THE INFLUENCE OF ENTERPRISE RISK MANAGEMENT ON PERFORMANCE OF COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

BERNARD OKETCH

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, UNIVERSITY OF NAIROBI

NOVEMBER 2018

DECLARATION

This research proposal is my original work and has not been submitted for examination to any other university.

Signed………………………………….. Date…………………………………………

BERNARD OKETCH

D61/82000/2015

This research project is submitted for examination with my approval as the University supervisor

Signed………………………………….. Date…………………………………………

PROF. PETER K'OBONYO

LECTURER

SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

DEDICATION

I dedicate this project work to all those who put together their efforts to support me in pursuit of this noble goal in education. They include my beautiful wife Lily, two great sons Aiden and Ethan, lovely daughter Talia and all my friends. May our Almighty GOD bless you all.

ACKNOWLEDGEMENT

I express my great appreciation to Prof. Peter K'obonyo for his valuable and constructive guidance during the entire development of this research work. His willingness to give his time so generously is much appreciated. I would also like to express my gratitude to Prof. Evans Aosa for his advice and assistance in moderating my research proposal. Finally, I wish to thank my family and friends for their support and encouragement throughout my study.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

ERM	Enterprise Risk Management
CRO	Chief Risk Officer
CMA	Capital Markets Authority
NSE	Nairobi Securities Exchange
RBA	Retirements Benefits Authority
CBK	Central Bank of Kenya
COSO	Committee of Sponsoring Organizations of the Treadway Commission
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
CTI	Cost to Income Ratio
EPS	Earnings per Share
BCBS	Basel Committee on Banking Supervision
SCAC	State Corporations Advisory Committee
S&P	Standards & Poor's
GCR	Global Credit Ratings company
MPT	Modern Portfolio Theory
CAPM	Capital Asset Pricing Model

ABSTRACT

Enterprise Risk Management (ERM) is a field of study which advocates for the establishment and institutionalization of a formally documented and board approved process for risk identification, measurement and control in a company with a view to ensure that value is created and preserved. The discipline advocates for a holistic view of a company's ecosystem (governance, strategy, processes, people, systems and performance) with a view to proactive identification and control of all potential threats and opportunities, which can either impair or enhance the ability of a company to achieving it primary objectives of maximizing stakeholder value. The objective of this research was to establish the influence of enterprise risk management on the financial performance of companies publicly listed in the Nairobi Securities Exchange. The use of descriptive survey was the appropriate approach as it made it possible to collect primary data on the independent variable (ERM) at a point in time. The research targeted all the 63 companies listed at the Nairobi Securities Exchange (NSE Website, 2017) and used a five point Likert scale questionnaire to collect the primary data. The influence of ERM programme implementation on the financial performance of listed companies was tested using linear regression, and out of the study several conclusions were arrived at, which include; a properly defined, documented and instituted ERM programme is essential for improved and sustained corporate performance; that board oversight over the management of key risks affecting companies is essential; that a well-defined risk management framework should be in place and must be communicated to the entire staff of a company for its implementation; that regular risks and controls self-assessment (RCSA) exercises should be conducted; that staff should be regularly rewarded for their efforts in good risk management practices; that regular risk management trainings should be conducted to all staff with a view to increase their risk management awareness; and equipping all the risk management teams with the necessary tools and processes for effective implementation of enterprise risk management practices within the companies.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

This research study explored the relationship between Enterprise Risk Management (ERM) and its influence on company performance. ERM is a field of study which advocates for the establishment of a formal documented and board approved process for risk identification, measurement and control in a company with a view to ensure that value is created and preserved. The discipline advocates for a holistic view of the company ecosystem, and strives to determine and implement an optimal strategy towards achieving the primary objectives of a company which are essentially to maximize on shareholder value (Gorvett, 2011). ERM comprises of a set of processes that deals with the risks and opportunities that affect company value creation and preservation. It provides for a process that is given life by the top leadership team of a company. The process is designed to identify potential risk events and manage them within the company defined acceptable risk levels.

Corporate performance measures the overall financial health of a company over a given period of time. There are many different methods for assessing the financial performance of a company. These include use of metrics such as Return on Assets (ROA), Return on Equity (ROE), Cost to Income Ratio (CTI) and Earnings per Share (EPS) amongst others. This study inferred on these metrics to analyze the extent over which such measures of company performance are influenced by the level of ERM implementation.

The study was underpinned by a number of theories that advance the concept of enterprise risk management. These theories include the Modern Portfolio Theory, Capital Asset Pricing Model theory, Behavioral Decision-making and Resource-based theory. All these theories have played a key role in informing the modern architecture and level of appreciation of the importance of taking an enterprise-wide view into risk management for the purposes of creating and preserving value within organizations. The theories are discussed in chapter two.

1.1.1 Enterprise Risk Management

Madhu, (2008) defines Enterprise risk management (ERM) as a system which can be used to measure and manage all risks that a company faces regardless of sources and nature, while at the same time ensuring that the company is protected from imminent dangers or crisis such as insolvency. This definition is enhanced by Walker et al. (2003) who defines ERM as a systematically integrated and disciplined process for managing risks within a company with the aim of ensuring that the company achieves its objectives of maximizing and creating value for its shareholders and stakeholders. Bogodistov, (2017) defines ERM as a collection of integrated processes that are geared towards managing risks with a view to minimizing the volatility of company returns and ensuring the survival of the company. The Institute of Risk Management of the United Kingdom, (2002) defines ERM as a central part of a company's strategic objectives, aimed at providing a platform where companies can methodically identify and address the risks that affect their business activities, whose goals are to achieve sustained benefits for the enterprise.

The definitions bring out the focus of ERM as the identification and treatment of enterprise-wide risks with the objective of achieving sustainable business growth and value of a company. The process demands a deeper appreciation and understanding of all risks and opportunities within the business environment that affect a company. ERM programmes must be continuous and run throughout the entire company; must be defined and documented and embody the approval of the top leadership team; must encompass the entire spectrum of all feasible risks that are inherent in the internal and external environment of the enterprise; must take a holistic and integrated company-wide view and exhibit a disciplined approach that brings together the company's business strategies, corporate governance processes, factors of production such as capital, systems, business processes, human resources, technology and knowledge together.

ERM programmes must be entrenched into the culture and behavioral norms of the company. It must translate the company strategy into tactical and operational key activities, while assigning responsibility to each staff for the proper management of risks that affect the company; must encourage and support accountability, enhance performance measurement and reward, with a view to promoting operational efficiency at all levels of the enterprise; and must have an overriding objective for enhancing the company's shareholder value and stakeholders interest, (Lechner and Gatzert, 2016).

1.1.2 Corporate performance

Corporate performance provides a view into the state of a company's business growth, profitability and sustainability. When adequately analyzed, financial information can provide better information and key insights for decision making. The need to make better business decisions is a key driver of enterprise risk management and helps businesses enhance their value creation and preservation, (Crane, 1998).

According to Griffin and Mahon, (1997), Successful performance of a company can be measured in terms of business returns and profitability. These profitability and balance sheet metrics when leveraged in a research study must be adequately assessed for applicability in the context of the study. The metrics must be uniform across companies and industries of study.

Some of the common measures used to assess the performance of a company include: Return on Assets (ROA), which is a ratio that measure the company's efficiency in managing its assets in the generation of its revenues and indirectly affects the value of a company; Return on Equity (ROE) measures the company's profitability from the perspective of the owners; Cost to Income (CTI) measures how efficient a company is at managing its costs of operations and enhances profitability; and Earnings per Share (EPS), which measures the return for shareholders generated by profits for a specific year and valuation of the company, (Griffin and Mahon, 1997).

1.1.3 NSE Listed Companies and the Capital Market

The focus of the study was on NSE listed companies. According to NSE Website, (2017), the exchange had 63 listed companies categorized into different sectors as illustrated in Table 1 in the Appendices. NSE as the principal capital market in Kenya, offers an automated and regulated platform for the listing and trading of equities and bonds to both local and international investors looking to invest in the East African capital markets. As per CMA Website, (2017), the exchange was licensed by the Capital Markets Authority (CMA) with the objective of promoting, developing, supporting and carrying out the business of a securities exchange in Kenya.

According to CMA, the agency was established by an Act of Parliament to supervise, license and monitor the activities of market intermediaries, including NSE.

CMA has issued a number of guidelines which were geared towards ensuring that listed companies adhere to good corporate governance practices of which adoption and implementation of ERM programmes is part of the requirements. CMA demands of listed companies under its supervision to adopt and implement enterprise risk management programmes. The guidelines require the listed companies to establish effective enterprise risk management policies and processes that are monitored by a risk management function comprising of suitably qualified and experienced professionals (CMA Risk Management and Internal Control Guidelines, May 2012).

1.2 Research Problem

ERM is an integrated process that is set out by a company with a view to systematically identify, assess, manage and control risks that impact its business operations. It has been argued by a number of scholars whose work is elaborated in chapter 2 that, when effectively adopted and implemented ERM can lead to enhanced corporate performance, (COSO, 2014). Corporate performance is a term that is used to portray the health of a company occasioned by its business activities. This health can be in the form of business profitability, growth, process efficiency, cost reduction and increase in market share. The link between ERM and corporate performance is important especially for companies operating in heavily regulated sectors or markets.

NSE listed companies by virtue of being under the supervision of CMA, are required to implement robust ERM programmes with the intended objective of enhancing the corporate value of the company over time and guarantee its sustainability. According to Kopia et al, (2017), a number of scholars have tried to draw linkages between ERM and company performances with varied conclusions. Some have established a positive relationship while others have not. Hoyt et al, (2006) performed a study on the value of ERM and its influence on corporate performance of U.S. Insurance Firms. The conclusions drawn from this study were that ERM creates value. Jean-Louis and Walker, (2012) on a study of ERM and its influence on company performance, found that the adoption and implementation of ERM enhances management consensus, better decision-making and communication of risks within the business.

Negative correlation between ERM and corporate performance have also been noted in a couple of studies. In a research study by Pooser and Tobin (2012), one of their conclusion was that ERM does not influence the ROA of a company. Linda and Baroroh (2016), on a study of ERM on company value mediated through financial performance concluded that ERM does not have significant influence on company value and profitability. Norlida and Manab, (2013) on their study on ERM's influence on company value concluded that although ERM contributes to increased shareholder value, it is not evident if it is the only factor implying that other factors could be playing a role.

The shortcomings of the empirical studies reviewed included inadequate responses from the study targeted groups, use of financial data that only spans one year horizon, few studies having been conducted especially from the developing and emerging countries. For example in Kenya there were only three studies that have been cited on ERM namely a review of ERM strategies and practices as determinants of performance in commercial Banks by Wambua, (2010); the impact of ERM on the corporate value of NSE listed companies by Waweru and Kisaka, (2011); and ERM impact in the financial services industry by Musyoki and Komo, (2017). In addition the study by Wambua, (2010) only focused on financial risks leaving out non-financial risk inherent in the Banking business.

These shortcomings and limitations coupled with varied divergent views and conclusions presented a compelling need to continue conducting studies in this area with a view to determine if enterprise risk management has influence on company performance and contribute to the body of knowledge of this subject. This study therefore attempted to address the question: what is the influence of ERM on the performance of firms listed at the Nairobi Securities Exchange (NSE)?

1.3 Research Objective

The objective of this research was to establish the influence of ERM on the performance of companies publicly listed at the Nairobi Securities Exchange.

1.4 Value of the Study

The study will contribute to existing body of knowledge and literature needed to sustain advancements towards realization of an enterprise risk management theory, which later studies can make reference to in conducting other studies. ERM as a discipline is fairly new and its adoption and implementation in developing nations is quite low and therefore this study will generate interest in ERM and identify additional areas of research studies for scholars and research students.

The study will enrich the ongoing policy discussion around better adoption and implementation of enterprise risk management programmes as catalysts for good corporate governance and performance in both public and private companies. The Kenya Government through the Mwongozo Code of Governance has made it mandatory for all public institutions to adopt and implement ERM, and therefore this study will contribute to ERM institutionalization by showcasing empirical evidence on the benefits of implementing ERM, (SCAC, 2015).

For ERM professionals and practitioners, this study will provide them with tested best practice standards drawn from listed companies which they can leverage and implement in their companies. The study will also highlight challenges that listed companies experience in implementation of ERM.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section covers the theoretical foundation and similar studies that have been conducted to establish existence of a positive relationship between ERM and company performance. The theories discussed include the Modern Portfolio Theory, Capital Asset Pricing Model, behavioral decision-making and resource–based theories. A number of both local and global studies on the subject are also discussed.

2.2 Theoretical Foundation

This section consists of theories which relate to the study. Four theories have been described. They comprise Modern Portfolio Theory by Harry Markowitz's, Capital Asset Pricing Model Theory by Sharpe (1964) and Lintner (1965), Behavioral Decision Theory by March and Shapira (1982) and Resource-based Theory by Barney et al, (2011).

2.2.1 Modern Portfolio Theory (MPT)

ERM is a discipline that traces its roots from the Modern Portfolio Theory. The theory advances a methodology for evaluating the aggregate risk of a portfolio of securities coupled with the expected returns. In Modern Portfolio Theory, an investor would select a portfolio of securities that produces better returns. The model makes an assumption that investors are naturally risk averse and therefore when choosing between portfolios, they would only care about their expected returns compared to the risks of the portfolio. As a result of this expectation, investors end up choosing portfolios that minimize the risk of portfolio returns and maximizes the portfolio expected returns, given the attendant risks.

ERM extends this theoretical concept of MPT beyond financial risks to include all other risks that face a company. The theory does not support the assertion that ERM creates value, but argues that investors are not concerned with company-specific risks since these risks within a portfolio can be easily eliminated through diversifying the assets in the portfolio, and this the investors can do by themselves and does not need the company to do it for them. The theory also contends that in a perfect capital market, ERM does not create value but leads to its destruction by forcing the companies to spend on setting up the ERM systems and processes. This expenditure represents an outflow of resources from the business which is a direct cost to the investor (Beasley, Pagach, and Warr, 2008: 2011).

The last couple of years has experienced varied theoretical research that have been key in championing the need for ERM and have provided justification for ERM adoption and implementation in companies. Nocco and Stulz, (2006) in their study of MPT and ERM argued that the state of market imperfections in the economies and business environments render invalid the assertion by MPT that the markets are frictionless and therefore companies need not manage risks as these does not arise. Smith and Stulz, (1985) argued that ERM helps avoid the costs for potential financial distress that may otherwise occur if ERM is not implemented. Schleifer and Vishny, (1992) argued that ERM helps avoid cases of asset fire sales such as disposal of securities at a throw-away price as a result of lower-tail earnings during times of financial distress such as the one experienced in 2007 – 2009.

Lam, (2003); Soileau, (2010) and Tonello, (2007), contends that ERM reduces losses and earnings volatility by improving on the level of returns to capital and shareholder value. Lai and Samad, (2009); Liebenberg and Hoyt, (2003) argued that improved ERM translates into better strategic and operational decision making; while Lam, (2003); Belmont, (2004); Crouhy, Galai, and Mark, (2006) argued that ERM strengthens management 's confidence of business operations, and enhances better corporate governance systems coupled with enhanced business reputation.

2.2.2 Capital Asset Pricing Model (CAPM)

Sharpe (1964) and Lintner (1965) through this theory (CAPM) advanced the MPT approach one step further. CAPM offers a powerful and intuitively acceptable predictions on how to assess risks and the relationship between expected returns of an asset and the risk tied to the asset also known as volatility. Following CAPM, a theory on Options Pricing by Black, Scholes and Marton, (1973) was introduced picking up on the concepts advanced by both MPT and CAPM. According to Fong-Woon et al, (2011), CAPM provides a limited risk pricing model, which is based on a single market risk factor in that it compensates investors for the portfolio systematic risk they assume. The model does not accurately predict asset returns. This is due to its limitations as it fails to incorporate non-market risk factors, which are relevant for the asset price movements.

The limitations of MPT and CAPM are addressed by ERM, which provides for the consideration to other risk factors beyond the systematic risks that would concern an investor. Fong-Woon goes further to advance ERM as a process that addresses the limitations of CAPM by identifying and analyzing risks from a holistic and company-wide perspective with a view to managing the uncertainties the company faces as it creates value. ERM implementation framework provides the building blocks for a multifactor risk pricing model which is advanced by CAPM through its market based, single-factor model.

2.2.3 Behavioral Decision Theory

In the behavioral study of how management makes decision, a study conducted by March and Shapira (1982) and Slovic (1985), Fischhoff and Lichtenstein (1985), the researchers concluded that managers on their own volition go after risks, which aligns to their self-orientation and behaviors in life. The studies further advanced the view that managers are not sensitive to estimates of the probabilities of possible outcomes, which is a key concept being advanced by ERM. The studies also concluded that managers are increasingly affected by the way their attention is focused on critical performance targets, which all of them would be chasing after to ensure they are achieved as these offer a reward.

However according to Allais, (1953) and Arrow, (1965), the importance of risk to decision making is critical and can be attested by its position in decision theory, which is evident in the way managers think before making a decision. The managers would consider all the possible events that can either impact positively or negatively on their choice path. The same conclusion is drawn by Peters and Waterman, (1982) in their study of managerial ideology and Crouch and Wilson, (1982) in their study of risk assessment and management decision-making. In the studies, probability estimates of risks are considered and trade-offs framed to assess the factors that affect management actions as a consequence of decisions taken.

2.2.4 Resource-based Theory

According to Barney et al, (2011), the resource based theory assumes that there is significant diversity of resource endowments between companies and explains the entrenchment of competitive advantage between companies that possess a vast majority of resources. To achieve sustainable competitive advantage, a company must possess valuable resources that its competitors would not have or would find it difficult to harness. The processes, systems and strategies geared towards creating this pool of resources that are unmatched is a critical pillar of advancing a holistic view into ERM. The theory demands companies to purposefully advance opportunities for creating, harnessing and aligning its resource base (Helfat et al, 2007) with a view to achieve competitive advantage through measures such as better portfolio risk management and quick adoption to dynamic and turbulent business environments (Teece et al, 1997).

Due to environmental complexity, companies are subject to an unlimited amount of risks (Bromiley and Rau, 2016, Burisch and Wohlgemuth, 2016; Luhmann, 1995) of which management cannot deal with all of them at the same time and needs to identify and focus on those with the greatest impact on the company. Applying the resource-based theory clarifies which risks the company should focus on with the limited resources. This theory requires companies to routinely reassess their resource bases and appreciate the changing nature of available resources in addressing the risks that impact them.

2.3 Enterprise Risk Management and Corporate Performance

Effective management of risks creates and preserve value. Value can be in the form of new business opportunities which need to be taken advantage of. Value preservation is achieved through processes such as instituting proper and sound internal controls to prevent unwarranted losses occasioned by fraudulent business activities, corruption, non-compliance with regulatory requirements and wastage of resources as a result of inefficiencies in the processing and execution of processes, (COSO, 2014). ERM provides a platform for the prompt and proactive identification and responding to risks that manifests themselves in the industries and environments in which companies operate from, with a view to enhance the achievement of business objectives in an efficient, effective and integrated way (Anderson, 2005).

The financial crisis of 2007 – 2009 (also known as the sub-prime credit crisis) greatly affected the USA, Europe, Asia and some economies in Africa. The crisis led to massive losses and was considered one of the worst global financial crisis since the great depression. It is argued that some of the factors that led to the manifestation of the crisis included inadequate corporate governance practices, poor ERM processes, over-leveraging, and incorrect pricing of risks (Yeoh, 2009). During that period many companies in the USA and Europe were declared bankruptcy, while some sought government bailouts. At the heart of the crisis was poor risk management practices. Sabatini and Ingram, (2010), Lundqvist, (2014), goes further to indicate that following the crisis, a number of weaknesses in ERM were identified, new regulations on ERM and corporate governance practices were developed and companies put to task to strengthen their ERM programmes (Leen and Roland, 2012).

Mikes and Kaplan (2014), studied ERM as an evolving business concept by showcasing empirical studies and corresponding findings on its current state of maturity. The study encompassed a survey of available academic literature on ERM and a ten-year field project research, where 250 senior risk officers were interviewed and three detailed case studies conducted. The study concluded that ERM is a critical component of good corporate governance practices. The study also noted that companies with the potential for higher risk of financial distress are more likely to accommodate and adopt ERM which in itself is indicative of the value add of employing ERM in companies. Stephen Gates et al. (2013), conducted a research study of ERM practices in companies to assess the practical value of ERM. The conclusions of the study indicated that adoption and implementation of ERM in companies contributes to increased management consensus which is critical for sound implementation of company strategies, better decision making and communication of risk taking situations in the business.

Grace et al. (2010) performed a study of ERM practices in the insurance industry through assessing the impact of ERM on company performance. The study concluded that ERM creates value and enhances performance. McShane et al. (2011) reviewed the relationship between ERM implementation and company performance by leveraging Standard and Poor index that incorporates ERM as a variable factor in its rating of insurance companies. From the study they discovered existence of a sound relationship between ERM implementation and performance. They established that ERM contributes to shareholder value and similarly offers opportunities for competitive advantages to insurance companies enabling them achieve superior ratings and adherence to solvency regulations.

Jalal-Karim (2013), evaluated the impact of ERM on enhancing competitive business advantages among selected Bahrain corporations using Cronbach alpha test, regression and correlation analysis and concluded that ERM enhances competitive advantage. Gatzert and Martin (2015), studied whether ERM programs can create value by conducting a comparative assessment of empirical evidence from available literature and found the existence of a positive relationship. Lechner and Gatzert (2016), conducted a study on the characteristics of a company that determine the level of ERM implementation and subsequent effect of ERM on the value of the company by focusing on companies listed at the German stock exchange. They concluded that ERM is essential at improving company value for the listed companies. Lin et al. (2012) on a study of the effects of ERM on firm performance, concluded that ERM does not create value. Lundqvist and Vilhelmsson (2016) in their study, concluded that higher levels of ERM implementation is a key contributor to reduced levels of default risk indicating that ERM preserves value.

In Kenya, Waweru and Kisaka (2013) conducted a similar study in the Kenyan context with a focus on the companies listed at the Nairobi Stock Exchange. Their study sought to assess the significance of factors that drive the level of ERM implementation and ascertain whether there was any relationship between ERM implementation and its impact to the value of NSE listed companies. Their research findings indicated that a majority of the companies considered ERM as a strategic business initiative. Consistent with prior research done by Hoyt and Liebenerg (2011), the study established a positive relationship between ERM and corporate performance. Wambua (2010), conducted a study that sought to analyze the various risk management practices adopted by commercial banks and their influence on performance in Kenya. The research used descriptive statistics and regression analysis to analyze the results and the conclusion was that ERM contributes to the performance of banks in the management of credit, liquidity, interest and foreign exchange risk. The downside to the study was the limitation in the type of risks considered. The study left out non-financial risks such as governance risk, strategic risk, reputational risk, legal and compliance risks and operational risks.

The summary of the studies suggest that taking risk controllably is essential for companies since it can lead to enhanced business growth and produce returns that are in excess of the cost of capital, (Madhu, 2008). ERM as a process provides a strategic view into the threats that would impact a company and helps it protect its assets from the risk of diminished returns, (Ballantyne, 2013). The process provides for effective reporting and adherence to existing laws and regulations; protects and adds value to the company and its stakeholders through provision of a platform where company decisions are made in a consistent and controlled manner; contributes to a more efficient use and allocation of company resources in the form of capital; protects and enhances the company image and optimizes operational efficiency, (COSO, 2004; Nocco and Stulz, 2006). ERM helps forestall potential company failures, scandals, and fraud, (Manab et al, 2010). Therefore in view of these benefits, the process can be considered as a company governance initiative that constrain and help coordinate the leadership team and other company staff members’ behavior for the betterment of the company and improved corporate performance, (Baxter, Bedard, Hoitash and Yezzegel, 2013).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains how the research was conducted, the methods and tools for data collection, the research design and its justification, the population of the study and methods for data analysis including presentation.

3.2 Research Design

Burns and Grove (2003) explains the research design as a blueprint that enables a researcher to have maximum control over the factors that may affect the validity of the study findings by providing a plan that adequately illustrates how, when and where research data is to be collected and analyzed. The study used a descriptive survey design. The use of descriptive survey was the most effective as it made it possible to collect primary data on ERM implementation at a point in time from the target respondents.

3.3 Population

The research targeted all the 63 companies listed at the Nairobi Securities Exchange (NSE Website, 2017). The listed companies were selected for this study due to their large size, exposure to regulatory agencies, public and/ or investor scrutiny. They were expected to more likely have implemented ERM programmes. Listed companies are expected to adhere to good corporate governance practices as provided for under the Capital Markets Authority code of company governance and NSE listing requirements (CMA Website, 2017); and therefore this made them best subjects for this study as their level of ERM implementation was expected to be above average compared to non-listed companies.

3.4 Data Collection

Primary data on enterprise risk management (independent variable) and secondary data on corporate performance (dependent variable) from the NSE quoted companies was used in this study. Questionnaire was used to collect the data on the independent variable, while secondary data on corporate performance was obtained from the companies' annual reports. The questionnaire was divided into three sections. Section 1 comprised general information about the respondent and the company they work for. The respondent were requested to supply general information such as the company they work for, current position, industry/ sector, number of staff and the number of years with the company. Section 2 sought to establish if the company had set-up the right ERM governance, policies, systems and processes necessary for an effective implementation of ERM within the company and section 3 sought to establish the ERM risk culture established within the company.

The questionnaire consisted of statements with rating scale ranging from 1 to 4; where 1 – indicated strong opposition and 4 strong support to the statements. Each respondent was asked to rate the degree to which they agree or disagree with the ERM implementation statements provided for in the questionnaire. The full scale comprised of [1] strongly disagree, [2] disagree, [3] agrees, [4] strongly agrees.

3.5 Data Analysis

Research data analysis comprised processes geared towards ensuring that the data collected was correct and adequate for the task of analysis. Data clean-up and analysis was performed with the aim of discovering useful information, suggesting conclusions, and supporting decision-making. Measures of central tendency such as mean and standard deviation were used to analyze and summarize the data and findings presented in tables. The influence of ERM on company performance was tested using simple linear regression analysis. The regression model was: $Y = Bo + B_iX + e$, where Y is the dependent variable (corporate performance), Bo is the constant, X is the independent variable ERM and 'e' is the error term.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The chapter present the research findings with the discussion from the data results of response rate, descriptive findings and regression analysis.

4.2 Response rate

This section represents the response rate of the respondents. The number of questionnaires that were administered were 63, out of which 58 were properly filled and returned by the respondents. This represents a 92 percent response rate. A response rate of 50 percent or more is adequate, as supported by Rear and Parker (2011), who indicated that a higher response rate assures more accurate survey results.

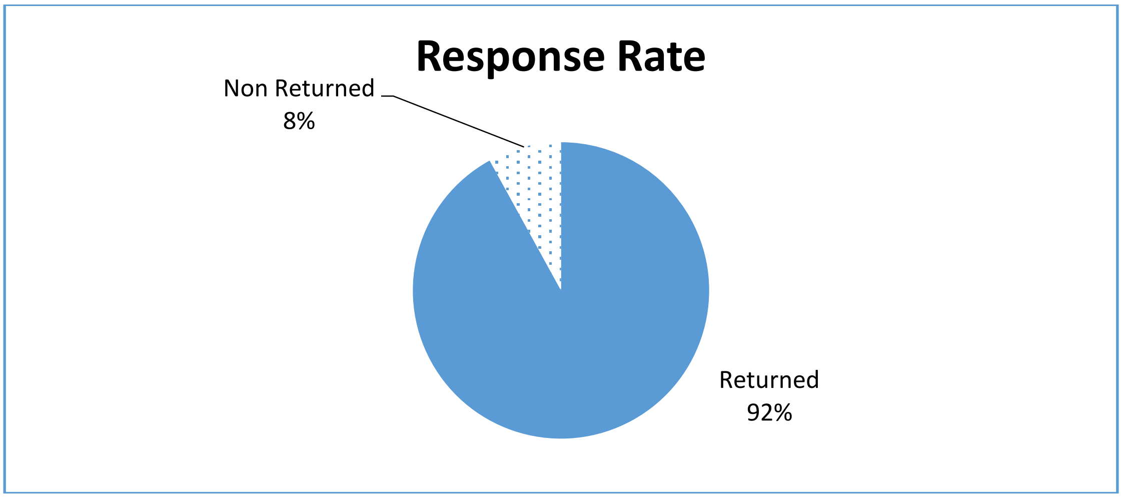

Figure 4.2: Response Rate

4.3 Descriptive Statistics Results for Enterprise Risk Management

4.3.1 Risk governance

The study sought to establish the level at which the respondents agreed or disagreed on the existence of proper risk governance structures within their companies, which are instrumental for enhanced corporate performance.

Table 4.3.1: Risk governance

Measures	Mean	Std. Deviation
1. The company has the right risk governance structures (department) for the proper management of risks that affect the business performance.	4.02	0.39
2. The board and senior management adequately provide oversight over the proper management of the company's enterprise risk management programme.	4.41	0.79
3. The heads of business units are at the forefront of championing the risk agenda within the company and they ensure that the risks that affect their business units are effectively managed.	4.50	0.63
4. The board and senior management effectively promote the risk agenda within the company and ensure that it is effectively managed.	4.33	0.78
5. The board and senior management have allocated adequate resources in the form of budgetary allocations and human resources for the purposes of effectively managing risks that impact the company.	4.47	0.71

The study established that the majority of the respondents agreed that their companies have the right risk governance structures for the proper management of risks that affect their businesses with a mean of 4.02; that their boards and senior management teams adequately provide oversight over the proper management of the company's enterprise risk management programme with a mean of 4.41; that their heads of business units are at the forefront of championing the risk agenda within their companies and they ensure that the risks that affect their business units are effectively managed with a mean of 4.50; that their boards and senior management teams effectively promote the risk agenda within their organizations and ensure that it is effectively managed with a mean of 4.33; and lastly that their boards and senior management teams have allocated adequate resources in the form of budgetary allocations and human resources for the purposes of effectively managing risks that impact the company with a mean of 4.47.

4.3.2 Risk management policies and framework

The study sought to establish the level at which the respondents agreed or disagreed on the existence of appropriate risk management policies and framework within their companies, which are instrumental for enhanced corporate performance.

Table 4.3.2: Risk management policies and framework

Measures	Mean	Std. Deviation
1. The company through the board and senior management have adequately communicated the company's risk management framework to all staff.	3.33	1.63
2. The company's risk management policies for managing financial and no-financial risks are effectively being utilized within the company to manage the related risks.	4.48	0.99
3. The company's risk appetite statement is well articulated within the company and is used in managing the risks that affect the company.	3.79	1.68

The study established that the majority of the respondents agreed with the statement that the companies through the board and senior management teams have adequately communicated the company's Risk management framework to all staff, with a mean of 3.33; that their companies risk management policies support the management of both financial and no-financial risks, with a mean of 4.48; and that their companies risk appetite statements are well articulated and leveraged in managing the risks that affect the companies with a mean of 3.79.

4.3.3 Risk management processes and practices

The study sought to establish the level at which the respondents agreed or disagreed on the existence and implementation of appropriate risk management processes and practices within the companies, which are instrumental for enhanced corporate performance.

Table 4.3.3: Risk management processes and practices

Measures	Mean	Std. Deviation
1. Risks within the company are proactively being identified and managed in all business units with a view to create new and preserve existing value.	4.74	0.69
2. The company conducts regular risks and controls self-assessment (RCSA) exercises across the company and the results of such exercises are being used to adequately manage the key risks that affect the company.	4.57	1.03

Measures	Mean	Std. Deviation
3. The company has good internal controls that have been optimized through proper design and documentation with a view to improve on process efficiency and effectiveness.	4.71	0.88
4. The company regularly uses risk reporting dashboards to enhance the level of communication of key risks that impact the company to the board of directors and senior management staff.	3.29	1.65
5. The company's board and senior management actively takes into consideration the risks that may impact the company's goals and objectives during company strategy planning sessions.	4.38	1.11
6. Regular risk management trainings are an important part and parcel of human resource capacity building within the company and both the board and senior management team continue to commit adequate resources for these trainings.	3.76	1.68

The study established that a majority of the respondents agreed with the statement that risks within the company are proactively being identified and managed in all business units with a view to create new and preserve existing value with a mean of 4.74; that the company conducts regular Risks and controls self-assessment (RCSA) exercises across and the results of such exercises are being used to adequately manage the key risks that affect the company with a mean of 4.57; that the company has good internal controls that have been optimized through proper design and documentation with a view to improve on process efficiency and effectiveness with a mean of 4.71; that the company regularly uses Risk reporting dashboards to enhance the level of communication of key risks that impact the company to the board of directors and senior management staff with a mean of 3.29; that the company's board and senior management actively takes into consideration the risks that may impact the company's goals and objectives during company strategy planning sessions with a mean of 4.38; and that regular risk management trainings are an important part and parcel of human resource capacity building within the company and both the board and senior management team continue to commit adequate resources for these trainings with a mean of 3.76.

4.3.4 Risk Culture

The study sought to establish the level at which the respondents agreed or disagreed on the existence of an appropriate risk culture within their companies, which are instrumental for enhanced corporate performance.

Table 4.3.4: Risk culture

Measures	Mean	Std. Deviation
1. Communication about risks that impact the company is open, timely, and transparent and provides all key stakeholders with the relevant information that informs the decisions and norms of the company.	4.52	1.20
2. Heads of departments and other staff members are regularly rewarded for appropriate risk management practices within the company.	4.39	1.31
3. Discussions of risks that affect the business units is part of the management team meeting agendas.	4.78	0.62
4. The leadership team has adopted an integrated view of risks that incorporates corporate governance, strategic, operational, compliance, fraud, reputational, security, business continuity, ICT and environmental risks.	4.66	0.85
5. Enterprise risk management improves the quality, efficiency and effectiveness of our processes, systems, and activities and supports us avoid/ reduce on wastage and unwarranted losses.	4.71	0.75
6. Enterprise risk management is viewed by the board and senior management staff as a valuable tool for enhancing the performance of the company.	4.57	1.08

The study established that a majority of the respondents agreed with the statement that communication about risks that impact the company is open, timely, and transparent and provides all key stakeholders with the relevant information that informs the decisions and norms of the company with a mean of 4.52; that the heads of departments and other staff members are regularly rewarded for appropriate risk management practices within the company with a mean of 4.39; that discussions of risks that affect the business units is part of the management team meeting agendas with a mean of 4.78; that the leadership team has adopted an integrated view of risks that incorporates corporate governance, strategic, operational, compliance, fraud, reputational, security, business continuity, ICT and environmental risks with a mean of 4.66; that enterprise risk management improves the quality, efficiency and effectiveness of their processes, systems, and activities and supports avoidance/ reduction of wastage and unwarranted losses with a mean score of 4.71; and that enterprise risk management is viewed by the board and senior management teams as a valuable tool for enhancing the performance of the company with a mean of 4.57.

4.4 Enterprise Risk Management and Performance

The objective of this study was to establish the influence of enterprise risk management on performance of firms quoted on the Nairobi Securities Exchange. This was done using simple linear regression analysis. The results are presented in table 4.4 below.

4.4.1 Correlations Analysis

Correlation is a term that refers to the strength of a relationship between two variables. A high correlation means that two or more variables have a strong relationship with each other while a weak or low correlation means that the variables are hardly related. Correlation coefficient can range from -1.00 to +1.00. The value of

-1.00 represents a perfect negative correlation while a value of +1.00 represents a perfect positive correlation.

Table 4.4.1: Correlations

Correlations		**Corporate Performance**	**Enterprise Risk Management**
Performance	Pearson Correlation	1.00	.862
	Sig. (2-tailed)		.000
	N	58	58

The study established positive association between dependent (corporate performance) and independent variable (enterprise risk management) at 0.05 significance level. The results in Table 4.4.1 show that the relationship between enterprise risk management and corporate performance with Pearson correlation of .862. The correlation matrix implies that the association between the independent variable (enterprise risk management) and corporate performance is high and therefore enterprise risk management being a key determinant of corporate performance of companies publicly quoted on the Nairobi Securities Exchange.

Table 4.4.2: Regression Results

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921[a]	.848	.846	.307

a. Predictors: (Constant), Enterprise Risk Management

b. Dependent Variable: Corporate Performance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.43	1	28.43	313.03	.000[b]
	Residual	5.09	56	.09		
	Total	33.52	57			

a. Dependent Variable: Corporate Performance

b. Predictors: (Constant), Enterprise Risk Management

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.684	.236		2.91	.005
	Enterprise risk management (ERM)	.870	.049	.921	17.69	.000

a. Dependent Variable: Corporate Performance

The results in Table 4.5 show that R = 0.921, implying a strong relationship between the independent variable (enterprise risk management) and the dependent variable (corporate performance). The R – Squared is 0.848; meaning that 84.8% of the variation in corporate performance of firms quoted on the Nairobi Securities Exchange is attributed to a one unit change in enterprise risk management at 95% confidence interval. The remaining 15.2% is due to factors not included in the study. The ANOVA results indicated that the model was statistically significant ($F=313.028$, $p<0.05$). The table further shows a significant beta co-efficient (Beta=0.921; $t=17.693$; $p<0.05$). The beta value implied that for one unit increase in enterprise risk management, corporate performance increased by 0.921. The findings therefore confirm that enterprise risk management has a significant influence on the performance of companies quoted on the Nairobi Securities Exchange. These results confirm the objective of this study.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, conclusion and recommendation of the study objectives and the corresponding hypothesis.

5.2 Summary of the Findings

The general objective of the study was to determine the influence of ERM on the performance of companies publicly quoted on the Nairobi Securities Exchange. The study established that there was a positive correlation between enterprise risk management and corporate performance. The simple linear regression results returned an R-Squared of 84.8%, which implied that 84.8% of the variation in corporate performance of firms quoted on the Nairobi Securities Exchange is attributed to a one unit change in enterprise risk management.

From the descriptive statistics results, the study also confirmed that a majority of the companies quoted on the Nairobi Securities Exchange have the right risk governance structures in place for the proper management of risks that affect their businesses; they have boards and senior management teams that adequately provide oversight over the proper management of enterprise risk management programmes; their boards and senior management teams effectively promote the risk agenda within their companies and ensure that risk is effectively managed; their boards and senior management teams have allocated adequate resources for the purposes of effectively managing risks; and that their companies risk management policies cover both financial and no-financial risks.

5.3 Conclusion

The study therefore conclude that enterprise risk management has a significant influence on the performance of companies quoted on the Nairobi Securities Exchange. To ensure a properly designed and instituted enterprise risk management programme, proper risk governance structures; risk management processes and practices; risk management framework and policies; and risk culture must be embedded and awareness created across the entire company for the benefits to be realized. The benefits can take many forms, some of which include improved quality, efficiency and effectiveness of company processes and services, reduction in wastage of resources and unwarranted losses.

5.4 Recommendations

The study recommends that companies should institute and nurture good enterprise risk management programmes. The programmes should encompass the design and institutionalization of appropriate risk governance structures to effectively provide direction and oversight over the management of risks that affect such companies. Enterprise risk management frameworks and policies should be defined and communicated across the enterprise to widen the ownership and enhance responsibility and accountability for all staff in the management of risks within the companies. A sustained campaign to improve on risk culture should be introduced in companies coupled with regular risk management practices of risk identification, risk assessment, risk control and mitigation. The campaign should encourage communication of risks in an open, timely, and transparent manner and provide all key stakeholders with the relevant information that informs the decisions and norms of the company.

Enterprise risk management programmes should be supported by the top leadership team. The support should be in the form of budgetary allocation and human capacity enhancements. Regular risk management trainings should be conducted to all staff of the company. The risk management programme should be monitored and assessed for progress on a continual basis to ensure the envisaged benefits are realized and sustained.

5.5 Limitations

The study targeted all the companies quoted on the Nairobi Securities Exchange, which were 63; however only 58 responded. It remains unknown how the remaining five could have impacted the results. The study only used questionnaire to collect the data on the independent variable, this form of data collection could encourage certain biases on the part of the respondents. It remains unknown how the results would have come out if the questionnaire would have been complemented with one-on-one interviews with the respondents. The study used a simple linear regression analysis to assess the relationship between the independent (enterprise risk management) and dependent variable (corporate performance). It remains unknown how the introduction of intervening or intermediating variables would have affected the results of the study. Lastly some respondents could have been biased while giving information on the questionnaire due to fear of confidentiality and others refused to provide answers to questions they viewed to be personal.

5.6 Areas for Further Research

The study targeted companies quoted on the Nairobi Securities Exchange. Such companies due to enhanced public scrutiny and stiff regulatory requirements by the Capital Markets Authority and the Central Bank of Kenya, are expected to have robust enterprise risk management programmes and may be inclined to positively affirm its benefits on corporate performance. The assertion could be different for companies which are not quoted and regulated. Therefore by expanding the target respondents to include unquoted and unregulated companies can form an area for further research.

The study through the use of linear regression model to analyze the relationship between the independent (enterprise risk management) and dependent variable (corporate performance) left out possible intervening and mediating variables, which may have had an effect on the study results. There is an opportunity to enhance the study by considering such additional variables. This was also confirmed by the 12.8% in the regression analysis results of the relationship between the independent and dependent variable, which could not be explained since it was due to other factors not included in the study.

The study considered enterprise risk management in totality as an independent variable; however there are a number of subsets of enterprise risk management such as corporate governance risk, strategic risk management, financial risks (credit risk, liquidity risk, and market risk), operational risk, business continuity risk, reputational risk, political risk, information technology and communication risk, cyber security risk and regulatory risk. These subsets present an opportunity for further research to assess their influence on performance of companies.

REFERENCES

Acharyya, M. (2008). In Measuring the Benefits of Enterprise Risk Management in Insurance: An Integration of Economic Value Added and Balanced Score Card Approaches, Working paper for the *Society of Actuaries*.

Akram, J. (2013). Leveraging Enterprise Risk Management (ERM) for boosting competitive business advantages in Bahrain, *World Journal of Entrepreneurship, Management and Sustainable Development Vol. 9 No. 1, pp. 29-42,* Emerald Group Publishing Limited

Anette, M. and Robert, S. (2014), Towards a Contingency Theory of Enterprise Risk Management, *Harvard Business School*

Baxter, R. Jean C. Bedard, R. Yezzegel, A. (2013), Enterprise Risk Management Program Quality: Determinants, Value Relevance and financial Crisis, *Contemporary Accounting Research Vol. 30 No. 4*, Bentley University

Bogodistov, Y. Wohlgemuth, V. (2017) Enterprise risk management: a capability-based perspective, *The Journal of Risk Finance, Vol. 18 Issue: 3, pp.234-251*

COSO. Committee of Sponsoring Organizations. (2004), Enterprise Risk Management-Integrated Framework. *New York: COSO*

Desheng, D. and David, O. (2010), Enterprise risk management: a DEA VaR approach in vendor selection, *International Journal of Production Research Vol. 48, No. 16, 4919-4932*

Desheng, D. and David, L. (2010), Enterprise Risk Management: Coping with Model Risk in a Large Bank, *The Journal of the Operational Research Society, Vol. 61, 179-190, No. 2,* Palgrave Macmillan Journals

Donald, P. and Richard, S. (2010), The Effects of Enterprise Risk Management on company performance, *A Journal of Practice & Theory*: *May 2008, Vol. 27, No. 1, pp. 35-66*

Fama, E. and Kenneth, R. (2004), The Capital Asset Pricing Model: Theory and Evidence, *The Journal of Economic Perspectives*, *18(3), 25-46*

Fischer, B. and Myron, S. (1973), The Pricing of Options and company Liabilities, *Journal of Political Economy, Vol. 81, No. 3 (May - Jun., 1973), pp. 637-654*

Fong-Woon, L. et al. (2011). Multifactor Model of Risk and Return through Enterprise Risk Management Framework. University of Malaya, Malaysia. *3rd International Conference on Information and financial Engineering. IPEDR vol.12 (2011), 555-559*

Gates, S, Jean-Louis, N, Walker, P (2013), Enterprise Risk Management: A process for enhanced management and improved performance, *Management Accounting Quarterly Volume 13 No 3,28-38*, Institute of Management Accountants

Griffin, J. and Mahon, F. (1997): performance Debate: Twenty-Five Years of Incomparable Research, The corporate Social performance and corporate financial: International Association of Business and Society: *Sage Publications, DOI: 10.1177/000765039703600102*

Jalal-Karim, A. (2013), leveraging enterprise risk management (ERM) for boosting competitive business advantages in Bahrain, *World Journal of Entrepreneurship, Management and Sustainable Development Vol. 9 No. 1, pp.65-75*, Emerald Group Publishing Limited

Jennifer, B. and Eileen, Z. (2011), By The Numbers: Individual Bias and Enterprise Risk Management, *Institute of Behavioral and Applied Management*

Kittipat, L. Rompho, N. (2014) A Study of the Relationship Between a Successful Enterprise Risk Management System, a performance Measurement System and the financial performance of Thai Listed companies, *Journal of Applied Business & Economics; Vol. 16 Issue 2, p. 81-92*

Klimczak, K. (2005), "company Risk Management from Stakeholders' Perspective", *TRANS' 05, SGH, Warszawa, Poland, pp. 371-380*.

Kraus, V. Othmar, L. (2013) The nexus of enterprise risk management and value creation: Connecting the Dots and Finding the Blind Spots, *Journal of Finance and Risk Perspectives, Vol. 1, No. 1, pp. 230-261*

Lechner, P. Gatzert, N. (2016), *Determinants and Value of Enterprise Risk Management: Empirical Evidence from Germany*, Working Paper, Department of Insurance Economics and Risk Management, Friedrich-Alexander University Erlangen-Nürnberg (FAU)

Leen, P. and Roland, F. (2012), The Adoption and Design of Enterprise Risk Management Practices: An Empirical Study, *European Accounting Review Vol. 21*, *No. 3*, *533–564*, *September 2012*, Routledge, Taylor and Francis Group

Linda, A. Baroroh, N. (2016) The Relationship Between Enterprise Risk Management (ERM) And Firm Value Mediated Through The financial performance, *Review of Integrative Business & Economics Research Vol 5, No. 1, pp. 128-138*

Lintner, J. (1965), Security Prices, Risk and Maximal Gains from Diversification, *Journal of Finance 20, pp.587-615*

Mami, W. (2010), Enterprise Risk Management Strategies and Practices As Determinants of performance in Commercial Banks in Kenya, an *MBA Project* submitted to the School of Business, University of Nairobi.

March, J., & Shapira, Z. (1987). Managerial perspectives on risk and risk taking. *Management Science, 33(11), 1404-1418*.

Mark, F. and Ronan, G. (2015), The Valuation Implications of Enterprise Risk Management Maturity, *The Journal of Risk and Insurance. 82, No. 3, 625–657*

Markowitz, H. (1959), *Portfolio Selection: Efficient Diversification of Investments*, New York: John Wrigley and Sons Inc. London. Chapman & Hall, Ltd, Cowles Foundation for Research in Economics, Yale University.

Martin, F. Grace, J. Leverty, T. Phillips, R. Shimpi, P. (2014), The Value of Investing in Enterprise Risk Management, *The Journal of Risk and Insurance 82. No. 2, 289-316*

Merton, R. (1972), An Inter-temporal Capital Asset Pricing Model, *Econometrical 41*

Merton, R. (1977), On the Pricing of Contingent Claims and the Modigliani and Miller Theorem, *Journal of financial Economics 5, pp 867-887*

Michael, K., Anil, N. and Elzotbek, R. (2011), Does Enterprise Risk Management Increase company Value, *Journal of Accounting, Auditing & Finance 26(4) 641–658*

Mikes, A. Kaplan, R. (2014), *Towards a Contingency Theory of Enterprise Risk Management*, Harvard Business School, Working Paper, 13-063, January 13, 2014

Modigliani, F. and M. H. Miller (1958), The Cost of Capital, company Finance and the Theory of Investment, *American Economic Review 48*

Musyoki, D. Komo, L. (2017), Risk Factors and Enterprise Risk Management in the financial Services Industry: A Review of Theory and Evidence, *IIARD International Journal of Economics and Business Management ISSN 2489-0065 Vol. 3 No. 1 2017* www.iiardpub.org

Nadine, G. and Michael, M. (2015), Determinants and Value of Enterprise Risk Management: Empirical Evidence From The Literature, *Risk Management And Insurance Review Vol 18, No. 1, 29-53*

Nelson, W. and Kisaka, E. (2011), The Effect of Enterprise Risk Management Implementation on the Value of companies Listed in the Nairobi Stock Exchange, *Journal of Applied Finance & Banking, vol. 3, no. 3, 2013, 81-105.* Science press Ltd.

Quon, T. Zeghal, D. Maingot, M. (2012), Enterprise Risk Management and Business performance during the financial and Economic Crisis, *Problems and Perspective in Management, Volume 10, Issue 3, pp 227-247*

Robert, E. and Andre, P. (2011), The Value of Enterprise Risk Management, *The Journal of Risk and Insurance Vol 78, No 4, 795-822*

Sara, L. and Anders, V. (2016), Enterprise Risk Management and Default Risk: Evidence from the Banking Industry, *School of Economics and Management, Department of Business Administration*, Lund University and Knut Wicksell Centre for financial st

Sharpe, W.F. (1964), Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk, *Journal of Finance 19, pp 425-442*

Sharpe, W.F. (1970), *Portfolio Selection and Capital Markets*, New York, McGraw-Hill

Capital Market Authority: https://www.cma.or.ke/

Nairobi Securities Exchange: https://www.nse.co.ke

APPENDICES

Appendix 1: NSE Listed companies

Table 1: List of companies in the Nairobi Securities Exchange (NSE)

No.	company	Symbol	Sector
1	ARM Cement	ARM	Industrials
2	Atlas African Industries	AAI	Industrials
3	B O C Kenya	BOC	Basic Materials
4	Bamburi Cement	BAMB	Industrials
5	Barclays Bank of Kenya	BBK	financials
6	BAT Kenya	BATK	Consumer Goods
7	Britam (Kenya)	BRIT	financials
8	Car & General (K)	CG	Consumer Services
9	Carbacid Investments	CARB	Basic Materials
10	Centum Investment Co	ICDC	financials
11	CIC Insurance Group	CIC	financials
12	Co-operative Bank of Kenya	COOP	financials
13	Crown Paints Kenya	BERG	Basic Materials
14	Deacons East Africa	DCON	Consumer Services
15	Diamond Trust Bank Kenya	DTK	financials
16	Eaagads	EGAD	Consumer Goods
17	East African Breweries	EABL	Consumer Goods
18	East African Cables	CABL	Industrials
19	East African Portland Cement	EAPC	Industrials

No.	company	Symbol	Sector
20	Equity Group	EQTY	financials
21	Eveready East Africa	EVRD	Consumer Goods
22	Express Kenya	XPRS	Consumer Services
23	Flame Tree Group Holdings	FTGH	Basic Materials
24	Housing Finance Co Kenya	HFCK	financials
25	Home Afrika	HAFR	financials
26	I&M Holdings	IM	financials
27	Jubilee Holdings	JUB	financials
28	Kakuzi	KUKZ	Consumer Goods
29	Kapchorua Tea company	KAPC	Consumer Goods
30	KCB Group	KCB	financials
31	KenGen company	KEGN	Utilities
32	KenolKobil	KENO	Oil & Gas
33	Kenya Airways	KQ	Consumer Services
34	Kenya Orchards	ORCH	Consumer Goods
35	Kenya Power & Lighting Co	KPLC	Utilities
36	Kenya Re	KNRE	financials
37	Kurwitu Ventures	KURV	financials
38	Liberty Kenya Holdings	CFCI	financials
39	Limuru Tea Co	LIMT	Consumer Goods
40	Longhorn Publishers	LKL	Consumer Services
41	Mumias Sugar Co	MSC	Consumer Goods
42	Nairobi Business Ventures	NBV	Consumer Services

No.	company	Symbol	Sector
43	Nairobi Securities Exchange	NSE	financials
44	Nation Media Group	NMG	Consumer Services
45	National Bank of Kenya	NBK	financials
46	NIC Bank	NICB	financials
47	Olympia Capital Holdings	OCH	Industrials
48	Safaricom	SCOM	Telecommunications
49	Sameer Africa	FIRE	Consumer Goods
50	Sanlam Kenya	PAFR	financials
51	Sasini	SASN	Consumer Goods
52	CfC Stanbic Holdings	CFC	financials
53	Standard Chartered Bank Kenya	SCBK	financials
54	Standard Group	SGL	Consumer Services
55	Stanlib Fahari I-REIT	FAHR	financials
56	Total Kenya	TOTL	Oil & Gas
57	TPS Eastern Africa	TPSE	Consumer Services
58	TransCentury	TCL	Industrials
59	Uchumi Supermarkets	UCHM	Consumer Services
60	Umeme	UMME	Utilities
61	Unga Group	UNGA	Consumer Goods
62	Williamson Tea Kenya	WTK	Consumer Goods
63	WPP Scangroup	SCAN	Consumer Services

Source of Data: NSE Website – Report as at 23 October 2017

Appendix 1: Research Study Questionnaire

Section I: company Profile

For each of the questions below, please provide an appropriate answer within the space provided:

1. Name of your company:

   …………………………………………………..……………

2. Your position within the company:

   ……………………………………………………………

3. The industry/ sector your company belongs to:

   …………………………….……………

4. The number of staff within the company:

   ……………..……………………………………

5. The number of years your company has been in existence? (Select the correct response)

   a) Less than 2 years [ ]

   b) 2 to 5 years [ ]

   c) 6 to 10 years [ ]

   d) Above 10 years [ ]

Section II: (a) Risk Governance

The questions in this section are related to how risk management is governed within the company. Risk governance comprises of aspects such as whether there is a risk management function or department within the company and how that function is structured in terms of reporting lines and staffing. *Please indicate the extent to which you agree or disagree with the statements by marking your preferred choice with a tick in the appropriate box.*

No.	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
1	The company has the right risk governance structures (department) for the proper management of risks that affect the business performance.				
2	The board and senior management adequately provide oversight over the proper management of the company's enterprise risk management programme.				
3	The heads of business units are at the forefront of championing the risk agenda within the company and they ensure that the risks that affect their business units are effectively managed.				
4	The board and senior management effectively promote the risk agenda within the company is effectively				

No.	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
	managed.				
5	The board and senior management have allocated adequate resources in the form of budgetary allocations and human resources for the purposes of effectively managing risks that impact the company.				

Section II: (b) Risk Management Policies and Framework

The risk management policies and procedures are the building blocks for an effective institutionalization of enterprise risk management within a company and therefore this section seeks to determine if the company has the appropriate policies and procedures needed to effectively govern risk management. *Please indicate the extent to which you agree or disagree with the statements by marking your preferred choice with a tick in the appropriate box.*

#	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
1	The company through the board and senior management has				

#	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
	adequately communicated the company's Risk management framework to all staff.				
2	The company's risk management policies for managing financial and no-financial risks are effectively being utilized within the company to manage the related risks.				
3	The company's risk appetite statement is well articulated within the company and is used in managing the risks that affect the company.				

Section II: (c) Risk Management Processes and Practices

Risk Management processes, systems and activities comprise of the necessary tools, processes and methodologies needed in place for effective implementation of enterprise risk management programmes within a company. This section therefore is intended to ascertain if such processes, systems and activities are in place and being performed. *Please indicate the extent to which you agree or disagree with the statements by marking your preferred choice with a tick in the appropriate box.*

#	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
1	Risks within the company are proactively being identified and managed in all business units with a view to create new and preserve existing value.				
2	The company conducts regular Risks and controls self-assessment (RCSA) exercises across the company and the results of such exercises are being used to adequately manage the key risks that affect the company.				
3	The company has good internal controls that have been optimized through proper design and documentation with a view to improve on process efficiency and effectiveness.				
4	The company regularly uses Risk reporting dashboards to enhance the level of				

#	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
	communication of key risks that impact the company to the board of Directors and senior management staff.				
5	The company’s board and senior management actively takes into consideration the risks that may impact the company’s goals and objectives during company strategy planning sessions.				
6	Regular Risk Management Trainings are an important part and parcel of human resource capacity building within the company and both the board and senior management team continue to commit adequate resources for these trainings.				

Section III: Risk Culture

For an effective appreciation and implementation of enterprise risk management within an company, it is imperative that the culture of the company is respect to its staff conduct and decision-making coupled with the way tasks and activities are executed must be aligned to good practices of enterprise risk management. Risk culture is all about enshrining a sustained culture of appropriate company conduct and decision-making that is aligned to the principles of good enterprise risk management.

Please indicate the extent to which you agree or disagree with the statements by marking your preferred choice with a tick in the appropriate box.

#	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
1	Communication about risks that impact the company is open, timely, and transparent and provides all key stakeholders with the relevant information that informs the decisions and norms of the company.				
2	Heads of Departments and other staff members are regularly rewarded for appropriate risk management practices within the company.				
3	Discussions of risks that affect				

#	Questions	Strongly Agree [4]	Agree [3]	Disagree [2]	Strongly Disagree [1]
	the Business units is part of the Management Team meeting Agendas.				
4	The leadership team has adopted an integrated view of risks that incorporates corporate governance, strategic, operational, compliance, fraud, reputational, security, business continuity, ICT and environmental risks.				
5	Enterprise Risk Management improves the quality, efficiency and effectiveness of our processes, systems, and activities and supports us avoid/ reduce on wastage and unwarranted losses.				
6	Enterprise Risk Management is viewed by the board and senior management staff as a valuable tool for enhancing the performance of the company.				

Appendix 2: Secondary Data Capturing Form

Variables	Indicators	Measure	2013	2014	2015	2016	2017
Financial Performance	Cost to Income Ratio (CTI)	Mean					
	Return on Assets (ROA)	Mean					