place. In other words, it is not proven that more regulations on risk management are effective in helping firms operate efficiently and survive in the turbulent and risky business environment (Kinyugo, 2014). This study aims at determining the effect of financial risks on institutional efficiency among companies listed in the Nairobi Securities Exchange.

The fact that most institutions in the Nairobi Securities Exchange operate within a defined common bond exposes them to a relatively high degree of financial risks compared to corporate firms. Indeed many companies listed in the Nairobi Securities Exchange have in the past experienced some crisis in their operations and sustainability as a result of lack of risk identification and management mechanisms. Despite the enormous contribution of these companies to the Kenyan economy, they have been faced

with numerous financial risks such as credit, liquidity, operational (weak internal controls and inadequate Information Communication Technology (ICT), among others. KPMG Report (2015) indicates that many companies that collapsed in Kenya in the last 20 years were as a result of the poor management of financial. It's important therefore to study how financial risks are affecting the operations of institutions listed in the Nairobi Securities Exchange.

Scholars have widely studied risk management practices. Nagy (2009) applied risk index to measure exposure to risk of several Jordanian banks concluded that Gross domestic product (GDP) had a negative relation, while inflation rate and market interest rate had positive relationship with risk index. Mwangi (2012) uncovered that some risk management methods have critical impact on financial management more than others do. He included that the presence of a hazard administration arrangement and the mix of hazard administration in setting of authoritative destinations are thought to be key risk management hones that directly affect financial management. This implies firms can enhance their approach by concentrating on creating solid risk management approaches and coordinating risk administration during the time spent setting achievable authoritative goals.

Ariffin and Kassim (2011) connected risk management tactics and management in the Islamic banks in Malaysia. The study shed some light on the present risk management hones in numerous Islamic organizations. Boyabatli and Toktay (2014) states that the fundamental target of risk administration projects is expanding shareholder esteem by improving firm esteem through the administration of hazard exposures. Ameer (2010)

brings up that despite the fact that hazard administration has picked up a considerable measure of consideration a large portion of the related risk management have for the most part focused on organizations' remote coin chance. Just as of late market dangers, for example, item chance has increased a greater amount of consideration. Monetary risk management hones fall into three noteworthy classes; credit chance practices, liquidity chance administration rehearse as and market dangers (Kithinji, 2010).

Locally, Korir (2012) did a study on the relationship between risk management and proficiency of assembling firms in Kenya, Anguka (2012) contemplated the impact of money related hazard administration on the budgetary execution of Commercial Banks in Kenya, Ndung'u (2013) led a study on the impact of money related hazard administration on monetary execution of oil organizations in Kenya, Wanjohi (2013) assessed the impact of risk management on the financial performance of business banks in Kenya, Obudho (2014) did a study on the relationship between monetary hazard and money related execution of insurance agencies in Kenya while Muteti (2014) concentrated on the relationship between risk management and budgetary execution of business banks in Kenya.

Regardless of the entrenched writing on the ordinary financial institutions, thinks about on the relationship between budgetary hazard administration and effectiveness of the firm stay inadequate. Larger part of the studies did have focused using a loan and operational hazard administration. Various studies have likewise been directed in the saving money division however none of the researchers has considered the impacts of budgetary hazard

on institutional effectiveness among organizations recorded in the Nairobi securities trade.

1.3 Research Objective

The objective of this study was to determine the effect of financial risks on institutional efficiency among companies listed in the Nairobi Securities Exchange.

1.4 Value of the Study

The findings of this study will be critical to different partners in the Agricultural, Energy and Petroleum, Growth and Enterprise Segment division since it will give a knowledge into the impact of money related dangers on institutional effectiveness. Since most of the ventures and funds are through these parts, and for the general population intrigue, it is vital to discover the impact of financial risks on institutional productivity.

Surveying firms' proficiency would help directors to inspect the accomplishment of their administrative choices; to better comprehend their administration adequacy and gives them with significant reference to enhancing their execution. Then again, it will assist arrangement creators with developing a solid and sound environment for these divisions by looking at the effect of money related hazard administration techniques and their impact on institutional effectiveness.

Investors need to perceive how well a particular firm is performing before possibly putting resources into it. A high stock value alone is insufficient to quantify; they need to perceive how well a firm is performing as well. In this manner, for any firm to survive and succeed, administrators ought to take in the status of their proficiency and how it is

contrasted with their partner in same nation or different nations. Consequently, to take in the reasonable monetary choices that accomplish better assigned money related assets to keep up legitimate liquidity in a more proficient and successful way, it is vital to evaluate organization productivity.

The data so acquired would be valuable to the Government, investigate foundations and different researchers who might need to propel the learning and writing on institutional productivity. It will likewise include to writing the subject as reference material and empower promote examine in the territory. To discover new bits of knowledge on organizations recorded in NSE exercises assessment, new approach other than the customary approach (financial ratios analysis).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This Chapter presents a review of literature related to financial risk and institutional efficiency. The chapter consists of theoretical review relating to risk management practices, an overview of related empirical researches and the determinants of financial performance among companies listed in the Nairobi securities exchange.

2.2 Theoretical Review

This section discusses theories of financial risk namely, modern portfolio theory (MPT), Arbitrage Pricing, The moral hazard theory and Efficient Market theory.

2.2.1 Modern Portfolio Theory (MPT)

Modern portfolio theory of finance seeks to show how firms can expand portfolio foreseen return for a predefined amount of portfolio hazard, or decrease chance for a predetermined level of expected return, by carefully selecting the extents of various resources. Going before the Markowitz's exertion on Portfolio Selection shareholders concentrated on assessing rewards and the dangers of individual securities in making their portfolios naturally. Itemizing math of enhancement, he expected that shareholders concentrate on picking portfolios relying upon those portfolios' general hazard compensate uniqueness rather than simply gathering portfolios from securities that each exclusively has alluring danger remunerate uniqueness. This implies financial specialists should pick portfolios not singular securities.

Through influence, portfolios on the capital market line are proficient to break portfolio on the productive wilderness. Sharpe (1964) noble the capital resource valuing model (CAPM). This makes solid speculation that prompt to rousing conclusions. Not simply does the market portfolio sit on the effective wilderness, however it is truly Tobin's super-proficient portfolio. The number juggling of portfolio theory is used in budgetary hazard administration and was a theoretical antecedent for the esteem at-hazard measures of today.

2.2.2 Arbitrage Pricing Theory

The Arbitrage Pricing Theory (APT) was fundamentally created by Ross (1976). It is a one-period representation in which every speculator considers that the stochastic resources of profits of capital resources are solid with a component arrangement. The Arbitrage Pricing Theory (APT) clarifies the cost where a mispriced resource is unsurprising to be. It is much of the time seen as a substitute to the capital resource evaluating model (CAPM), in light of the fact that the APT has additional adaptable theory necessities. While the CAPM strategy requires the normal return of the market, APT applies the unsafe resource's expected return and also the hazard premium of different small scale monetary perspectives. Arbitrageurs utilize the APT representation to wage by exploiting the mispriced securities. A security that is mispriced will have an esteem that varys from the theoretical cost determined by the model (Ross, 1976). The APT is an option for the Capital Asset Pricing Model (CAPM) in that they both certify a straight connection associating expected returns of the advantages and in addition their covariance with other self-assertive factors (Kargi, 2011). Arbitrage evaluating theory

does not depend on computing the execution of the market. As a substitute, APT specifically shares the security cost to the key viewpoints driving it. The emergency with this is the theory in itself gives no indication of what these angles are, so they require being experimentally decided. Clear angles incorporate financing costs and monetary development. For associations in a few portions different angles are clearly appropriate also -, for example, client spending for dealers. The possibly enormous number of viewpoints means additional betas to be registered. There is additionally no certification that all the appropriate angles have been perceived.

2.2.3 Moral Hazard Theory

A moral hazard alludes to where one gathering is responsible for the prosperity of another, however has an inspiration to put his own advantages first. For example, one may go for broke that another person will need to manage. Such good perils are an unavoidable and an inescapable element of the money related framework and additionally of the economy for the most part. Krugman (2009) clarified moral danger as any conditions in which an individual settles on the decision about the measure of hazard to expect, while someone else bears the cost if things go inadequately. The deficient control of good dangers as often as possible prompts to publicly exorbitant hazard taking—and additionally intemperate risk taking was unquestionably a repeating subject in the current worldwide monetary cataclysm.

Njenga (2012) indicated that no different business yet back has a comparable inclination for mingling misfortunes and privatizing picks up. Rather than creating esteem, as we were much of the time guaranteed, the performs of money related building (counting

elective hazard exchange and organized back), dodgy FICO score, forceful bookkeeping and enormous influence have permitted their professionals to take out esteem on a tremendous scale—to leave with the burgle, not to put too fine a tip on it—while being over the top by monetary controls, corporate administration and hazard administration, all of which have affirmed to be basically futile (Limam, 2010).

2.2.4 Efficient Market Hypothesis (EMH)

Efficient Market Hypothesis (EMH) confirms that financial markets are informational competent. One cannot continually achieve returns in excess of the average market returns on a hazard adjusted basis, given the data that is available at the moment the investment is completed (Guerrien & Gun, 2011). Amihud et al. (2007) disputed that EMH forecasts that market prices ought to incorporate all the available information at every point in time because the security costs adjust to all novel information. The theory suggests that profits from forecasting price movements are very unlikely and complex since the reason behind value changes is the arrival of novel information. Owing to price changes on arrival of novel information, businesses will always function at the best costs which leads to enhanced business' performance and thus efficiency.

The relaxation of the competitive and frictionless market theories introduces the idea of liquidity risk. Generally speaking, liquidity risk refers to extra risk due to the size and timing of a trade. From the perspective of the financial engineering, the need is vital for an easy yet vigorous method that integrates liquidity risk into arbitrage pricing hypothesis. The market microstructure text, Hoyt (2011), though conceptually

constructive, is missing in this regard. As the initial resolution to this crisis, liquidity risk has lately been integrated into arbitrage pricing hypothesis as a convenient.

2.3 Determinants Of Institutional Efficiency

Companies must make efficiency analysis to reach to accomplishment. The DEA program allows one to discover the correct weights which exploits the competence of DMU and computes the competence score as well as frontier of output for a specified level of inputs (Farrell, 1957). The weights for the ratio are established by the limit that comparable ratios for each DMU ought to be equal or less than the unity, hence reducing multiple outputs and inputs to a particular virtual output without involving pre-assigned weights. Thus, the efficiency score acts function of the weights of the virtual input output combination given as follows;

Efficiency = Weighted sum of output

Weighted sum of inputs

Inputs=Total Assets (TA), Cost of raw materials and cost of sales expenses (CRSE)

Outputs = Net Sales (NA) and Net Profit (NP).

Therefore, comparative efficiency score of particular DMUs is attained by resolving the subsequent linear programming model as explained Charnes-Cooper (1962). Every DMU chooses input weights that exploit its efficiency score. Usually, a DMU is assumed to be competent if it gets a score of 1.00, implying 100% competence while a score of below 1.00 indicates that it is incompetent.

2.4 Financial Risks

Financial risk refers to an umbrella term used for multiple categories of risk related with financing, including financial contracts that include company loans in possibility of default. The risk management has established increased consideration over the precedent years (Schönborn, 2010). Financial risks can be of diverse forms. However, there are outside financial risks depending on the alterations on financial markets. There are interior financial risks, where the business itself is the cause of the risks (Eichhorn, 2004).

External financial risks are founded on the risk aspects of interest rates and exchange and commodity prices (Schönborn, 2010). The four sorts of monetary dangers that will be evaluated incorporate liquidity chance, outside conversion scale hazard, loan cost hazard and credit chance.

2.4.1 Foreign Exchange Risk

This is a financial risk that is postured by a contact to startling changes in the swap rate between 2 financial forms. Multinational organizations and speculators bringing in or sending out administrations and products or making abroad ventures all through the overall economy are confronted with a swap rate chance which can bring about serious money related punishment if not oversaw effectively. In the event that remote exchange markets are capable with the end goal that loan cost equality, purchasing power equality and the worldwide Fisher impact remain constant, a financial specialist or firm does not require securing against outside swap hazard because of lack of concern toward worldwide venture choices. A difference from at least one of the 3 worldwide equality

conditions as a rule needs to happen for a contract to outside swap chance (Ahmed, Akhtar and Usman, 2011).

Variance connotes swap rate hazard by the extend of trade rates; while standard deviation symbolizes change rate chance by the amount trade rates wander, on standard, from the mean swap rate in a plausibility dissemination. A higher standard deviation flags a more prominent cash hazard. Options, for example, semi difference and normal total deviation have been progressed to measuring monetary hazard (Simar, 2012).

2.4.2 Interest Rate Risk

Loan cost hazard is established on changes in financing costs and can be seen in differing shapes. The principal shape alludes to modifications in loan fees in relationship with fleeting financing and variable credits. An increase in the rate of interest leads to high interest expenditure for the variable rate of loan and more costly follow-up financing. This reduces the company's earnings and may in worst situation lead to financial misery. Second, the vice versa situation refers to cash situations of the business. Thirdly, inflexible rate debt contracts can be a hazard for the business. In times of broken down financing costs those understandings cause higher use then a variable credit would do and are hindering for the business.

Nonetheless, these expenses are chance expenses and not genuine expenses to the business (Dhanini, 2007). Consequently, it can be summed up that the more shared obligation and especially factor and fleeting rate obligation a business has, the more defenseless it is to modifications in the loan cost (Dhanini, 2007). At long last, request understanding brought about by the rate of intrigue changes can also be seen as a feature

of the loan cost hazard. Be that as it may, practically identical to financial experience of abroad conversion scale hazard, likewise the conjecture of this affectability is additionally scarcely and troublesomely quantifiable. It is then by and by unnoticed for most organizations and items (Schönborn, 2010).

2.4.3 Credit Risk

Credit risk emerges when a debtor is overseeing to exploit prospect cash flows to repay a loan. It is the danger of loss of budgetary reward or loss of a vital subsequently from the disappointment of the borrower to pay back a credit or generally meet the commitment according to the agreement (Amihud et al, 2007).

Credit credit risk management alludes to an organized approach utilized for overseeing vulnerabilities through hazard assessment, creating ways to deal with oversee it, and easing of hazard using administrative asset (Husni, 2011). The techniques include exchanging to an alternate gathering, avoiding the hazard, diminishing the unconstructive impacts of hazard, and also tolerating all or a portion of the outcomes of a given hazard.

2.4.4 Liquidity Risk

Liquidity risk eludes the hazard that a specific resource or security can't be exchanged quickly enough in the commercial center to maintain a strategic distance from a misfortune (or make the important benefit). There are 3 sorts of liquidity hazard: Asset liquidity emerges when an advantage can't be exchanged because of absence of liquidity in the commercial center. Financing liquidity chance happens when liabilities: can't be met at whatever point they fall due, and must be met at a value that is not monetary and can be systemic or name-particular (Claudiu, 2009).

Liquidity hazard is generally the outcome of different dangers which prompts to a disparity of the arranged result and may prompt to higher money outpourings or lower money inflows. Liquidity measures the capacity of the business to meet its working cost and therefore it additionally shows whether the business is able to make due with a few misfortunes because of hazard event (Smithson, Smith and Wilford, 1995). Absence of budgetary means can prompt to issues in the capacity of the business to pay its bills when they fall due and by that prompt to additional expenses. Notwithstanding, costs happen for back payments expenses. Nonetheless, the rating of the business can be lower and after that future financing prompts to higher intrigue installments (Eichhorn, 2004). Because of that the financing hazard turns out to be more basic and may prompt to higher dissolvability and liquidity dangers. As inner and outer money related dangers may vastly affect the business and its progression, an administration of these dangers is vital additionally for non-budgetary association. To deal with the liquidity positions, banks should take a gander at both the long haul presentation and positions to extensive investors in addition to other things (Gupta and Aggarwal, 2014).

2.5 Empirical Studies

Singh et al (2013) carried out a study on technical efficiency as well as its determinants in micro finance organizations in India on a business level analysis. They obtained data from Mix Market Network and a total of 41 micro finance institutions were tested depending on the accessibility of data for 5 consecutive years 2005 – 2009. The study employed DEA model since it incorporate multiple outputs and inputs and it does not need any value information for double cost purpose as is necessary for parametric

approaches. The results showed that connection coefficient of price of total assets is constructive with every the competence measures and that of period is constructive with uncontaminated sale efficiency and technical efficiency. However, the financial capability of micro finance organizations had constructive connection with all the measures of competence.

Njenga (2012) wanted to investigate the association between financial performance and cost X-efficiency of companies that are listed in Nairobi Securities Exchange in Kenya. The sample comprised of firms listed in Nairobi Securities Exchange whose published financial data was available continuously over the sample period of the study between the years 2006 to 2011. To succeed and be reasonable after some time, supervisory must keep up the interests of shareholders, groups, workers, providers and clients and also going in the comparable bearing. Stakeholder management might be corresponded to traditional thoughts of authoritative accomplishment through explanatory contention. Taken a toll effectiveness allude to how close an association's genuine cost are to the cost of best-practice firm delivering same yield. It included businesses in the following sectors; Agriculture service and communication, banking, accessories and automobile, banking, construction and allied, energy as well as petroleum, insurance and investment firm.

Andries (2010) carried out a study to investigate the determinants of productivity growth and bank efficiency in the Central and Eastern European banking systems. The data utilized in the analysis was taken from the yearly reports of banks, reports. This was for the period 2004 – 2008. The results indicated that the factors affecting the level of

competence of banks in Central and Eastern European countries were size, capital structure, total assets, form of ownership.

Githinji (2015) carried out a study on Credit Risk Management and Profitability of Deposit taking Micro financial foundations in Kenya to evaluate how much the credit risk administration by and by had fundamentally added to high benefits in Deposit taking Micro budgetary organizations of Kenya. Information on the measure of credit, level of non-performing advances and benefits were gathered for the period 2004 to 2008. The results of the study demonstrated that, there was no relationship between benefits, measure of credit and the level of nonperforming advances. A regression model was utilized to expound the outcomes which demonstrated that there was no criticalness relationship between the store taking Micro financial foundations benefit and credit hazard administration intermediary by level of Non-performing Loans and Loans and Advances/Total resources.

Kolapo (2012) on his study on Credit Risk and Deposit taking Micro money related associations' Performance In Nigeria completed an exact study concerning the quantitative impact of credit hazard on the execution of Deposit taking Micro budgetary associations in Nigeria over the time of 11 years (2000 - 2010). Five Commercial store taking Micro money related foundations firms were chosen on a cross sectional reason for a long time. Consequently, to take in the reasonable monetary choices that accomplish better assigned money related assets to keep up legitimate liquidity in a more proficient and successful way, it is vital to evaluate organization productivity.

Ogilo (2012) provided a comparative study of Credit Risk Management on Financial Performance of Deposit taking Micro financial organizations in Kenya. A causal study design was embarked on in this study and this was facilitated by the use of secondary data which was obtained from the Central Deposit taking Micro financial institutions of Kenya publications on deposit taking Micro financial institutions sector survey. The study used multiple regression analysis in the analysis of data and the findings were presented in the form of tables and regression equations.

2.6 Conceptual Framework

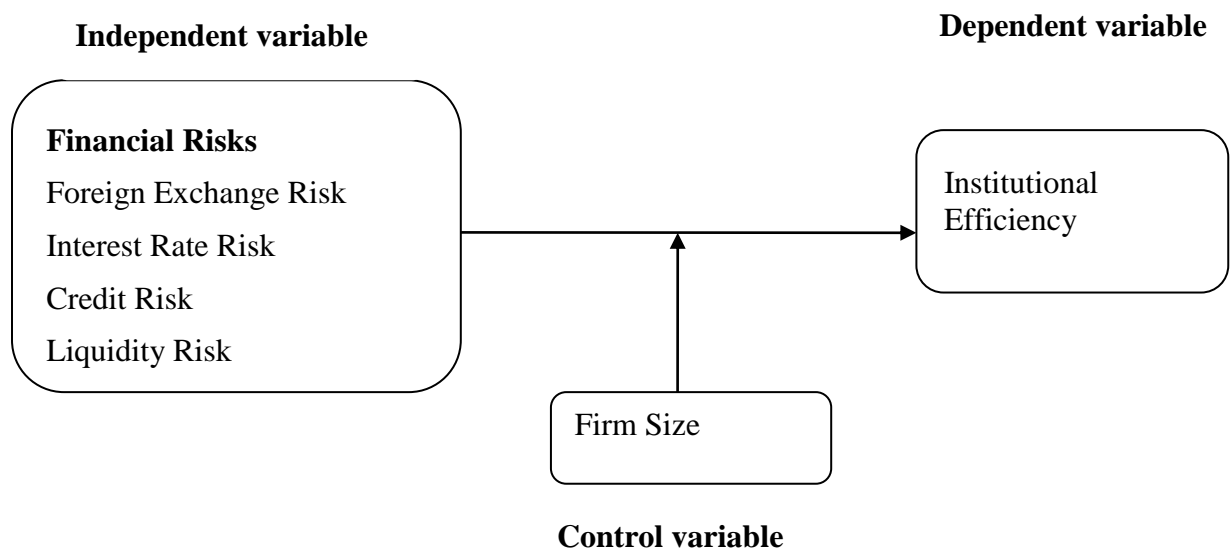


Figure 2.1: Conceptual Framework

The framework presents a diagrammatic representation of the conceptualization of the study which seeks to establish the effect of financial risks on organizational competence among institutions listed in the Nairobi Securities Exchange. The independent variables in this case are the financial risks including the foreign exchange risk, interest rate risk,

credit risk and liquidity risk while the dependent variable is institutional efficiency. This relationship is controlled by the Firm Size.

2.7 Summary of the Literature Review

This study is inclined on the current portfolio theory (MPT), Arbitrage Pricing, The moral hazard theory and Efficient Market theory. The effectiveness estimation depended on the DEA program which empowers one to locate the best possible weights which amplify the proficiency of DMU and ascertains the productivity score and outskirts of yield for a given level of sources of info. The four sorts of financial risks that will be evaluated incorporate credit chance; loan fee chance; remote swapping scale hazard; and liquidity chance. Foreign Exchange is a financial risk postured by a presentation to unexpected changes in the swapping scale between two monetary standards. Then again, Interest rate hazard depends on changes in financing costs and can be seen in various structures. Liquidity hazard is the hazard that a given security or resource can't be exchanged rapidly enough in the market to keep a misfortune (or make the required benefit).

Past studies directed on financial related dangers such Singh et al (2013), Andries (2010), Kolapo (2012), Njenga (2012), Githinji (2015) and Ogilo (2012) were led in various setting other than the organizations recorded in the Nairobi Securities Exchange whose vital approach and monetary balance is distinctive. Assist, no study concentrated on the relationship between budgetary dangers and institutional proficiency. Along these lines, there is a writing hole in the impact of money related dangers on institutional effectiveness among organizations recorded in the Nairobi Securities Exchange.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this section, the researcher has talked about the exploration outline that was utilized to lead this study. The specialist has likewise made an intricate talk on the populace that is focused on, the example estimate that was included in the study and the testing plan that was utilized to touch base at the required sample measure. The focus additionally takes a gander at the kind of instruments that was utilized to gather information and how the same was investigated and exhibited.

3.2 Research Design

This study employed descriptive research design. The designs investigations the how, what, why and when of a phenomena (Kothari, 2004). Examine outline is an vital and deliberate arrangement for coordinating an exploration contemplate. It determines the destinations of the study, the approach and procedures to be embraced for accomplishing the objective(s) (Mugenda, 2008).

3.3 Target Population

The objective for this study was all the 63 organizations recorded at the Nairobi securities trade (NSE 2016). Mugenda and Mugenda, (2003) clarify that the objective populace ought to have some recognizable attributes, to which the scientist plans to sum up the consequences of the study. Information was gathered from all the 63 organizations recorded at the Nairobi securities trade.

3.4 Data Collection

Secondary data was used in this study, for the purpose of analyzing the effect of financial risks on organizational competence of the institutions registered at the Nairobi securities exchange. Secondary data from NSE annual report was collected on the study variables which include, total assets, current assets, current liabilities, total expenses, net profit after taxes, Earning per share, interest rate, Loans, Non-interest expense and Equity. The study collected secondary data for the last 5 years starting year 2011 to 2015.

3.5 Data Analysis and Presentation

Mugenda and Mugenda (2003) affirm that information got from the field in raw nature is hard to decipher unless it is cleaned, coded and dissected. The information gathered was thusly cleaned, coded and efficiently sorted out in a way that encourages investigation utilizing the Statistical Package for Social Sciences (SPSS) variant 21. Quantitative examination was utilized through elucidating insights, for example, measure of focal propensity to produce pertinent rates, recurrence tallies, mode, and middle and mean where conceivable. Moreover, a multivariate relapse model was connected to decide the impact of money related dangers on institutional effectiveness. Various relapses is an adaptable technique for information examination that might be fitting at whatever point quantitative factors (the ward) is to be inspected in relationship to some other components (communicated as free or indicator variable) (Cohen, West and Aiken, 2013). With a specific end goal to make the information more clients well disposed and alluring to the perusers, realistic intuitive tables were produced utilizing the PC spreadsheet to display the information.

3.5.1 Measurement of Institutional Efficiency

Categorical Data Envelopment Analysis (DEA) was used to measure institutional efficiency of the companies listed in the NSE. According to Emami (2000), data Envelopment Analysis (DEA) is a nonparametric efficiency measurement method that uses mathematical programming and has the ability to evaluate the performances of a set of entities called Decision Making Units (DMUs) which convert multiple inputs into multiple outputs, and to identify both inefficient DMUs and the magnitude of the efficiency. The input used in this study include total assets, current assets, current liabilities and total expenses while the factors treated as outputs are net profit after taxes and Earning per share.

3.5.2 Analytical Model

The following relationship equation represents the linear regression model used in this study.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where Y= Institutional efficiency of companies listed in Nairobi Securities Exchange

(Adapted from DEA model)

α = Constant Term

$\beta_1, \beta_2, \dots, \beta_{10}$ = Beta coefficients

X_1 = Foreign currency risk (ratio of net foreign currency exposure between assets and liabilities to total assets)

X_2 = Interest rate risk (ratio of the interest rate sensitivity gap between assets and liabilities maturing within a period less or equal to one year to total assets)

X_3 = Credit risk (Loans / total assets)

X_4 = Liquidity Risk (total current liabilities to total current assets)

X_5 = Size (Logarithm of total assets)

ε = Error Term

3.5.3 Test of Significance

The noteworthiness of every autonomous variable was tried. Fischer dispersion test called F-test was likewise connected. F-test alludes to the proportion between the model mean square partitioned by the mistake mean square. F-test was utilized to test the essentialness of the general model at a 95 percent certainty level. The p-esteem for the F-measurement was connected in deciding the vigor of the model. The conclusion depended on the premise of F computed and F-basic. Where if the F computed is more noteworthy than F-basic, the model is not fit (if the p-esteem is under 0.05) and if the F ascertained is not as much as F-basic then the model is acknowledged (if the p-esteem is more value than 0.05).

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research objective and research methodology. The objective of this study was to determine the effect of financial risks on institutional efficiency among companies listed in the Nairobi Securities Exchange. The data was gathered exclusively from the secondary source which included records at companies audited financial report. Data was collected from a total of 66 companies listed at Nairobi securities exchange. Section 4.2 presents descriptive statistics, section 4.3 discusses the relationship between foreign currency and institutional efficiencies, section 4.4 presents discussion of findings, while section 4.5 presents the summary and interpretation of findings.

4.2 Summary Statistics

Descriptive statistics are the methods that describe the overall aspect of the data in a study. They describe the nature of response from primary data and/or secondary data. Descriptive data analysis was performed on the institutional efficiency of companies listed in Nairobi Securities Exchange, foreign currency risk, interest rate risk, credit risk, liquidity risk and size. The descriptive statistics results are tabulated below.

Table 4. 1: Institutional efficiency of companies listed in Nairobi Securities Exchange

| | Minimum | Maximum | Mean | Std. Deviation |
|------|----------------|----------------|-------------|-----------------------|
| 2011 | 0.623 | 2.629 | .703 | .57344 |
| 2012 | 0.634 | 1.987 | .663 | 1.76982 |
| 2013 | 0.456 | 2.698 | 0.878 | .39826 |
| 2014 | 0.897 | 1.098 | .879 | .82639 |
| 2015 | 0.654 | 2.987 | 1.987 | .760 |

Source: Author (2016)

Table 4.1 presents the findings on the descriptive statistics for institutional efficiency of companies listed in Nairobi Securities Exchange for the years 2011-2015. Institutional competence is gauged with reference to expansion of output, minimization of expense or expansion of profits. The means depict year 2015 with the uppermost meanwhile 2012 showed the least institutional effectiveness of institutions in Nairobi Securities Exchange of 0.663. Moreover the levels of standard deviation show disparity in institutional efficiency of institutions in Nairobi Securities Exchange for the numerous firms statistically.

Table 4. 2: Foreign currency

| | Minimum | Maximum | Mean | Std. Deviation |
|------|----------------|----------------|-------------|-----------------------|
| 2011 | 67.98 | 75.89 | 72.78 | .85648 |
| 2012 | 73.87 | 83.76 | 76.90 | .95033 |
| 2013 | 72.76 | 89.56 | 81.89 | .25348 |
| 2014 | 84.89 | 100.09 | 90.76 | .39964 |
| 2015 | 91.76 | 102.87 | 98.09 | .90567 |

Source: Author (2016)

Table 4.2 presents the findings on the descriptive statistics for foreign currency for the years 2011-2015. The means portray a steady increase in the foreign currency for all the 66 institutions registered at the Nairobi Securities exchange for years 2011 to 2015. The

lowest mean was reported in 2011 with a mean of 72.78 while the highest was reported in 2015 with a mean of 98.09.

Table 4. 3: Interest rate risk

| | Minimum | Maximum | Mean | Std. Deviation |
|------|----------------|----------------|-------------|-----------------------|
| 2011 | 7.90 | 11.04 | 10.1227 | .69240 |
| 2012 | 7.87 | 11.18 | 10.1771 | .69704 |
| 2013 | 7.85 | 11.21 | 10.2538 | .72652 |
| 2014 | 7.82 | 11.21 | 10.2689 | .73481 |
| 2015 | 6.85 | 11.27 | 10.2950 | .80786 |

Source: Author (2016)

Table 4.3 presents the findings on the descriptive statistics for size of firm for the years 2011-2015. The means portray a steady increase in the interest rate for all the 66 firms listed at the Nairobi Securities exchange with the lowest being 10.1227 in the year 2011 and the highest being 10.2950 in 2015. Further, the standard deviation data are high for interest rate, signifying there is high level of variability in the data. There is a narrow gap between the maximum and minimum size, which means that there is low variability of interest rate in NSE.

Table 4. 4: Credit risk

| | Minimum | Maximum | Mean | Std. Deviation |
|------|----------------|----------------|-------------|-----------------------|
| 2011 | 0.223 | 0.629 | .439 | .57398 |
| 2012 | 0.234 | 0.987 | .663 | 1.76782 |
| 2013 | 0.156 | 0.698 | 0.378 | .79826 |
| 2014 | 0.297 | 0.898 | 0.479 | .82639 |
| 2015 | 0.154 | 0.987 | 0.587 | 1.760 |

Source: Author (2016)

Table 4.4 present the findings on the descriptive statistics for credit risk for the years 2011-2015. The means portray an irregular pattern in the credit risk for all the 66 firms listed at the Nairobi Securities exchange with the lowest being 0.378 in the year 2013 and the highest being 0.663 in 2012. Additionally the standard deviation figures are high for credit risk, indicating that the data points are spread out over a large range of values, meaning that there is high level of variability in the data. There is a wide gap between the maximum and minimum credit risk, which means that there is high variability of leading and lagging change in NSE.

Table 4. 5: liquidity risk

| | Minimum | Maximum | Mean | Std. Deviation |
|------|----------------|----------------|-------------|-----------------------|
| 2011 | 0.123 | 0.329 | 0.239 | .57398 |
| 2012 | 0.034 | 0.887 | 0.563 | 1.76782 |
| 2013 | 0.156 | 0.498 | 0.378 | 1.79826 |
| 2014 | 0.197 | 0.498 | 0.279 | 1.82639 |
| 2015 | 0.154 | 0.387 | 0.287 | 3.0986 |

Source: Author (2016)

Table 4.5 present the findings on the descriptive statistics for liquidity risk for the years 2011-2015. The means portray an irregular pattern in the liquidity risk for all the 66 firms listed at the Nairobi Securities exchange with the lowest being 0.239 in the year 2011 and the highest being 0.563 in 2012. Additionally the standard deviation figures are high for liquidity risk, indicating that the data points are spread out over a large range of values, meaning that there is high level of variability in the data. There is a low gap between the maximum and minimum liquidity risk, which means that there is low variability of leading and lagging change in NSE.

4.3 Relationship between Foreign currency and Institutional efficiencies

The study employed general Linear Model to assess the predictive power to establish the relationship between financial risks and institutional efficiency of companies listed in Nairobi Securities

4.3.1 Regression Analysis

Moreover, the researcher directed a multiple regression analysis in order to test relationship among factors (autonomous) on the relationship between budgetary risks and institutional proficiency among organizations recorded in Nairobi Securities Exchange. The scientist connected the factual bundle for sociologies (SPSS V 21.0) to code, enter and process the estimations of the numerous regressions for the study.

4.3.2 Model Summary

Coefficient of assurance discloses the degree to which changes in the needy variable can be clarified by the adjustment in the autonomous factors or the rate of variety in the needy variable (institutional proficiency) that is clarified by all the four free factors (outside money, financing cost risk, credit risk and liquidity risk).

Table 4. 6: Results of multiple regression between institutional efficiencies among companies listed in Nairobi Securities Exchange and predictor variables

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1 | 0.866 | 0.749 | 0.731 | 0.116 |

Source: Author (2016)

The four independent variables that were studied, explain only 74.9% on the relationship between financial risks and institutional efficiencies represented by the R^2 . This therefore

means that other factors not studied in this research contribute 25.1% of the institutional efficiencies. Therefore, further research should be conducted to investigate the other factors (25.1%) that affect institutional efficiency of companies listed in Nairobi Securities Exchange.

4.3.3 ANOVA Results

The study conducted the ANOVA to establish the fitness of the model in predicting the relationship between the variables (foreign currency, interest rate risk, credit risk and liquidity risk) and institutional efficiencies)

Table 4. 7: ANOVA of the Regression

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | 2.534 | 4 | 1.267 | 8.635 | .002 ^a |
| | Residual | 9.307 | 61 | 2.327 | | |
| | Total | 11.841 | 65 | | | |

Source: Author (2016)

The significance value is 0.002 which is less than 0.05 thus the model is statistically significant in predicting how (foreign currency risk, Interest rate risk, Credit risk, liquidity risks, and size) affect institutional efficiency of companies listed in Nairobi Securities Exchange. The F critical at 5% level of significance was 2.25. Since F calculated is greater than the F critical (value = 8.635), this shows that the overall model was significant.

4.3.4 Regression Coefficient

Several regression analyses was done assess the extent of the relationship between the institutional effectiveness of institutions listed in Nairobi Securities Exchange and the four variables (foreign currency, interest rate risk, credit risk and liquidity risk).

Table 4. 8: Regression coefficients of the relationship between institutional efficiency of companies listed in Nairobi Securities Exchanges and predictor variables

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|--------------------|-----------------------------|------------|---------------------------|-------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.103 | 0.154 | | 7.162 | 0000 |
| | Foreign currency | 0.852 | 0.196 | 0.684 | 4.347 | .0009 |
| | Interest rate risk | 0.654 | 0.113 | 0.609 | 5.788 | .000 |
| | Credit risk | 0.524 | 0.148 | 0.672 | 3.541 | .0010 |
| | Liquidity risk | 0.456 | 0.162 | 0.582 | 2.815 | .0070 |

Source: Author (2016)

According to the regression equation, considering all variables (Foreign currency, Interest rate risk, Credit risk and Liquidity risk) constant at zero, institutional proficiency of organizations listed in Nairobi Securities Exchange will be 1.103. The information findings broke down additionally demonstrates that taking all other autonomous factors at zero, a unit increment in Foreign currency will prompt to a 0.852 increment in institutional effectiveness of organizations recorded in Nairobi Securities Exchange; a unit increment in Interest rate risk will prompt to a 0.654 increment in institutional proficiency of organizations listed in NSE, while a unit increment in credit hazard will prompt to a 0.524 increment in institutional productivity of organizations recorded in Nairobi Securities Exchange and a unit increment in liquidity hazard will prompt to a 0.456 increment in institutional proficiency of organizations recorded in Nairobi Securities Exchange.

This infers that foreign currency contribute most to the institutional effectiveness took after by loan cost risk, then credit chance while liquidity chance had minimal impact on institutional proficiency among organizations recorded in Nairobi Securities Exchange. At 5% level of hugeness and 95% level of certainty, remote coin, financing cost chance, credit hazard and liquidity hazard was all huge in institutional effectiveness of organizations recorded in Nairobi Securities Exchange.

4.4 Discussion

From the above regression model, the study discovered that foreign currency, loan fee risk, credit risk and liquidity chance affected institutional proficiency of organizations recorded in Nairobi Securities Exchange. The greater part of the factors impacted it decidedly. The study discovered that the block was 1.103 for all years.

The four free factors that were contemplated (Foreign currency, Interest rate risk, Credit risk and Liquidity risk) clarify a generous 74.9% of Institutional productivity of organizations recorded in Nairobi Securities Exchange among organizations recorded at Nairobi securities trade spoke to by balanced R2 (0.749). This accordingly implies the five free factors contributes 74.9% of the Institutional proficiency of organizations recorded in Nairobi Securities Exchange among institutions recorded at Nairobi securities trade while different components and irregular varieties not concentrated on in this exploration contributes a measly 25.1% of the Institutional productivity of organizations recorded in Nairobi Securities Exchange among business banks in Kenya.

The study found that the coefficient for foreign currency was 0.852, implying that outside cash emphatically and essentially impacted the Institutional proficiency of organizations

recorded in Nairobi Securities Exchange among institutions recorded at Nairobi securities trade in Kenya. These discoveries are in accordance with Ahmed, Akhtar and Usman(2011) who showed that a deviation from at least one of the three universal equality conditions for the most part needs to happen for a presentation to outside trade hazard. Simar (2012) included that change speaks to credit hazard by the spread of credit dangers; though standard deviation speaks to credit chance by the sum credit dangers go astray, all things considered, from the mean credit chance in a likelihood dispersion. A higher standard deviation would flag a more prominent cash hazard.

The concentrate additionally reasoned that the coefficient for financing cost hazard was 0.654, implying that loan cost chance emphatically and altogether impacted the institutional proficiency of organizations recorded in Nairobi Securities Exchange among organizations recorded at Nairobi securities trade. The discoveries are bolstered by Dhanini, (2007) that the more corporate obligation and particularly fleeting and variable rate obligation an organization has, the more defenseless it is to changes in the loan cost.

The study set up that the coefficient credit hazard size was 0.654, implying that Credit chance decidedly and essentially affected the institutional productivity of organizations recorded in Nairobi Securities Exchange among institutions recorded at Nairobi securities trade. Husni (2011) showed that credit chance administration is an organized way to deal with overseeing instabilities through hazard appraisal, creating techniques to oversee it, and moderation of hazard utilizing administrative asset Amihud et al, (2007).

Study also finds additionally discovers positive and vital relationship between liquidity hazard and institutional proficiency of organizations recorded in Nairobi Securities

Exchange. The discoveries are in accordance with Eichhorn (2004) that the rating of the organization can be lower and in this manner future financing prompts to higher intrigue installments. Liquidity measures the capacity of the firm to cover its costs and in this way it likewise indicates whether the organization can adapt to a few misfortunes because of hazard event (Smithson, Smith and Wilford, 1995).

4.5 Summary

Descriptive data analysis was performed on the institutional efficiency of companies listed in Nairobi Securities Exchange, foreign currency risk, interest rate risk, credit risk and liquidity risk. The mean for institutional efficiency of companies listed in Nairobi Securities Exchanges portray year 2013 with the highest meanwhile year 2015 reported the lowest institutional efficiency of companies listed in Nairobi Securities Exchange of 0.663. The highest mean was reported in 2015 with a mean of 98.09 while the lowest was reported in 2011 with a mean of 72.78. additionally, the study established a steady increase in the interest rate for all the 66 firms listed at the Nairobi Securities exchange with the lowest being 10.1227 in the year 2011 and the highest being 10.2950 in 2015. However, the mean portrayed an irregular pattern in the credit risk for all the 66 firms listed at the Nairobi Securities exchange with the lowest being 0.378 in the year 2011 and the highest being 0.663 in 2013.

From the above regression model, the study found out that foreign currency, interest rate risk, and credit risk, influenced institutional efficiency of companies listed in Nairobi Securities Exchange positively. The study also deduced that the coefficient for interest rate risk was 0.654, meaning that interest rate risk positively and significantly influenced

the institutional efficiency of companies listed in Nairobi Securities Exchange among companies listed at Nairobi Securities Exchange. The study established that the coefficient credit risk size was 0.524, meaning that Credit risk positively and significantly influenced the institutional efficiency of companies listed in Nairobi Securities Exchange among companies listed at Nairobi Securities Exchange.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary, conclusion and recommendations of the main findings on the relationship between foreign currency and institutional efficiencies among companies listed in Nairobi Securities Exchange. Section 5.2 presents summary of the study, section 5.3 discusses conclusions, while section 5.4 presents the recommendations.

5.2 Summary of the Study

From the above regression model, the study found out that foreign currency, interest rate risk, and credit risk, influenced institutional efficiency of companies listed in Nairobi Securities Exchange. All of the variables impacted it emphatically. The study discovered that the intercept was 1.103 for all years.

The three free factors that were considered, that is, foreign currency, loan cost risk, and credit chance clarify a significant 74.9% of Institutional effectiveness of organizations recorded in Nairobi Securities Exchange among organizations recorded at the Nairobi Securities Exchange spoke to by balanced R2 (0.749). This accordingly implies the five autonomous factors contribute 80.7% of the Institutional productivity of organizations recorded in Nairobi Securities Exchange among organizations recorded at Nairobi Securities Exchange while different components and irregular varieties not examined in this examination contribute a unimportant 25.1% of the Institutional effectiveness of

organizations recorded in Nairobi Securities Exchange among organizations recorded at the Nairobi Securities Exchange.

The study set up that the coefficient for remote money was 0.852, implying that outside coin decidedly and essentially impacted the Institutional proficiency of organizations recorded in Nairobi Securities Exchange among organizations recorded at Nairobi Securities Exchange in Kenya.

The focus likewise concluded that the coefficient for loan fee hazard was 0.654, implying that the financing cost chance decidedly and essentially impacted the institutional proficiency of organizations recorded in Nairobi Securities Exchanges among organizations recorded at the Nairobi Securities Exchange. The study assessed that the coefficient credit risk size was 0.524, to mean that credit risk positively and significantly influenced the institutional efficiency of companies listed in Nairobi Securities Exchange among companies listed at the Nairobi Securities Exchange.

5.3 Conclusions

The study found concludes that foreign currency, interest rate risk, and credit risk, influenced institutional efficiency of companies listed in Nairobi Securities Exchange.

The study showed out that the intercept was 1.103 for all years.

The study settles that the coefficient for foreign currency was 0.852, meaning that foreign currency pointedly affected the Institutional efficiency of firms listed in Nairobi Securities Exchange among companies listed at Nairobi securities exchange in Kenya.

Adopting financial risk quantified by foreign currency risk has positive or negative foreign currency risk or positive (negative) abnormal returns during results publication.

The study also concluded that the coefficient for interest rate risk was 0.654, meaning that interest rate risk positively and significantly influenced the institutional efficiency of companies listed in Nairobi Securities Exchange among companies listed at Nairobi securities exchange.

The study finally concluded that the coefficient liquidity risk size was 0.456, meaning that liquidity risk positively and significantly influenced the institutional efficiency of companies listed in Nairobi Securities Exchange among companies listed at Nairobi Securities Exchange.

5.4 Limitations of the Study

This study has several limitations. First, it is possible that the nature of data from the financial statements is impacting the results in an unanticipated manner or limits the power of the tests to detect associations. This may be created by variation of statistical figures illustrating the key variable measurements.

The legitimacy of this study lays on the example of firms and the era. The accessibility of huge fluctuation contrast in the picked/chose money related proclamation records will significantly influence the consequences of this study. Remote cash is viewed as both unscrupulous and an infringement of securities law. Accordingly, firms who take part in remote money will go to impressive length to cover their tracks. Therefore, this study is

an endeavour to reveal foreign currency if and where they exist. Most past studies depended on relationship in the factors. This is genuine additionally of this study.

At long last, the utilization of auxiliary information gave a chance to inquiry to a more honest and intrinsic relationship between the factors. This managed the scientist the advantages of a more prominent concentrate on breaking down the accessible information all the more nearly in a way that would improve the accomplishment of the study destinations. In any case, selecting the right mix of factors to intermediary for undetectable marvels is dependably an issue in exact quantitative research.

5.5 Recommendations for Policy and Practice

It is true that companies with above average growth potential will generally command higher foreign currency those with lower growth prospects but many other factors such as stability of the industry among others also influence institutional efficiency of companies listed in Nairobi Securities Exchanges hence must be taken into consideration in determining institutional efficiency. Due to the importance of foreign currency in the investment decisions, care should be exercised in determining the correct and comparable foreign currency of each company.

Strategies to facilitate a favorable financial risks management at the NSE companies should be adopted by management for a good institutional efficiency. As the findings illustrated, institutional efficiency among companies listed in the Nairobi Securities exchange is highly dependent on the financial risks.

The supervisory body of macroeconomic environment like Inflation and GDP should ensure viable environment for companies. They should regulate the variables in such a

way that they lead the economy towards the growth and favor of companies. This will favor the financial sector by facilitating better the financial health thus increased institutional efficiency of the companies.

The government as companies' regulator through the CMA should adopt policies that ensure increased efficiency among NSE listed companies. Strict conditions of minimum liquidity and capital should continue being emphasized on to ensure none of the companies have lower of the two.

5.6 Recommendations for Further Research

Not so many studies have been done on this area of research here in Kenya, therefore it's still a raw field and there are so many gaps which further studies can bridge it. A study could be carried out to establish foreign currencies for non-listed companies in Kenya. Further research may be directed in comparing the findings of this study with findings that relate to firms operating in other developing countries of Africa.

Also, this study only covers a period of five years from 2011 to 2015 because of dearth of data. Future studies could increase the scope and consider the Relationship between financial risks and institutional efficiencies among companies listed in Nairobi securities exchange.

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APPENDICES

Appendix I: List of firms listed in the NSE as at 31st March 2016

| Company | Sector |
|--|-------------------|
| A Baumann & Co | Financials |
| AccessKenya Group | Technology |
| ARM Cement | Industrials |
| Atlas African Industries (GEMS) | Industrials |
| B O C Kenya | Basic Materials |
| Bamburi Cement | Industrials |
| Barclays Bank of Kenya | Financials |
| British American Tobacco Kenya | Consumer Goods |
| British-American Investments Co(Kenya) | Financials |
| Car & General (K) | Consumer Services |
| Carbacid Investments | Basic Materials |
| Centum Investment Co | Financials |
| CFC Stanbic of Kenya Holdings | Financials |
| CIC Insurance Group | Financials |
| Co-operative Bank of Kenya | Financials |
| Crown Paints Kenya | Basic Materials |
| Diamond Trust Bank Kenya | Financials |

| Company | Sector |
|----------------------------------|-------------------|
| Eaagads | Consumer Goods |
| East African Breweries | Consumer Goods |
| East African Cables | Industrials |
| East African Portland Cement | Industrials |
| Equity Group Holdings | Financials |
| Eveready East Africa | Consumer Goods |
| Express Kenya | Consumer Services |
| Flame Tree Group Holdings (GEMS) | Basic Materials |
| Home Afrika (GEMS) | Financials |
| Housing Finance Co Kenya | Financials |
| I&M Holdings | Financials |
| Jubilee Holdings | Financials |
| Kakuzi | Consumer Goods |
| Kapchorua Tea Company | Consumer Goods |
| KCB Group | Financials |
| KenGen Company | Utilities |
| KenolKobil | Oil & Gas |
| Kenya Airways | Consumer Services |
| Kenya Orchards | Consumer Goods |

| Company | Sector |
|-------------------------------|--------------------|
| Kenya Power & Lighting Co | Utilities |
| Kenya Reinsurance Corporation | Financials |
| Kurwitu Ventures (GEMS) | Financials |
| Liberty Kenya Holdings | Financials |
| Limuru Tea Co | Consumer Goods |
| Longhorn Kenya | Consumer Services |
| Marshalls East Africa | Consumer Services |
| Mumias Sugar Co | Consumer Goods |
| Nairobi Securities Exchange | Financials |
| Nation Media Group | Consumer Services |
| National Bank of Kenya | Financials |
| NIC Bank | Financials |
| Olympia Capital Holdings | Industrials |
| Pan Africa Insurance Holdings | Financials |
| Safaricom | Telecommunications |
| Sameer Africa | Consumer Goods |
| Sasini | Consumer Goods |
| Scangroup | Consumer Services |
| Standard Chartered Bank Kenya | Financials |

| Company | Sector |
|----------------------|-------------------|
| Standard Group | Consumer Services |
| Total Kenya | Oil & Gas |
| TPS Eastern Africa | Consumer Services |
| Trans-Century | Industrials |
| Uchumi Supermarkets | Consumer Services |
| Umeme | Utilities |
| Unga Group | Consumer Goods |
| Williamson Tea Kenya | Consumer Goods |

Appendix II: Secondary Data

TOTAL ASSETS (ksh '000')

| COMPANY | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Eaagads Limited | 340,318 | 568,826 | 745,234 | 887,345 | 1,456,987 |
| Kakuzi Limited | 3,466,163 | 3,425,677 | 3,323,567 | 3,689,234 | 4,874,098 |
| Kapchorua Tea Company Ltd | 1,296,110 | 1,506,002 | 1,896,098 | 1,987,234 | 2,078,645 |
| Limuru Tea Company Limited | 185,755 | 309,486 | 489,786 | 678,980 | 890,000 |
| Rea Vipingo Plantations Ltd | 1,863,504 | 2,118,634 | 2,345,897 | 2,786,908 | 3,908,786 |
| Sasini Ltd | 8,878,592 | 8,337,352 | 8,786,654 | 9,786,234 | 12,378,456 |
| Williamson Tea Kenya Limited | 5,345,347 | 6,226,024 | 6,563,765 | 7,234,178 | 9,456,674 |
| Car & General (Kenya) Ltd | 5,562,239 | 5,705,400 | 5,905,234 | 6,896,234 | 7,190,145 |
| Cmc Holdings Limited | 14,579,112 | 12,957,113 | 12,456,256 | 13,897,465 | 15,456,234 |
| Marshalls (E.A) Ltd | 403,568 | 392,629 | 390,785 | 267,234 | 245,897 |
| Sameer Africa Limited | 2,249,788 | 2,326,723 | 2,498,897 | 2,786,345 | 3,897,654 |
| Barclays Bank Of Kenya Ltd | 165,994 | 184,825 | 207,456 | 246,897 | 287,368 |
| Cfc Stanbic Holdings Limited | 150,171,015 | 143,212,155 | 123,256,675 | 104,678,453 | 156,298,467 |
| Co-Operative Bank of Kenya Limited | 168,312,000 | 200,588,000 | 237,897,908 | 308,124,900 | 356,276,100 |
| Diamond Trust Bank (Kenya) Ltd | 107,759,818 | 135,461,412 | 145,567,894 | 168,907,453 | 209,236,890 |
| Equity Bank Limited | 196,294,000 | 243,170,000 | 267,345,190 | 290,786,321 | 304,389,245 |
| Housing | 31,870,916 | 40,956,577 | 46,234,147 | 42,356,786 | 48,675,290 |

| | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|
| Finance Company Limited | | | | | |
| Kenya Commercial Bank Ltd | 330,716,159 | 367,379,285 | 455,237,120 | 489,190,345 | 546,278,143 |
| National Bank Of Kenya Ltd | 68,664,516 | 67,154,805 | 63,178,467 | 66,789,453 | 70,900,671 |
| Nic Bank Limited | 78,984,005 | 108,348,593 | 124,678,809 | 145,879,456 | 187,456,890 |
| Standard Chartered Bank Kenya Ltd | 164,046,624 | 195,352,756 | 200,456,890 | 267,567,890 | 398,098,562 |
| Express Kenya Limited | 357,319 | 334,118 | 336,678 | 400,675 | 438,564 |
| Kenya Airways Limited | 56,529,000 | 53,676,000 | 48,897,000 | 57,456,900 | 59,456,234 |
| Longhorn Kenya Ltd | 709,653 | 661,675 | 628,345 | 786,345 | 796,564 |
| Nation Media Group Limited | 6,285,400 | 7,460,700 | 7,123,500 | 7,987,900 | 800,875 |
| Scan group Limited | 8,489,938 | 8,646,961 | 8,768,234 | 8,907,569 | 9,020,675, |
| Standard Group Limited | 2,317,738 | 2,382,845 | 2,409,563 | 2,675,356 | 3,24,786 |
| Tps Eastern Africa Limited (Serena Hotels) | 11,516,544 | 11,438,115 | 11,245,786, | 11,145,098 | 12,876,357 |
| Uchumi Supermarkets Limited | 2,462,533 | 2,738,119 | 2,814,899 | 3,316,786 | 3,463,897 |
| Athi-River Mining Limited | 16,095,887 | 20,450,260 | 23,675,765 | 27,456,890 | 32,987,098 |
| Bamburi Cement Limited | 33,502,000 | 43,038,000 | 50,786,000 | 58,907,000 | 70,400,000 |
| Crown Paints Kenya Limited | 2,215,352 | 2,258,263 | 2,287,564 | 2,456,278 | 2,678,345 |
| East African | 2,918,720 | 3,716,416 | 4,987,986 | 5,430,234 | 2,786,907 |

| | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|
| Cables Limited | | | | | |
| East African Portland Cement Company | 13,530,871 | 14,091,006 | 14,567,456 | 15,897,980 | 17,890,000 |
| Kenol Kobil Limited | 13,180,127 | 7,343,350 | 7,245,890 | 6,987,243 | 7,908,650 |
| Kenya Electricity Generating Company (Kengen) | 149,736,697 | 148,143,916 | 148,098,900 | 153,897,326 | 170,786,987 |
| The Kenya Power & Lighting Co. Ltd | 121,171,515 | 134,131,983 | 140,240,500 | 167,908,456 | 200,678,345 |
| Total Kenya Ltd | 12,215,402 | 15,047,441 | 17,098,654 | 20,786,345 | 23,000,897 |
| Umeme | - | 451,576,000 | 480,674,000 | 521,908 000 | 548,897,000 |
| Britam | 25,639,244 | 35,820,165 | 40,897,653 | 45,897,127 | 52,784,000 |
| CIC Insurance Limited | 11,120,796 | 14,069,551 | 16,897,245 | 20,987,234 | 24,897,456 |
| Jubilee Holdings Limited | 38,039,832 | 47,417,562 | 53,894,243 | 56,897,345 | 68,908,765 |
| Kenya Reinsurance Corporation Ltd | 19,096,441 | 23,787,957 | 27,984,724 | 36,982,541 | 45,897,231 |
| Liberty Kenya Holdings Limited | 24,293,533 | 27,390,346 | 36,876,134 | 45,897,245 | 49,876,456 |
| Pan Africa Insurance Company Ltd | 11,513,857 | 16,473,522 | 18,873,532 | 21,985,769 | 27,098,700 |
| Centum Investment Company (ICDCI) Ltd | 9,559,377 | 11,041,242 | 13,456,675 | 16,789,908 | 21,674,678 |
| Olympia Capital Holdings Ltd | 1,074,236 | 1,620,955 | 1,834,765 | 2,098,876 | 2,678,834 |
| Trans century Limited | 22,424,264 | 21,845,754 | 19,876,654 | 22,456,789 | 26,897,908 |
| Boc Kenya Ltd | 1,816,803 | 1,989,541 | 2,000,987 | 2,456,267 | 3,870,600 |

| | | | | | |
|--|------------|------------|------------|-------------|-------------|
| British American Tobacco Kenya Limited | 8,409,916 | 9,123,815 | 10,234,190 | 11,675,890 | 13,786,908 |
| Carbacid Investments Limited | 1,694,287 | 1,862,650 | 1,909,245 | 2,187,342 | 2,478,345 |
| East African Breweries Limited | 34,010,178 | 32,100,534 | 31,200,675 | 33,765,890 | 37,987,907 |
| Eveready East Africa Limited | 1,016,908 | 1,150,729 | 1,350,436 | 1,673,908 | 2,000,910 |
| Mumias Sugar Company Ltd | 19,965,708 | 21,679,458 | 23,986,345 | 26,897,234 | 31,890,700 |
| Unga Group Limited | 5,708,897 | 6,410,259 | 7,123,567 | 9,789,978 | 11,165,890 |
| Access Kenya Group Limited | 2,415,111 | 2,265,714 | 2,187,463 | 2,997,453 | 3,678,976 |
| Safaricom Limited | 79,737,036 | 84,283,777 | 98,345,786 | 110,786,345 | 126,897,345 |

CURRENT ASSET (ksh '000')

| COMPANY | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| Eaagads Limited | 86,803 | 84,987 | 82,657 | 80,765 | 83,897 |
| Kakuzi Limited | 1,174,645 | 1,237,473 | 1,087,453 | 975,908 | 897,897 |
| Kapchorua Tea Company Ltd | 575,942 | 782,196 | 897,876 | 1,087,234 | 1,345,897 |
| Limuru Tea Company Limited | 100,340 | 130,764 | 167,980 | 201,876 | 234,765 |
| Rea Vipingo Plantations Ltd | 894,196 | 876,556 | 873,987 | 786,976 | 654,342 |
| Sasini Ltd | 1,243,233 | 1,109,871 | 1,000,050 | 1,300,768 | 1,500,907 |
| Williamson Tea Kenya Limited | 2,326,779 | 2,447,223 | 2,564,897 | 2,789,096 | 3,321,900 |

| | | | | | |
|------------------------------------|------------|------------|------------|------------|------------|
| Car & General (Kenya) Ltd | 3,487,990 | 3,397,179 | 3,367,908 | 2,987,978 | 2,786,890 |
| Cmc Holdings Limited | 12,308,768 | 10,057,428 | 10,043,815 | 9,087,986 | 11,963,916 |
| Marshalls (E.A) Ltd | 182,914 | 197,102 | 245,874 | 167,890 | 278,915 |
| Sameer Africa Limited | - | - | - | 789,907 | 890,543 |
| Barclays Bank Of Kenya Ltd | 12,212 | 16,486 | 21,564 | 25,897 | 30,820 |
| Cfc Stanbic Holdings Limited | 94,884,596 | 78,483,828 | 67,908,543 | 57,024,786 | 89,097,908 |
| Co-Operative Bank Of Kenya Limited | 5,714,000 | 5,876,000 | 5,900,900 | 6,435,875 | 8,975,234 |
| Diamond Trust Bank (Kenya) Ltd | 1,333,157 | 1,869,483 | 2,234,678 | 3,897,674 | 3,987,345 |
| Equity Bank Limited | - | - | - | - | - |
| Housing Finance Company Limited | 246,178 | 384,425 | 456,768 | 521,400 | 543,098 |
| Kenya Commercial Bank Ltd | 69,379,021 | 71,919,067 | 73,892,145 | 76,890,345 | 81,893,734 |
| National Bank Of Kenya Ltd | - | - | - | - | - |
| Nic Bank Limited | 13,891,108 | 18,320,378 | 23,543,289 | 27,567,349 | 45,897,098 |
| Standard Chartered Bank Kenya Ltd | 12,005,054 | 13,575,454 | 14,897,934 | 17,908,675 | 25,897,356 |
| Express Kenya Limited | 137,663 | 63,985 | 61,876 | 56,243 | 45,198 |
| Kenya Airways Limited | 23,622,000 | 21,833,000 | 21,897,653 | 24,789,765 | 26,987,768 |
| Longhorn Kenya Ltd | 526,934 | 444,044 | 420,342 | 378,987 | 276,348 |
| Nation Media Group | 5,855,100 | 7,248,200 | 10,345,762 | 12,376,234 | 19,345,897 |

| | | | | | |
|---|------------|-------------|-------------|-------------|------------|
| Limited | | | | | |
| Scan group Limited | 7,772,923 | 7,735,575 | 7,896,234 | 7,567,345 | 9,876,345 |
| Standard Group Limited | 1,287,683 | 1,248,272 | 1,034,563 | 867,456 | 786,098 |
| Tps Eastern Africa Limited (Serena Hotels) | 2,414,929 | 2,070,277 | 2,00,800 | 2,236,897 | 879,785 |
| Uchumi Supermarkets Limited | 1,397,650 | 1,594,146 | 2,987,845 | 3,289,354 | 3,876,098 |
| Athi-River Mining Limited | 3,723,221 | 7,936,410 | 10,876,345 | 11,234,765 | 17,908,000 |
| Bamburi Cement Limited | 13,356,000 | 16,462,000 | 19,675,764 | 22,654,238 | 25,908,877 |
| Crown Paints Kenya Limited | 1,569,315 | 1,589,244 | 1,675,897 | 1,856,367 | 2,890,564 |
| East African Cables Limited | 2,407,504 | 3,031,439 | 3,678,980 | 5,879,764 | 6,980,987 |
| East African Portland Cement Company | 3,172,070 | 2,570,423 | 2,276,890 | 1,456,879 | 2,897,456 |
| Kenolkobil Limited | 40,145,862 | 24,540,381 | 21,673,890 | 17,928,098 | 12,890,342 |
| Kenya Electricity Generating Company (Kengen) | 19,539,034 | 22,288,066 | 24,564,789 | 36,897,784 | 46,892,435 |
| The Kenya Power & Lighting Co. Ltd | - | - | - | - | - |
| Total Kenya Ltd | 25338951 | 23,348,459 | 21,345,712 | 19,456,234 | 14,897,456 |
| Umeme | - | 323,314,000 | 350,243,000 | 421,897,000 | 500,000000 |
| Britam | - | - | - | 56,987,098 | 45,342,786 |
| CIC Insurance Limited | 157,663 | 258,126 | 300,987 | 365,876 | 421,765 |

| | | | | | |
|--|------------|------------|------------|------------|------------|
| Jubilee Holdings Limited | - | - | - | - | - |
| Kenya Reinsurance Corporation Ltd | - | - | - | - | - |
| Liberty Kenya Holdings Limited | - | - | - | - | - |
| Pan Africa Insurance Company Ltd | 233,180 | 283,639 | 312,908 | 456,099 | 675,893 |
| Centum Investment Company (ICDCI) Ltd | 3,801,961 | 358,489 | 1,897,456 | 567,345 | 897,098 |
| Olympia Capital Holdings Ltd | - | - | - | - | - |
| Transcentury Limited | 9,460,388 | 7,509,767 | 4,876,234 | 3,123,456 | 2,456,908 |
| Boc Kenya Ltd | 890,082 | 1,087,971 | 1,564,356 | 1,987,546 | 2,432,765 |
| British American Tobacco Kenya Limited | 6,979,714 | 7,129,828 | 7,567,456 | 9,657,453 | 14,890,645 |
| Carbacid Investments Limited | 404,113 | 639,388 | 890,765 | 1,345,897 | 3,890,000 |
| East African Breweries Limited | 16,320,457 | 18,057,773 | 21,786,453 | 24,897,765 | 27,890,876 |
| Eveready East Africa Limited | 733,708 | 876,043 | 843,132 | 675,890 | 976,987 |
| Mumias Sugar Company Ltd | 6,511,659 | 7,171,360 | 8,345,753 | 12,785,342 | 14,789,674 |
| Unga Group Limited | 4,086,617 | 4,644,891 | 4,976,453 | 6,654,234 | 6,432,678 |
| Access Kenya Group Limited | 482,981 | 293,924 | 145,324 | 124,567 | 97,098 |
| Safaricom Limited | 21,701,296 | 21,194,195 | 20,456,234 | 18,907,456 | 22,784,890 |
| | | | | | |

CURRENT LIABILITIES (ksh '000')

| Company | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Eaagads Limited | 14,604 | 4,530 | 4,589 | 20,876 | 23,789 |
| Kakuzi Limited | 351,157 | 146,023 | 124,897 | 68,987 | 20,987 |
| Kapchorua Tea Company Ltd | 274,093 | 456,895 | 567,876 | 764,897 | 1,897,654 |
| Limuru Tea Company Limited | 5,487 | 10,537 | 13,765 | 16,345 | 20,789 |
| Rea Vipingo Plantations Ltd | 425,236 | 257,984 | 200,789 | 154,890 | 676,987 |
| Sasini Ltd | 585,628 | 583,435 | 587,000 | 876,908 | 956,876 |
| Williamson Tea Kenya Limited | 687,396 | 1,017,203 | 1,567,345 | 1,987,654 | 3,879,098 |
| Car & General (Kenya) Ltd | 536,670 | 633,783 | 700,876 | 1,897,645 | 2,654,789 |
| Cmc Holdings Limited | 9,002,281 | 6,541,365 | 4,678,345 | 5,123,345 | 3,784,099 |
| Marshalls (E.A) Ltd | 673,297 | 174,466 | 134,564 | 56,908 | 345,908 |
| Sameer Africa Limited | - | - | - | 45,789,342 | 345,897 |
| Barclays Bank Of Kenya Ltd | 208,000 | 1,125,000 | 1,789,876 | 2,789,674 | 3,789,985 |
| Cfc Stanbic Holdings Limited | - | - | - | - | - |
| Co-Operative Bank Of Kenya Limited | 144,514,000 | 163,149,000 | 178,234,000 | 179,074,000 | 200,876,000 |
| Diamond Trust Bank (Kenya) Ltd | 73,867 | 456,716 | 675,897 | 1,345,890 | 1,900,789 |
| Equity Bank Limited | - | - | - | - | - |
| Housing Finance Company Limited | - | - | - | - | 45,987,000 |

| | | | | | |
|--|------------|------------|------------|------------|------------|
| Kenya Commercial Bank Ltd | - | - | - | - | - |
| National Bank Of Kenya Ltd | - | - | - | - | - |
| Nic Bank Limited | - | - | - | - | - |
| Standard Chartered Bank Kenya Ltd | - | - | - | - | - |
| Express Kenya Limited | 409,479 | 161,491 | 127,987 | 100,345 | 45,987 |
| Kenya Airways Limited | 22,214,000 | 23,756,000 | 26,876,000 | 29,078,000 | 32,875,000 |
| Longhorn Kenya Ltd | 298,248 | 397,090 | 567,453 | 678,987 | 1,987,654 |
| Nation Media Group Limited | 2,530,900 | 3,216,700 | 5,786,453 | 7,986,435 | 10,785,766 |
| Scan group Limited | 3,797,599 | 3,389,273 | 3,876,876 | 4,908,223 | 3,876,987 |
| Standard Group Limited | 1,194,519 | 1,118,703 | 1,003,786 | 678,098 | 1,876,908 |
| TPS Eastern Africa Limited (Serena Hotels) | 1,615,296 | 2,045,961 | 4,876,987 | 4,986,908 | 6,980,765 |
| Uchumi Supermarkets Limited | 2,462,533 | 2,203,769 | 2,100,905 | 3,678,345 | 4,908,765 |
| Athi-River Mining Limited | 4,420,053 | 6,502,840 | 8,796,456 | 10,234,678 | 12,897,453 |
| Bamburi Cement Limited | 5,097,000 | 7,011,000 | 7,674,674 | 8,564,342 | 11,342,987 |
| Crown Paints Kenya Limited | 1,071,998 | 1,034,709 | 897,098 | 1,876,906 | 2,564,789 |
| East African Cables Limited | 2,074,312 | 2,532,226 | 2,789,556 | 3,001,785 | 4,879,876 |
| East African | 2,100,179 | 2,275,422 | 2,400,768 | 2,876,000 | 4,786,098 |

| | | | | | |
|---|------------|-------------|-------------|-------------|-------------|
| Portland Cement Company | | | | | |
| Kenol Kobil Limited | 32,794,177 | 25,340,816 | 21,345,890 | 15,908,782 | 10,897,456 |
| Kenya Electricity Generating Company (Kengen) | 11,256,593 | 15,000,957 | 18,907,765 | 23,768,908 | 30,876,865 |
| The Kenya Power & Lighting Co. Ltd | - | - | - | - | - |
| Total Kenya Ltd | 22982764 | 17,933,163 | 14,987,453 | 12,564,234 | 9,876,654 |
| Umeme | - | 304,357,000 | 456,897,000 | 509,045,000 | 600,876,000 |
| Britam | - | - | - | - | - |
| CIC Insurance Limited | - | - | - | - | - |
| Jubilee Holdings Limited | - | - | - | - | - |
| Kenya Reinsurance Corporation Ltd | - | - | - | - | - |
| Liberty Kenya Holdings Limited | - | - | - | - | - |
| Pan Africa Insurance Company Ltd | - | - | - | - | - |
| Centum Investment Company (ICDCI) Ltd | 2,742,199 | 526,459 | 436,879 | 234,789 | 786,908 |
| Olympia Capital Holdings Ltd | - | - | - | - | - |
| Trans century Limited | 7,725,846 | 5,846,150 | 4,846,346 | 3,876,987 | 1,908,984 |
| Boc Kenya Ltd | 1,816,803 | 1,989,541 | 2,097,234 | 2,874,897 | 3,987,908 |
| British American Tobacco | 5,340,629 | 6,052,680 | 7,00,926 | 8,098,674 | 12,987,098 |

| | | | | | |
|--------------------------------|------------|------------|------------|------------|-------------|
| Kenya Limited | | | | | |
| Carbacid Investments Limited | 45,698 | 150,166 | 200,987 | 567,908 | 600,324 |
| East African Breweries Limited | 15,509,186 | 22,483,782 | 26,897,564 | 35,987,654 | 45,896,534 |
| Eveready East Africa Limited | 658,427 | 695,764 | 734,876 | 845,683 | 1,987,564 |
| Mumias Sugar Company Ltd | 2,961,691 | 5,720,655 | 7,784,655 | 11,234,456 | 14,213,434 |
| Unga Group Limited | 1,618,796 | 1,967,953 | 2,007,654 | 2,456,783 | 2,978,076 |
| AccessKenya Group Limited | 658,142 | 549,671 | 523,789 | 356,897 | 123,465,897 |
| Safaricom Limited | 34,117,726 | 37,615,900 | 43,675,341 | 54,890,000 | 64,876,435 |
| | | | | | |

EARNING PER SHARE

| COMPANY | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------|---------|-------|-------|-------|---------|
| Eaagads Limited | 8.93 | 1.36 | 1.45 | 5.89 | 0.89 |
| Kakuzi Limited | 28.06 | 19.35 | 17.97 | 23.89 | 14.87 |
| Kapchorua Tea Company Ltd | 19.93 | 47.80 | 49.78 | 34.76 | 24.56 |
| Limuru Tea Company Limited | 84.86 | 33.74 | 31.76 | 67.98 | 45.97 |
| Rea Vipingo Plantations Ltd | 7.79 | 6.34 | 5.78 | 10.87 | 8.09 |
| Sasini Ltd | 1.97 | - | 2.87 | 9.87 | 10.76 |
| Williamson Tea Kenya Limited | (46.74) | 97.61 | 86.78 | 34.65 | (24.98) |
| Car & General (Kenya) Ltd | 7.78 | 7.48 | 6.74 | 4.56 | 5.89 |
| Cmc Holdings Limited | -0.31 | 0.18 | 0.56 | 1.56 | 4.89 |

| | | | | | |
|------------------------------------|--------|---------|-------|---------|-------|
| Marshalls (E.A) Ltd | 12.61 | (11.50) | 9.78 | 20.75 | 11.75 |
| Sameer Africa Limited | 0.35 | 0.68 | 0.87 | (0.65) | 14.89 |
| Barclays Bank Of Kenya Ltd | 1.49 | 1.61 | 1.68 | 4.87 | 5.89 |
| Cfc Stanbic Holdings Limited | 5.99 | 9.90 | 11.34 | 3.82 | 16.78 |
| Co-Operative Bank Of Kenya Limited | 1.53 | 1.84 | 2.01 | 4.78 | 5.87 |
| Diamond Trust Bank (Kenya) Ltd | 13.15 | 17.44 | 23.65 | (34.67) | 5.89 |
| Equity Bank Limited | 2.79 | 3.26 | 5.87 | 7.32 | 11.90 |
| Housing Finance Company Limited | 2.70 | 3.22 | 3,86 | 4.31 | 6.98 |
| Kenya Commercial Bank Ltd | 3.72 | 4.11 | 4.35 | 6.85 | 2.45 |
| National Bank Of Kenya Ltd | 5.52 | 2.61 | 0.23 | (45.76) | 3.56 |
| Nic Bank Limited | 5.54 | 6.03 | 6.87 | 9.75 | 14.56 |
| Standard Chartered Bank Kenya Ltd | 19.28 | 26.60 | 32.67 | 46.89 | 23.78 |
| Express Kenya Limited | (6.47) | 0.37 | 1.87 | 4.65 | 7.98 |
| Kenya Airways Limited | 7.66 | 3.60 | 2.45 | -0.46 | 0.98 |
| Longhorn Kenya Ltd | 10.92 | (0.38) | 0.34 | 2.45 | 5.78 |
| Nation Media Group Limited | 7.66 | 15.98 | 21.78 | 24.76 | 20.13 |
| Scan group Limited | 2.55 | 2.21 | 2.25 | 5.84 | 15.98 |
| Standard Group | 1.99 | 2.24 | 2.34 | 2.67 | 4.87 |

| | | | | | |
|---|--------|--------|--------|-------|---------|
| Limited | | | | | |
| Tps Eastern Africa Limited (Serena Hotels) | 4.16 | 3.33 | 3.07 | 2.56 | 5.98 |
| Uchumi Supermarkets Limited | 1.47 | 1.03 | 1.34 | 0.89 | (15.66) |
| Athi-River Mining Limited | 11.61 | 2.52 | (4.96) | 0.55 | 4.83 |
| Bamburi Cement Limited | 14.45 | 12.17 | 11.14 | 10.36 | 14.87 |
| Crown Paints Kenya Limited | 7.58 | 6.01 | 4.87 | 3.16 | 0.87 |
| East African Cables Limited | 1.24 | 2.06 | 2.45 | 3.78 | 7.99 |
| East African Portland Cement Company | 0.02 | (9) | -0.44 | 0.34 | 1.87 |
| Kenolkobil Limited | 2.22 | (4.27) | 0.66 | 1.96 | 2.01 |
| Kenya Electricity Generating Company (Kengen) | 0.95 | 1.28 | 2.28 | 4.81 | 4.98 |
| The Kenya Power & Lighting Co. Ltd | 2.16 | 2.36 | 2.76 | 3.56 | 7.90 |
| Total Kenya Ltd | -0.41 | (1.15) | 0.32 | 1.08 | 2.86 |
| Umeme | - | 35.17 | 36.87 | 40.12 | 41.35 |
| Britam | (1.03) | 1.33 | 3.78 | 4.98 | 7.34 |
| Cic Insurance Limited | 5.48 | 0.64 | (0.71) | 0.45 | 2.87 |
| Jubilee Holdings Limited | 35.09 | 38.14 | 42.14 | 48.00 | 53.76 |
| Kenya Reinsurance | 3.19 | 4.00 | 5.87 | 8.90 | 15.98 |

| | | | | | |
|--|--------|-------|-------|-------|--------|
| Corporation Ltd | | | | | |
| Liberty Kenya Holdings Limited | 1.84 | 1.72 | 1.34 | 0.87 | 1.65 |
| Pan Africa Insurance Company Ltd | 4.62 | 7.27 | 9.12 | 13.56 | 23.98 |
| Centum Investment Company (Icdci) Ltd | 3.79 | 1.79 | 1.65 | 0.87 | (0.78) |
| Olympia Capital Holdings Ltd | 0.88 | 1.07 | 1.86 | 2.45 | 4.78 |
| Transcentury Limited | 1.32 | 1.66 | 1.98 | 2.76 | 5.98 |
| Boc Kenya Ltd | 7.71 | 10.11 | 12.34 | 15.89 | 18.90 |
| British American Tobacco Kenya Limited | 30.98 | 32.71 | 33.75 | 23.78 | 34.87 |
| Carbacid Investments Limited | 8.89 | 11.46 | 14.76 | 19.78 | 225.67 |
| East African Breweries Limited | 9.31 | 13.46 | 15.98 | 17.98 | 22.89 |
| Eveready East Africa Limited | (0.59) | 0.33 | 0.89 | 1.89 | 3.98 |
| Mumias Sugar Company Ltd | 1.26 | 1.32 | 2.08 | 3.90 | 8.98 |
| Unga Group Limited | 3.57 | 2.81 | 2.21 | 3.23 | 0.78 |
| Access Kenya Group Limited | 0.50 | 0.69 | 1.45 | 2.45 | 3.67 |
| Safaricom Limited | 0.33 | 0.32 | 0.24 | 4.83 | 7.98 |

EQUITY (ksh '000')

| COMPANY | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------------|------------|------------|------------|------------|------------|
| Eaagads Limited | 340,318 | 568,826 | 589,675 | 634,789 | 457,987 |
| Kakuzi Limited | 2,756,765 | 2,801,225 | 3,124,785 | 3,345,786 | 4,056,645 |
| Kapchorua Tea Company Ltd | 1,296,110 | 1,506,002 | 1,789,765 | 2,896,746 | 2,987,765 |
| Limuru Tea Company Limited | 185,755 | 309,486 | 786,543 | 897,764 | 1,765,645 |
| Rea Vipingo Plantations Ltd | 1,863,504 | 2,118,634 | 2,456,762 | 2,890,789 | 4,786,654 |
| Sasini Ltd | 8,878,592 | 8,337,352 | 7,875,654 | 6,789,564 | 9,876,342 |
| Williamson Tea Kenya Limited | 5,345,347 | 6,226,024 | 6,765,654 | 7,002,764 | 8,765,654 |
| Car & General (Kenya) Ltd | 1,862,329 | 2,090,003 | 2,456,789 | 2,786,654 | 3,678,564 |
| Cmc Holdings Limited | 5,145,429 | 5,736,158 | 6,786,543 | 7,785,654 | 4,789,764 |
| Marshalls (E.A) Ltd | 403,568 | 392,629 | 367,543 | 278,900 | 4,789,765 |
| Sameer Africa Limited | - | - | - | - | - |
| Barclays Bank Of Kenya Ltd | 26,993 | 29,586 | 34,675 | 45,789 | 78,986 |
| Cfc Stanbic Holdings Limited | 19,329,127 | 27,240,888 | 35,786,890 | 42,564,789 | 56,908,897 |
| Co-Operative Bank Of Kenya Limited | 20,951,000 | 29,367,000 | 30,874,789 | 25,789,567 | 35,897,654 |
| Diamond Trust Bank (Kenya) Ltd | 13,248,819 | 18,626,921 | 20,675,432 | 23,678,986 | 26,891,674 |
| Equity Bank Limited | 34,285,000 | 42,916,000 | 44,789,005 | 47,890,765 | 67,908,098 |
| Housing Finance Company Limited | 4,717,364 | 5,137,244 | 4,890,874 | 5,908,657 | 7,897,654 |

| | | | | | |
|--|------------|------------|------------|------------|------------|
| Kenya Commercial Bank Ltd | 44,365,027 | 53,339,559 | 55,786,564 | 78,568,765 | 88,657,432 |
| National Bank Of Kenya Ltd | 10,456,474 | 10,449,976 | 12,784,652 | 14,678,908 | 11,345,786 |
| Nic Bank Limited | 10,522,953 | 15,481,622 | 17,897,756 | 21,756,904 | 23,785,764 |
| Standard Chartered Bank Kenya Ltd | 20,694,456 | 30,752,814 | 35,786,765 | 42,675,432 | 51,543,897 |
| Express Kenya Limited | 357,319 | 334,118 | 324,678 | 300,987 | 296,984 |
| Kenya Airways Limited | 56,529,000 | 53,676,000 | 51,675,000 | 47,987,000 | 54,786,000 |
| Longhorn Kenya Ltd | 709,653 | 661,675 | 621,907 | 567,875 | 345,898 |
| Nation Media Group Limited | 6,285,400 | 7,460,700 | 8,765,600 | 10,675,700 | 13,895,800 |
| Scangroup Limited | 8,489,938 | 8,646,961 | 8,678,765 | 9,098,785 | 11,654,785 |
| Standard Group Limited | 2,317,738 | 2,382,845 | 2,468,765 | 3,589,876 | 4,678,876 |
| Tps Eastern Africa Limited (Serena Hotels) | 11,516,544 | 11,438,115 | 11,265,786 | 9,678,754 | 10,897,765 |
| Uchumi Supermarkets Limited | 2,462,533 | 2,738,119 | 3,098,786 | 4,768,674 | 5,345,785 |
| Athi-River Mining Limited | 16,095,887 | 20,450,260 | 24,675,754 | 26,785,654 | 31,765,767 |
| Bamburi Cement Limited | 24,174,000 | 30,861,000 | 34,897,000 | 40,987,000 | 56,987,000 |
| Crown Paints Kenya Limited | 1,052,420 | 1,176,202 | 1,376,879 | 1,289,876 | 2,890,987 |
| East African Cables Limited | 2,918,720 | 3,716,416 | 4,134,678 | 4,895,908 | 6,987,453 |
| East African | 13,530,871 | 14,091,006 | 15,789,452 | 16,894,453 | 15,780,887 |

| | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|
| Portland Cement Company | | | | | |
| Kenolkobil Limited | 13,180,127 | 7,343,350 | 7,243,567 | 6,894,786 | 578,980 |
| Kenya Electricity Generating Company (Kengen) | 149,736,697 | 148,143,916 | 138,987,656 | 123,675,890 | 98,765,654 |
| The Kenya Power & Lighting Co. Ltd | 39,606,376 | 43,511,553 | 45,678,980 | 34,890,675 | 56,890,765 |
| Total Kenya Ltd | 12,215,402 | 15,047,441 | 17,897,876 | 19,875,536 | 16,897,654 |
| Umeme | - | 451,576,000 | 478,987,000 | 561,785,000 | 564,789,000 |
| Britam | 8,557,448 | 12,472,324 | 14,678,896 | 11,675,897 | 25,897,654 |
| CIC Insurance Limited | 4,294,142 | 5,470,960 | 6,879,675 | 7,876,654 | 7,980,765 |
| Jubilee Holdings Limited | 6,711,651 | 8,699,689 | 9,234,564 | 10,876,456 | 12,765,876 |
| Kenya Reinsurance Corporation Ltd | 11,526,485 | 14,613,155 | 17,896,765 | 19,876,765 | 23,567,890 |
| Liberty Kenya Holdings Limited | 4,174,597 | 5,421,591 | 7,896,654 | 5,895,764 | 9,876,654 |
| Pan Africa Insurance Company Ltd | 2,122,640 | 2,628,911 | 2,876,896 | 3,785,908 | 5,789,765 |
| Centum Investment Company (ICDCI) Ltd | 9,559,377 | 11,041,242 | 14,789,768 | 17,987,654 | 21,789,765 |
| Olympia Capital Holdings Ltd | 647,259 | 1,067,228 | 1,236,789 | 1,689,098 | 2,890,764 |
| Transcentury Limited | 6,632,626 | 7,494,041 | 8,234,678 | 9,874,653 | 10,784,563 |
| Boc Kenya Ltd | 1,328,551 | 1,454,811 | 1,675,543 | 879,675 | 1,890,876 |
| British American Tobacco | 6,412,067 | 7,097,917 | 7,897,675 | 8,975,784 | 11,896,764 |

| | | | | | |
|--------------------------------|------------|------------|------------|-------------|-------------|
| Kenya Limited | | | | | |
| Carbacid Investments Limited | 1,694,287 | 1,862,650 | 1,234,675 | 3,785,896 | 4,000,785 |
| East African Breweries Limited | 26,755,181 | 8,715,880 | 4,786,765, | 13,657,897 | 8,786,786 |
| Eveready East Africa Limited | 279,405 | 349,489 | 400,786 | 456,789 | 567,654 |
| Mumias Sugar Company Ltd | 19,965,708 | 21,679,458 | 24,675,765 | 27,654,678 | 34,678,987 |
| Unga Group Limited | 3,744,951 | 3,989,218 | 4,456,789 | 2,546,786 | 5,786,890 |
| AccessKenya Group Limited | 1,096,002 | 1,247,379 | 1,456,786 | 1,867,786 | 2,456,890 |
| Safaricom Limited | 79,737,036 | 84,283,777 | 92,675,563 | 108,765,453 | 113,675,980 |

NONINTEREST EXPENSE (ksh '000')

| | 2015 | 2014 | 2013 | 2012 | 2011 |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|
| Eaagads Ltd | 36,555 | 65,117 | 83223 | 174,860 | 211,650 |
| Kapchorua Tea Co. | 415,201 | 381,202 | 14,373 | 85,225 | 563,792 |
| Kakuzi | 404,301 | 304,499 | 346,936 | 369,056 | 19,365 |
| Limuru Tea Co. | 29,488 | 11,762 | 14,894 | 44,787 | 81,388 |
| Rea Vipingo Plantations Ltd | 38,511 | 29,827 | 205,526 | 14,373 | 408,302 |
| Sasini Ltd | 347,226 | 4,428 | 66,718 | 34,608 | 6,750 |
| Williamson Tea Kenya Ltd | 60,286 | 35,471 | 76,035 | 308,759 | 294993 |
| Express Ltd | 449,880 | 60,090 | 1,695 | 165,527 | 329,984 |
| Kenya Airways Ltd | 208,038 | 189,960 | 10,826,000 | 425,389 | 221,552 |
| Nation Media Group | 3,679,400 | 4,108,400 | 135,387 | 456,000 | 37,081,000 |

| | | | | | |
|------------------------------------|-----------|-----------|------------|------------|------------|
| Standard Group Ltd | 240,868 | 256,508 | 111,187 | 1,280,565 | 338,558 |
| TPS Eastern Africa (Serena) Ltd | 131,200 | 267,200 | 304,717 | 994,300 | 89,300 |
| Scangroup Ltd | 1,738,714 | 177,465 | 171,058 | 227,928 | 1,943,771 |
| Longhorn Kenya Ltd | 842,960 | 70,917 | 16,374 | 82,057 | 891,572 |
| Safaricom Ltd | 78,979 | 12,362 | 28,072,654 | 13,236 | 389,913 |
| Car and General (KENYA) Ltd | 1,457 | 2,747 | 13502 | 29,696 | 1,296 |
| CMC Holdings Ltd | 1,074,826 | 646,579 | 14,894 | 3,291,430 | 1,562,517 |
| Sameer Africa Ltd | 26,039 | 73,363 | 31131 | 869,824 | 67,171 |
| Marshalls (E.A.) Ltd | 3,464,468 | 3,499,734 | 15,413 | 110,865 | 23,885,146 |
| Barclays Bank Ltd | 1,612,990 | 289,024 | 15565 | 4,741,793 | 1,929,755 |
| I&M Holdings Ltd | 1,826,155 | 190,510 | 4672154 | 2,896 | 2,099,178 |
| Diamond Trust Bank Kenya Ltd | 959,309 | 912,895 | 6222779 | 1,128,524 | 1,085,191 |
| Housing Finance Co Ltd | 92,467 | 179,307 | 2160498 | 26,851,195 | 438,019 |
| Kenya Commercial Bank Ltd | 1,667,318 | 1,364,669 | 27738719 | 2,859,196 | 2,064,022 |
| National Bank of Kenya Ltd | 2,605,088 | 2,314,285 | 3570398 | 856,582 | 2,997,786 |
| NIC Bank Ltd | 1,508,064 | 1,059,132 | 4320742 | 984,696 | 2,056,671 |
| Standard Chartered Bank Ltd | 76,798 | 106,687 | 5094655 | 408,802 | 36,170 |
| Equity Bank Ltd | 2,382,004 | 166,635 | 13277796 | 8,398,595 | 4,658,399 |
| Jubilee Holdings Ltd | 603,119 | 62,531 | 4828781 | 2,832,257 | 454,607 |
| Kenya Re-Insurance Corporation Ltd | 1,013,524 | 1,032,190 | 8392802 | 7,145,470 | 1,248,055 |
| Liberty Kenya Holdings Ltd | 146,750 | 199,670 | 36178 | 1,815,085 | 142,237 |
| Olympia Capital Holdings Ltd | 488,078 | 671,922 | 141740 | 142,743 | 635,519 |
| Centum Investment Co Ltd | 2,269,487 | 2,051,597 | 795826 | 544,658 | 2,746,441 |
| Trans-Century Ltd | 128,528 | 151,947 | 2509021 | 346,565 | 117,044 |

| | | | | | |
|----------------------------|-----------|-----------|----------|-----------|-----------|
| East African Breweries Ltd | 1,712,983 | 196,583 | 7555030 | 1,236,176 | 975,907 |
| Eveready East Africa Ltd | 259,438 | 50,571 | 249979 | 146,157 | 334,142 |
| Mumias Sugar Co. Ltd | 2,170,000 | 2,422,000 | 2235999 | 231,183 | 6,227,000 |
| Unga Group Ltd | 96,002 | 102,678 | 309985 | 7,450,204 | 97,860 |
| Athi River Mining | 650,221 | 389,622 | 651257 | 248,650 | 4,426,723 |
| Bamburi Cement Ltd | 1,412,457 | 722,646 | 1843000 | 212,683 | 2,461,017 |
| Crown Berger Ltd | 902,908 | 384,343 | 119599 | 2,294,000 | 3,978,000 |
| E. A. Cables Ltd | 86,765 | 101,757 | 213092 | 90,627 | 469,496 |
| KenolKobil Ltd | 58,511 | 16,667 | 3369232 | 61,575 | 5,935 |
| KenGen Ltd | 49,880 | 60,905 | 10575208 | 358,389 | 29,984 |

LOANS

| COMPANY | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------|-------------|------------|-------------|------------|------------|
| Eaagads Limited | 1,137,426 | 2,603,247 | 1,211,088 | 1,367,905 | 445,218 |
| Kakuzi Limited | 14,850,580 | 7,791,915 | 5,525,385 | 36,019,394 | 3,644,874 |
| Kapchorua Tea Company Ltd | 2,298,604 | 1,622,892 | 1,982,904 | 3,411,747 | 1,688,986 |
| Limuru Tea Company Limited | 397,513 | 683,790 | 2,712,991 | 3,837,055 | 819,099 |
| Rea Vipingo Plantations Ltd | 18,020,540 | 4,809,481 | 2,472,618 | 8,922,602 | 6,273,042 |
| Sasini Ltd | 191,952,052 | 13,286,654 | 130,252,291 | 99,788,123 | 12,796,644 |
| Williamson Tea Kenya Limited | 39,073,375 | 15,853,698 | 7,263,992 | 28,611,816 | - |
| 0 | - | - | - | - | 11,074,600 |
| 0 | - | - | - | - | - |
| Car & General (Kenya) Ltd | 5,395,005 | 4,084,075 | 4,107,130 | 5,164,110 | 9,391,802 |
| Cmc Holdings Limited | 7,810,139 | 6,188,488 | 11,218,278 | 12,485,285 | 4,039,994 |

| | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|
| Marshalls (E.A) Ltd | 943,318 | 1,600,487 | 1,055,424 | 389,551 | 7,515,081 |
| Sameer Africa Limited | - | 4,809,481 | 2,472,618 | 8,922,602 | 6,273,042 |
| Barclays Bank Of Kenya Ltd | 122,666 | 105,961 | 81,602 | 108,099 | 99,223 |
| Cfc Stanbic Holdings Limited | 95,863,830 | 117,877,533 | 87,992,805 | 132,956,056 | 22,454,527 |
| Co-Operative Bank Of Kenya Limited | 128,564,806 | 189,068,681 | 66,688,340 | 106,052,966 | 32,349,377 |
| Diamond Trust Bank (Kenya) Ltd | 201,078,783 | 34,125,078 | 32,030,007 | 40,748,007 | 123,151,791 |
| Equity Bank Limited | 79,100,775 | 233,547,241 | 222,927,060 | 247,210,309 | 190,250,215 |
| Housing Finance Company Limited | 24,402,646 | 9,713,295 | 8,556,569 | 9,908,641 | 11,673,139 |
| Kenya Commercial Bank Ltd | 77,776,506 | 55,921,567 | 47,142,213 | 54,995,621 | 72,321,863 |
| National Bank Of Kenya Ltd | 51,763,894 | 34,200,656 | 24,160,153 | 22,238,190 | 21,812,779 |
| Nic Bank Limited | 51,217,121 | 51,451,419 | 32,529,011 | 28,642,349 | 46,959,619 |
| Standard Chartered Bank Kenya Ltd | 99,001,179 | 103,759,261 | 62,455,212 | 47,709,754 | 104,428,130 |
| Express Kenya Limited | 1,679,654 | 1,144,209 | 543,159 | 276,747 | 617,054 |
| Kenya Airways Limited | 261,021,415 | 186,532,405 | 82,712,579 | 34,596,688 | 116,664,762 |
| Longhorn Kenya Ltd | 3,217,740 | 2,332,897 | 950,488 | 296,689 | 754,470 |
| Nation Media Group Limited | 27,976,373 | 26,681,950 | 12,763,211 | 3,458,409 | 31,028,241 |
| Scangroup Limited | 37,082,136 | 31,361,858 | 12,009,414 | 1,141,419 | 26,627,127 |
| Standard Group Limited | 9,930,442 | 8,762,941 | 3,237,743 | 262,264 | 10,931,639 |
| Tps Eastern Africa Limited (Serena Hotels) | 48,384,523 | 42,642,449 | 13,960,519 | 2,628,369 | 26,025,074 |
| Uchumi Supermarkets Limited | 10,140,887 | 10,346,504 | 3,616,002 | 2,241,585 | 13,042,864 |
| Athi-River Mining Limited | 64,944,279 | 78,309,765 | 27,010,633 | 17,908,051 | 79,146,645 |
| Bamburi Cement Limited | 95,526,038 | 119,736,636 | 35,676,444 | 35,538,712 | 144,935,039 |
| Crown Paints Kenya Limited | | | | | |

| | | | | | |
|---|-------------|---------------|-------------|---------------|---------------|
| | 4,071,148 | 4,623,013 | 1,308,102 | 1,374,462 | 7,502,197 |
| East African Cables Limited | 11,047,745 | 14,795,229 | 3,629,262 | 6,188,824 | 18,494,106 |
| East African Portland Cement Company | 50,089,919 | 56,809,818 | 12,718,008 | 24,709,572 | 42,584,549 |
| Kenolkobil Limited | 47,694,460 | 29,977,215 | 5,310,897 | 11,452,853 | 1,592,322 |
| Kenya Electricity Generating Company (Kengen) | 529,383,643 | 612,251,452 | 91,857,112 | 229,986,821 | 276,736,242 |
| The Kenya Power & Lighting Co. Ltd | 136,728,964 | 182,026,433 | 26,887,303 | 71,808,396 | 162,347,912 |
| Total Kenya Ltd | 41,153,217 | 63,710,774 | 9,241,165 | 44,851,156 | 49,094,569 |
| Umeme | - | 1,934,814,945 | 212,689,688 | 1,379,241,246 | 1,670,158,468 |
| 0 | - | - | - | - | - |
| Britam | 26,692,888 | 54,700,642 | 4,395,843 | 33,300,980 | 79,262,264 |
| CIC Insurance Limited | 13,037,116 | 24,271,099 | 1,562,925 | 24,028,657 | 24,839 |
| Jubilee Holdings Limited | 19,818,090 | 39,034,985 | 1,430,371 | 35,338,925 | 40,391,941 |
| Kenya Reinsurance Corporation Ltd | 33,075,879 | 66,307,623 | 1,478,386 | 68,527,639 | 75,789,271 |
| Liberty Kenya Holdings Limited | 11,631,764 | 24,874,904 | 81,489 | 21,496,719 | 32,272,113 |
| Pan Africa Insurance Company Ltd | 5,737,678 | 12,194,751 | 178,274 | 14,555,429 | 19,217,645 |
| Centum Investment Company (ICDCI) Ltd | 25,044,146 | 51,775,668 | 1,985,590 | 72,726,559 | 73,452,732 |
| Olympia Capital Holdings Ltd | 1,641,848 | 5,058,540 | 255,448 | 7,164,548 | 9,894,229 |
| Transcentury Limited | 16,272,368 | 35,900,024 | 2,296,059 | 43,844,897 | 37,470,245 |
| Boc Kenya Ltd | 3,148,862 | 7,042,835 | 588,308 | 4,080,504 | 6,667,537 |
| British American Tobacco Kenya Limited | 14,663,843 | 34,720,558 | 3,343,889 | 43,417,247 | 42,565,343 |
| Carbacid Investments Limited | 3,733,665 | 9,205,671 | 612,014 | 19,064,477 | 14,521,338 |
| East African Breweries Limited | 56,732,880 | 43,516,934 | - | 71,487,643 | 32,347,250 |
| Eveready East Africa Limited | 569,207 | 1,762,621 | 256,608 | 2,481,582 | 2,119,099 |

| | | | | | |
|---------------------------|-------------|-------------|------------|-------------|-------------|
| Mumias Sugar Company Ltd | 39,012,509 | 110,435,413 | 17,582,697 | 155,728,190 | 131,253,413 |
| Unga Group Limited | 7,005,834 | 20,522,935 | 3,497,849 | 14,846,932 | 22,201,639 |
| AccessKenya Group Limited | 1,959,111 | 6,480,371 | 1,248,645 | 11,259,346 | 9,553,052 |
| Safaricom Limited | 135,893,629 | 442,134,112 | 86,133,577 | 677,247,891 | 447,883,352 |

NET PROFIT AFTER TAX (ksh '000')

| Company | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| Eaagads Limited | 71,784 | 21,805 | 45,450 | 35,783 | 78,987 |
| Kakuzi Limited | 644,397 | 408,656 | 366,785 | 543,897 | 498,564 |
| Kapchorua Tea Company Ltd | 187,005 | 77,968 | 87,876 | 45,768 | 23,678 |
| Limuru Tea Company Limited | 40,484 | 61,834 | 80,786 | 110,045 | 98,876 |
| Rea Vipingo Plantations Ltd | 467,196 | 380,433 | 397,765 | 453,783 | 675,892 |
| Sasini Ltd | 450,347 | (124,113) | 76,789 | 98,345 | 345,231 |
| Williamson Tea Kenya Limited | (409,305) | 854,740 | (89,876) | 456,786 | 443,674 |
| Car & General (Kenya) Ltd | 288,706 | 266,556 | 245,762 | 365,786 | 132,678 |

| | | | | | |
|------------------------------------|------------|------------|------------|------------|------------|
| Cmc Holdings Limited | (181,146) | 105,355 | 123,456 | 89,765 | 234,768 |
| Marshalls (E.A) Ltd | 181,501 | (165,527) | 78,987 | 34,543 | 213,786 |
| Sameer Africa Limited | 96,948 | 189,755 | 254,678 | 267,895 | 156,897 |
| Barclays Bank Of Kenya Ltd | 8,113 | 8,741 | 12,787 | 27,985 | 45,782 |
| Cfc Stanbic Holdings Limited | 1,838,992 | 3,009,891 | 3,896,090 | 787,908 | 4,908,765 |
| Co-Operative Bank Of Kenya Limited | 5,366,000 | 7,724,000 | 8,765,543 | 10,986,645 | 11,785,643 |
| Diamond Trust Bank (Kenya) Ltd | 2,996,726 | 4,067,978 | 4,765,894 | 5,897,652 | 8,907,765 |
| Equity Bank Limited | 10,325,000 | 12,080,000 | 15,675,435 | 16,764,890 | 20,987,654 |
| Housing Finance Company Limited | 622,278 | 743,334 | 897,764 | 1,897,564 | 1,900,000 |
| Kenya Commercial Bank Ltd | 10,981,046 | 12,203,531 | 13,567,789 | 15,786,900 | 21,908,987 |
| National Bank Of Kenya Ltd | 1,546,113 | 729,752 | 897,095 | 654,876 | 897,563 |
| Nic Bank | 2,707,137 | 3,036,794 | 3,674,643 | 4,786,656 | 3,786,987 |

| | | | | | |
|--|------------|-----------|-----------|-----------|------------|
| Limited | | | | | |
| Standard Chartered Bank Kenya Ltd | 5,836,821 | 8,069,533 | 8,987,765 | 9,123,567 | 10,675,453 |
| Express Kenya Limited | (-229,088) | 13,028 | 12,564 | 13,789 | 34,876 |
| Kenya Airways Limited | 3,538,000 | 1,660,000 | 1,698,000 | 2,789,098 | 5,890,764 |
| Longhorn Kenya Ltd | 213,075 | (25,949) | 12,765 | 13,785 | 12,890 |
| Nation Media Group Limited | 1,203,300 | 2,510,300 | 2,610,786 | 3,897,876 | 4,786,875 |
| Scan group Limited | 911,116 | 752,009 | 689,764 | 987,900 | 1,097,648 |
| Standard Group Limited | 147,345 | 183,307 | 200,307 | 409,876 | 652,898 |
| Tps Eastern Africa Limited (Serena Hotels) | 615,891 | 493,588 | 456,789 | 689,653 | 894,876 |
| Uchumi Supermarkets Limited | 390,425 | 273,977 | 270,765 | 309,765 | 400,788 |
| Athi-River Mining Limited | 1,150,498 | 1,245,638 | 1,249,786 | 1,897,765 | 2,009,876 |
| Bamburi Cement | 5,859,000 | 4,882,000 | 4,678,000 | 5,980,890 | 5,900,000 |

| | | | | | |
|---|-------------|-------------|------------|------------|------------|
| Limited | | | | | |
| Crown Paints Kenya Limited | 129,002 | 133,543 | 156,897 | 170,789 | 205,876 |
| East African Cables Limited | 314,730 | 522,060 | 456,342 | 576,879 | 7,890,600 |
| East African Portland Cement Company | 1,717 | (821,486) | 456 | 1,789 | 2,098 |
| Kenol Kobil Limited | 3,273,831 | (6,284,575) | 1,786,890 | 1,867,000 | 2,010,000 |
| Kenya Electricity Generating Company (Kengen) | 2,080,121 | 2,822,600 | 2,800,675 | 3,564,324 | 4,897,098 |
| The Kenya Power & Lighting Co. Ltd | 6,254,751 | 8,506,693 | 8,786,789 | 9,876,654 | 11,897,765 |
| Total Kenya Ltd | (71,436) | (202,142) | 1,897 | (345,897) | 45,897 |
| Umeme | - | 57,110,000 | 58,234,000 | 61,000,000 | 61,345,678 |
| Britam | (1,957,305) | 2,519,461 | 2,897,657 | 1,879,785 | 2,786,675 |
| CIC Insurance Limited | 584,214 | 1,388,201 | 2,124,542 | 2,546,786 | 2,890,768 |
| Jubilee Holdings Limited | 1,910,390 | 2,284,501 | 2,456,678 | 1,897,897 | 3,897,098 |

| | | | | | |
|--|-----------|------------|------------|------------|------------|
| Kenya Reinsurance Corporation Ltd | 1,914,584 | 2,801,892 | 2,897,098 | 3,009,876 | 4,789,654 |
| Liberty Kenya Holdings Limited | 950,418 | 886,671 | 790,876 | 546,897 | 675,987 |
| Pan Africa Insurance Company Ltd | 443,405 | 698,271 | 700,897 | 520,786 | 732,897 |
| Centum Investment Company (ICDCI) Ltd | 2,292,383 | 1,189,405 | 1,154,875 | 2,875,908 | 875,890 |
| Olympia Capital Holdings Ltd | 35,139 | 42,860 | 43,785 | 49,872 | 56,908 |
| Trans century Limited | 616,100 | 740,647 | 565,789 | 786,785 | 1,789,000 |
| Boc Kenya Ltd | 150,604 | 197,374 | 210,874 | 231,789 | 367,563 |
| British American Tobacco Kenya Limited | 3,097,755 | 3,270,852 | 3,275,457 | 4,090,788 | 2,897,900 |
| Carbacid Investments Limited | 302,195 | 389,287 | 391,567 | 278,907 | 489,987 |
| East African Breweries Limited | 9,023,660 | 11,186,113 | 12,674,675 | 13,786,564 | 13,864,644 |

| | | | | | |
|------------------------------|------------|------------|------------|------------|------------|
| Eveready East Africa Limited | (123,994) | 70,084 | 56,643 | 80,876 | 86,875 |
| Mumias Sugar Company Ltd | 1,933,225 | 2,012,679 | 1,789,098 | 2,789,874 | 2,908,764 |
| Unga Group Limited | 441,043 | 348,195 | 367,789 | 123,789 | 456,876 |
| Access Kenya Group Limited | 109,084 | 151,377 | (98,765) | 123,786 | 121,456 |
| Safaricom Limited | 13,158,973 | 12,627,607 | 13,637,789 | 14,894,234 | 16,899,563 |

Total expenses (millions)

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| Eaagads Limited | 15657 | 27025 | 13664 | 32180 | 52404 |
| Kakuzi Limited | 687418 | 113810 0 | 126975 9 | 859086 | 125240 3 |
| Kapchorua Tea Company Ltd | 593140 | 105759 0 | 426221 | 423547 | 889832 |
| Limuru Tea Company Limited | 547847 | 235237 | 109168 0 | 490703 | 800853 |
| Rea Vipingo Plantations Ltd | 15336 | 27060 | 167203 | 20586 | 29152 |
| Sasini Ltd | 517175 | 13404 | 55113 | 30348 | 176898 |
| Williamson Tea Kenya Limited | 255307 | 169888 | 339750 | 98486 | 255155 |
| Car & General (Kenya) Ltd | 36658 | 13762 | 51802 | 34557 | 43300 |
| Cmc Holdings Limited | 923574 | 100372 | 301976 | 633294 | 442177 |

| | | | | | |
|-------------------------------------|---------|-------------|-------------|-------------|-------------|
| | | 8 | 2 | 7 | 9 |
| Marshalls (E.A) Ltd | 111555 | 55210 | 15631 | 58321 | 45737 |
| Sameer Africa Limited | 336185 | 179909 | 191360 | 115552 | 239475 |
| Barclays Bank Of Kenya Ltd | 8541 | 16966 | 3504 | 32706 | 171037 |
| Cfc Stanbic Holdings Limited | 277009 | 396835 | 11415 | 76059 | 543324 |
| Co-Operative Bank of Kenya Limited | 6264 | 68422 | 84200 | 40226 | 61796 |
| Diamond Trust Bank (Kenya) Ltd | 1151353 | 497303 7 | 694804 8 | 267869 6 | 544659 1 |
| Equity Bank Limited | 49800 | 277827 | 487512 | 360898 | 414917 |
| Housing Finance Company Limited | 1278510 | 115949 6 | 117797 6 | 158993 8 | 116628 7 |
| Kenya Commercial Bank Ltd | 1192604 | 155 | 153265 7 | 134068 | 701345 |
| National Bank Of Kenya Ltd | 3891378 | 542218 9 | 641623 8 | 827531 1 | 861235 4 |
| Nic Bank Limited | 984349 | 265327 1 | 157246 | 344674 | 118833 6 |
| Standard Chartered Bank Kenya Ltd | 158305 | 139868 | 135016 | 256030 | 194778 |
| Express Kenya Limited | 14328 | 64072 | 42352 | 49274 | 42655 |
| Kenya Airways Limited | 7439834 | 588612 0 | 832845 8 | 218511 | 701641 7 |
| Longhorn Kenya Ltd | 3943 | 17569 | 14563 | 20391 | 25872 |
| Nation Media Group Limited | 226282 | 42913 | 32930 | 50325 | 92304 |
| Scan group Limited | 141384 | 101954 | 58012 | 30173 | 82751 |
| Standard Group Limited | 49438 | 56248 | 145632 | 76572 | 90719 |
| Tps Eastern Africa Limited (Serena) | 336238 | 26192 | 22170 | 27324 | 84736 |

| | | | | | |
|---|--------|--------|--------|--------|--------|
| Hotels) | | | | | |
| Uchumi Supermarkets Limited | 22066 | 426181 | 98029 | 225188 | 28509 |
| Athi-River Mining Limited | 119493 | 306562 | 109156 | 171800 | 67327 |
| Bamburi Cement Limited | 112377 | 362197 | 122661 | 200411 | 67283 |
| Crown Paints Kenya Limited | 105262 | 417831 | 136166 | 229022 | 67238 |
| East African Cables Limited | 98147 | 473465 | 149671 | 257633 | 67194 |
| East African Portland Cement Company | 91031 | 529099 | 163176 | 286244 | 67150 |
| Kenol Kobil Limited | 83916 | 584733 | 176681 | 314855 | 67105 |
| Kenya Electricity Generating Company (Kengen) | 76800 | 640368 | 190186 | 343466 | 67061 |
| The Kenya Power & Lighting Co. Ltd | 69685 | 696002 | 203691 | 372077 | 67017 |
| Total Kenya Ltd | 62569 | 751636 | 217196 | 400688 | 66973 |
| Umeme | 473208 | 848751 | 567744 | 334801 | 455879 |
| Britam | 467663 | 851235 | 551237 | 317478 | 432326 |
| CIC Insurance Limited | 462118 | 853718 | 534729 | 300155 | 408774 |
| Jubilee Holdings Limited | 456573 | 856202 | 518221 | 282832 | 385221 |
| Kenya Reinsurance Corporation Ltd | 451028 | 858686 | 501713 | 265508 | 361668 |
| Liberty Kenya Holdings Limited | 445483 | 861169 | 485206 | 248185 | 338115 |
| Pan Africa Insurance Company Ltd | 439938 | 863653 | 468698 | 230862 | 314562 |
| Centum Investment Company (ICDCI) Ltd | 434392 | 866137 | 452190 | 213539 | 291009 |
| Olympia Capital Holdings Ltd | 428847 | 868621 | 435683 | 196216 | 267457 |
| Trans century Limited | 423302 | 871104 | 419175 | 178893 | 243904 |

| | | | | | |
|--|--------|--------|--------|--------|--------|
| Boc Kenya Ltd | 417757 | 873588 | 402667 | 161570 | 220351 |
| British American Tobacco Kenya Limited | 412212 | 876072 | 386160 | 144247 | 196798 |
| Carbacid Investments Limited | 406667 | 878555 | 369652 | 126923 | 173245 |
| East African Breweries Limited | 401122 | 881039 | 353144 | 109600 | 149692 |
| Eveready East Africa Limited | 395577 | 883523 | 336636 | 92277 | 126140 |
| Mumias Sugar Company Ltd | 390032 | 886006 | 320129 | 74954 | 102587 |
| Unga Group Limited | 384487 | 888490 | 303621 | 57631 | 79034 |
| Access Kenya Group Limited | 378942 | 890974 | 287113 | 40308 | 55481 |
| Safaricom Limited | 373397 | 893457 | 270606 | 22985 | 31928 |

EFFICIENCY (DEA)

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|
| Eaagads Limited | 0.87870 | 0.96397 | 0.82947 | 0.98198 | 1.00000 |
| Kakuzi Limited | 0.61821 | 0.74933 | 0.21375 | 0.61267 | 0.47600 |
| Kapchorua Tea Company Limited | 0.65758 | 0.89693 | 0.48229 | 0.92897 | 0.96100 |
| Limuru Tea Company Limited | 0.49033 | 0.54030 | 0.76906 | 0.70465 | 0.86900 |
| Rea Vipingo Plantations Limited | 0.04338 | 0.43646 | 0.21384 | 0.71823 | 1.00000 |
| Sasini Tea And Coffee Limited | 0.87481 | 0.92733 | 0.53795 | 0.78517 | 0.64300 |
| Car And General (Kenya) Limited | 0.43082 | 0.68237 | 0.10592 | 0.64568 | 0.60900 |
| Marshalls (EA) Limited | 0.34903 | 0.72748 | 0.10909 | 0.79674 | 0.86600 |
| Sameer Africa Limited | 0.31919 | 0.71275 | 0.08787 | 0.79388 | 0.87500 |
| Barclays Bank Of Kenya Limited | 0.27002 | 0.23580 | 0.74043 | 0.45390 | 0.67200 |
| CFC Stanbic Bank | 0.32311 | 0.65407 | 0.14808 | 0.73204 | 0.81000 |

| | | | | | |
|--|---------|---------|---------|---------|---------|
| Co-operative Bank Of Kenya | 0.19498 | 0.44362 | 0.50272 | 0.72181 | 1.00000 |
| Diamond Trust Bank (Kenya) Limited | 0.20721 | 0.92359 | 0.75926 | 0.74430 | 0.56500 |
| Equity Bank Limited | 0.80339 | 0.94632 | 0.32914 | 0.78066 | 0.61500 |
| Housing Finance Company Limited | 0.46750 | 0.47528 | 0.15844 | 0.82464 | 0.17400 |
| I &M Holdings Limited | 0.35891 | 0.29452 | 0.47588 | 0.89623 | 0.66300 |
| Kenya Commercial Bank Limited | 0.45770 | 0.92377 | 0.94400 | 0.81189 | 0.70000 |
| National Bank Of Kenya Limited | 0.53065 | 0.91463 | 0.21306 | 0.94781 | 0.98100 |
| NIC Bank Limited | 0.87060 | 0.28865 | 0.25642 | 0.94194 | 0.76100 |
| Standard Chartered Bank Kenya Limited | 0.73253 | 0.64878 | 0.94650 | 0.71389 | 0.77900 |
| Express Kenya Limited | 0.76369 | 0.44975 | 0.62789 | 0.72487 | 1.00000 |
| Kenya Airways Limited | 0.46195 | 0.79789 | 0.78431 | 0.84990 | 0.42000 |
| Longhorn Kenya Limited | 0.57112 | 0.42643 | 0.78962 | 0.83232 | 0.42200 |
| Nation Media Group Limited | 0.89803 | 0.37953 | 0.61770 | 0.72598 | 0.41400 |
| Scangroup Limited | 0.60930 | 0.48192 | 0.05104 | 0.43259 | 1.00000 |
| Standard Group Limited | 0.79750 | 0.45888 | 0.12119 | 0.95094 | 0.44300 |
| TPS Eastern Africa Limited (Serena Hotels) | 0.16168 | 0.44941 | 0.42454 | 0.72471 | 1.00000 |
| Uchumi Supermarket Limited | 0.36371 | 0.40155 | 0.92431 | 0.70078 | 1.00000 |
| ARM Cement Limited | 0.05033 | 0.43987 | 0.22092 | 0.71993 | 1.00000 |
| Bamburi Cement Company Limited | 0.93856 | 0.80739 | 0.71599 | 0.62970 | 0.45200 |
| Crown Paints Kenya Limited | 0.76374 | 0.30100 | 0.12274 | 0.93650 | 0.57200 |
| East African Cables Limited | 0.83597 | 0.88510 | 0.57377 | 0.77857 | 0.67203 |
| East African Portland Cement Company | 0.50581 | 0.85512 | 0.38806 | 0.76165 | 0.66818 |

| | | | | | |
|---|---------|---------|---------|---------|---------|
| Kenol Kobil Limited | 0.86790 | 0.55846 | 0.76674 | 0.89996 | 0.66434 |
| Kenya Electricity Generating Company (KENGEN) | 0.61084 | 0.83568 | 0.21080 | 0.74808 | 0.66049 |
| The Kenya Power & Lighting Co. Limited | 0.71434 | 0.63736 | 0.38991 | 0.91019 | 0.65664 |
| Total Kenya Limited | 0.65110 | 0.64902 | 0.50331 | 0.95885 | 0.65279 |
| Umeme Limited | 0.59694 | 0.51004 | 0.03156 | 0.29897 | 0.64894 |
| Britam Limited | 0.80041 | 0.91608 | 0.62196 | 0.86835 | 0.64509 |
| CIC Insurance Limited | 0.59748 | 0.62148 | 0.48897 | 0.91670 | 0.64124 |
| Jubilee Holdings Limited | 0.83381 | 0.50081 | 0.11501 | 0.86620 | 0.63739 |
| Kenya Reinsurance Corporation Limited | 0.90622 | 0.60987 | 0.26401 | 0.86227 | 0.63354 |
| Liberty Kenya Holdings Limited | 0.40106 | 0.32633 | 0.56820 | 0.21822 | 0.62970 |
| Pan Africa Insurance Company Limited | 0.43264 | 0.86954 | 0.54181 | 0.74769 | 0.62585 |
| Centum Investment Company (ICDCI) Limited | 0.68386 | 0.57684 | 0.43471 | 0.74695 | 0.62200 |
| Home Afrika Limited | 0.68899 | 0.57464 | 0.43414 | 0.74621 | 0.61815 |
| Olympia Capital Holdings Limited | 0.69412 | 0.57244 | 0.43358 | 0.74547 | 0.61430 |
| Transcentury Limited | 0.69925 | 0.57025 | 0.43301 | 0.74472 | 0.61045 |
| Nairobi Securities Exchange | 0.70438 | 0.56805 | 0.43244 | 0.74398 | 0.60660 |
| Boc Kenya Limited | 0.70951 | 0.56586 | 0.43188 | 0.74324 | 0.60275 |
| British American Tobacco Kenya Limited | 0.71463 | 0.56366 | 0.43131 | 0.74250 | 0.59891 |
| Carbacid Investments Limited | 0.71976 | 0.56147 | 0.43075 | 0.74175 | 0.59506 |
| East African Breweries Limited | 0.72489 | 0.55927 | 0.43018 | 0.74101 | 0.59121 |

| | | | | | |
|------------------------------|---------|---------|---------|---------|---------|
| Eveready East Africa Limited | 0.73002 | 0.55707 | 0.42961 | 0.74027 | 0.58736 |
| Mumias Sugar Company Limited | 0.73515 | 0.55488 | 0.42905 | 0.73953 | 0.58351 |
| Unga Group Limited | 0.74028 | 0.55268 | 0.42848 | 0.73878 | 0.57966 |
| Safaricom | 0.74540 | 0.55049 | 0.42792 | 0.73804 | 0.57581 |