

**IMPACT OF ENTERPRISE RISK MANAGEMENT PRACTICE
ON THE FINANCIAL PERFORMANCE OF INSURANCE FIRMS
IN KENYA**

By

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DECLARATION

I declare that this is my original work and has not been presented for a degree in any other university.

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DEDICATION

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ABSTRACT

Enterprise risk management has its role in enhancing effectiveness in an organization, improved quality of the risk reporting tools as well as enhanced business performance. Through the efforts of ERM insurance entities are offered the opportunity to avoid intolerable threats as well as effective adoption of acceptable risks. There is still no absolute consensus from the studies on ERM about whether investing in ERM results in better financial performance in insurance firms in Kenya. The research objective was to establish the relationship between Enterprise Risk Management and financial performance of insurance firms in Kenya. This research study adopted a descriptive survey research design. The target population of this study was all insurance firms in Kenya that have been in operation for the year 2012 to 2017 which are currently 51 insurance firms. A structured questionnaire was applied during data collection at primary level which included both closed and open-ended questions. The questionnaires were hand-delivered to the respondents' offices with a request to fill in the questionnaire in one week's time whereupon it was collected. Pilot study was done to assess the appropriateness of the questionnaire and respondents' understanding of questionnaire and to eliminate ambiguities and errors. The descriptive statistics were applied during analysis of the collected data. Inferential statistics such as correlation together with regression analysis were done. The study established there was a proportion variation of 68.9% of return on asset due to change in enterprise risk management activities which include internal environment, objectives setting, event identification, risk assessment, risk response, control activities, information & communication and monitoring. The research established enterprise risk management has a significant effect on the insurance companies' return on asset as they are able to benefit from increased profitability and reduce earnings volatility and meet strategic goals.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Risk management can be defined as a means through which threats facing individuals or even organizations are handled (Hoyt & Liebenberg, 2011). The key objectives that risk management serves are to guard an organization from extreme financial disturbance. The shielding is realized through affordable as well as stable costs (TCRP, 1995). Enterprise risk management (ERM) is a third generational form of risk management as it advanced towards a corporate-wide view from the silo methodology. ERM is applied throughout an organization to pin point and mitigate the major risks while enabling the firm achieve its objectives (McShane & Cox, 2009).

The need of a clear understanding and effective implementation of the suitable practices in risk management has been increasing as a result of the many business and corporate failures being witnessed (Walker, Shenkir, & Barton, 2014). Awareness of investors has been heightened on the importance of early business risk warning systems aimed at ensuring increased and timely remedy on such conditions. Management reporting of internal risk mitigation strategies to company board committees such as finance, audit and risk committees has become an important function (Klimczak, 2005). The Treadway Commission, COSO (2004) gave out its ERM, an Integrated Framework, as a model for risk management process that viewed ERM as one of the on-going, methodical processes requiring senior administration and the board to have a clear understanding of the future events whose occurrence can have a strategic effect on an enterprise.

1.1.1 Enterprise Risk Management

Enterprise risk management (ERM) has been categorized as a valued based analytical tool enabling insurers to generate cutting-edge services. ERM according to Lam (2013) has its role in enhancing effectiveness in an organization, improved quality of the risk reporting tools as well as enhanced business performance. Through the efforts of ERM insurance entities are offered the opportunity to avoid intolerable threats as well as effective adoption of acceptable risks. Preservation and value creation are the two ultimate goals sought by the ERM. Company capabilities in responding to risk and seizing opportunities are intensified through ERM (Deloitte, 2012). However, different entities give it different definitions but all in all maintain the same meaning and concepts. The Committee of Sponsoring Organizations (2004) defines ERM as just a process that is actioned by the board of directors in an establishment, management as well as other enterprise personnel, applied in the setting of objectives and across the entity designed to recognise potential events of impact to a business venture as well as manage the operational hazards within acceptable standards in the process of realizing the objectives (Suranarayana, 2013).

ERM departs from the traditionally applied methods of risk management that took in them the silo procedure where every threat was independently managed with no concern on risk interdependence. Through ERM, corporate wide assessment, quantification, funding and management of risk is made possible and this creates value for the firm (Nocco & Stulz, 2014). Through the ERM's efforts, joint risk assessment and evaluation of a firm's risk interactions enables effective resource allocation, capital structure and risk management decisions. The failure in incorporating ERM is documented as the key cause of the financial crisis witnessed in 2008 as documented by various professionals in the risk management profession.

ERM therefore embodies a radical paradigm shift from managing risks independently to holistic risk treatment.

The 2004 COSO ERM framework consists of eight essential components for enterprise risk management namely, internal environment, objectives setting, event identification, risk assessment, risk response, control activities, information & communication and monitoring.

1.1.2 Financial Performance

Financial performance is a measure of an organization's level of achievement in monetary terms. It measures how well a firm utilizes its resources to generate revenue and is an important aspect of financial risk management (Athanasoglou, M., Panayiotis & Delis, 2006). Financial performance can be measured through various profitability ratios which indicate the overall effectiveness of the company. The ratios used give an overview regarding the net earnings in comparison to debt, assets, shareholders equity and sales over a fixed period. Profitability ratios evaluate a company's control, growth and success in converting investments into profit (Mirie & Murigu, 2015). Ratios are used by lenders to gauge an organization's ability in repayment of both interest and loaned funds. Investors are also interested in profitability ratios as it helps evaluate the speed and amount of return they get from their investments in the firm. This research paper will focus on Return on Assets (ROA) as a measure of financial performance of insurance companies. Return on the Assets ratio is calculated as the Net Profit after Taxes divided by the Total Assets (PAT)/ (TA). The ratio (ROA) indicates the level of the operating efficiency for the firm based on all assets employed.

A firm's performance can be measured by means of financial or the non-financial operations. Financial operations can be described as a business routine categorization that is applied in measuring the performance of a business entity. Most companies aim at amplified profits, financial liquidity as well as solvency as means of quantifying the financial strength characterizing a business entity (Cheplel, 2013). Liquidity measures a firm's capability to meet its financial roles as they become due with no interference on business operation. On the other hand solvency is considered to be the measure of the debt capital amount applied in actualizing business activities relative to the capital invested in the business (Crouhy & Galai, 2012). Analyses made on business profitability rests its focus on the association that exists between the business revenues received and expenses incurred as well as the low productivity as a result of low capital investment (Mesquita & Lara, 2003).

According to studies conducted by other researchers it has been realized the complete look of a business is not provided when only financial measures are used to judge performance. Businesses must also consider competitiveness, quality of products, channels of commodity delivery, consumer satisfaction, reliability and after-sales services are applied (Bozac, 2005). The conventional financial methods have been documented as incompetent in measuring the aspects provide although they are the key performance indicators in the global commercial arena. Both the qualitative as well as quantitative indicators are used to shed light on the non-financial setting of an organization where lead time, consumer feedback, product quality, warranty claims as well as system downs are used. Attaining organizational goals is one methods of gauging the performance of an organization.

Venkatraman (1986) alluded that financial indicators can be used in the process of financial management with the use of sales growth, business performance, profit margins, organizational effectiveness and the rate on investment. However, Green (2007) identified how the returns on investment, advancement in markets and sales as well as profits are applied as the key factors in the process of estimating the performance of an organization. It has been generally accepted that both internal and external factors are used in gauging business profitability index. However, Athanasoglou and Panayiotis (2006) documented about the relationship between profitability and internal factors since they are influenced by the managerial decisions as well as policies while the external factors account for most of the company's structural setting such as the development of stock markets among other industrial factors.

1.1.3 Enterprise Risk Management and Financial Performance

ERM has been documented to create value out of the shareholders' investments as firms are better enabled to realize a highly optimized risk versus returns trade off. Meulbroek (2012) argues that the role played by risk management focuses on selecting the optimal risk level that can realize a maximized shareholder value and not just to minimize risk. Nocco and Stulz (2006), stated that assessments conducted on risks at project level results in decision making that is suboptimal since corporate level risk interactions and diversification is not factored. A key component of the ERM is the evaluation of the connections between risks and their combination as it improves the internal facets of the decision making process and a firms performance as capital allocation becomes more effective (Hoyt & Liebenberg, 2011). They further

posited that ERM results to reduction cash flow dangers, giving up on profitable business investments and expensive capital procurements.

Diverging from the conventional risk management systems, the ERM is seen to recognize the significant risks facing a firm combined together into a portfolio thus embracing a holistic risk management tactic (Rosenburg & Schuermann, 2006). On his part, Rustambekov (2011) highlighted the importance promoted by the ERM risk aggregation approach, as it allows the hedging of residual risk, instead of the onerous task of dealing with independent risks that maximizes business value through the effect of risk diversification. The same profit is as well documented by Hoyt and Liebenberg (2011) as they pointed out how risk integration aids firms in the evasion of the duplication of risk management layout. Beasley, Clune, and Hermanson, (2005), explained the benefit of risk portfolio in improving board and management ability to supervise and decide strategically.

1.1.4 Insurance Firms in Kenya

Insurance industry in Kenya has grown steadily since independence and now boasts of 60 years of existence. Currently there are 51 insurance firms, 5 reinsurance companies, 144 insurance brokers and 6,428 agents trading insurance in Kenya. The Insurance Regulation Authority (IRA) acts as the central watchdog on all insurance firms in Kenya and is mandated with the role of supervising, regulating and developing the Kenyan insurance industry. In the Kenyan insurance industry has a market penetration of 3.1% (IRA, 2015).

Insurance firms face various types of risks in their operations ranging from actuarial, credit, systematic, fraud, operational, liquidity and legal risks. With such a wide range

of risks, it is expected that the insurance firms are affected by the manner in which the risks are managed. The insurance business has principally become of interest to study about ERM's impact on their financial performance. This is because insurance firms are in the risk administration business and as such, they are expected in the forefront of ERM implementation. The adoption of ERM would enable insurance firms to improve capital allocation, better decisions in managing risks and capital structure (Cummins, Phillips & Smith, 2001).

1.2 Research Problem

The last decade has seen financial institutions face increased volatility in their business environments resulting in major financial crises. The financial crisis in 2007 resulted in more pressure to improve on regulations towards risk management especially in financial firms so as to decrease the probabilities of a future crisis. Risk management is continuing to receive increased attention within corporate practice and literature because of its perceived benefits to a firm which include increase of a firm's profits and to ensure survival of the firm. Despite the amplified awareness of the importance of risk management and interest in risk management, (Liebenberg and Hoyt, 2003) opines that minimal studies have been conducted to surface more information about the topic.

ERM has recorded minimal interest as a result of data insufficiency on risk management in addition to the discipline having existed for less than two decades (Jorion, 2001). There is variability on the results citing the relation between different performance measures and ERM. The modern portfolio theory explains how risk remains valueless to shareholders (Markowitz, 1952). Every kind of risk is characterized by a negative net present value that needs to be taken care of regardless

of the situations at hand. As such, (Beasley *et al.*, 2008) is documented to have embarked on investigations on such an argument as he related equity market response with senior risk management appointments. The researchers found the relationship between the cumulative abnormal returns and the appointment of a Chief Risk Officer to be insignificantly negative. (Hoyt & Liebenberg, 2011), showed a positive relation between the value of a firm and the appointment of a Chief Risk Officer in the same organization. Gordon *et al.*(2009) in their studies discovered that the association that tied the performance of an organization and the ERM was highly dependent on the way in which the ERM was implemented in the specific organization.

On a local account, Waweru and Kisaka,(2013) deliberated on the effect that implementing an ERM project would result on the value of twenty companies listed within the Nairobi Securities Exchange. According to the study, it was discovered that a positive relation existed between firm value and the extent of ERM's implementation. According to Nyagah, (2014), it was of benefit to study the effect of risk management on organizations financial performance of Kenyan pension fund management companies. Mirie and Mirigu (2015), on the other hand chose to study more on the factors determining the financial performance for the Kenyan general insurance companies.

It is evident from the above studies that various aspects of enterprise risk management have been studied, both locally and internationally. There is still no absolute consensus from the studies on ERM about whether investing in ERM results in better financial performance. Insurance firms play an important role in the Kenyan economy, of bearing risks on behalf of individuals and various businesses in all sectors which aids in business continuity. Therefore their ability to manage their risks and ensure their financial well-being not only impacts them but also directly impacts

on their clients' operations and consequently the Kenyan economy. Failure of the insurance industry means failure of the Kenyan economy to a great extent. However, there has been no study conducted locally on the impact of ERM practices wedged on the financial performance of Kenyan insurance companies.

Based on this gap, the present study aims to establish the impact created by ERM's adoption on the financial performance of the insurance establishments based in Kenya. The study attempted to provide answers on the question how does enterprises risk management affect financial performance in insurance companies in Kenya?

1.3 Research Objective

The research objective was to establish the relationship between Enterprise Risk Management and financial performance of insurance firms in Kenya.

1.4 Value of the Study

The understanding on ERM in organizations will be of benefit to policy makers, state/governments institutions in addition to other stakeholders as they set up policies as well programs helpful in the prevention of operational deteriorations of firms that often lead to default their legal and mandatory obligations that lead to bankruptcy. The management operations on risk management will be applied as significantly valuable tool applicable in the process of quick appraisals in the corporate risk profile and for tracking the credit ratings of different firms. Furthermore, the successful ERM's adoption will assist policymakers in the stimulation of its establishment within other entities since they will have gained sufficient evidence in local risk management. Regulatory organisations such as Insurance Regulatory Authority, Capital Markets Authority and Kenya Revenue Authority can apply the findings obtained from the study in the process of improving their regulatory frameworks.

Both the staff and the management will be assisted by the study since the insurance firms will have gained a wider scope of knowledge on the efficient methods applicable in managing risks. The study will as well contribute current body of knowledge on managing risks in the sense that it will identify the specific aspects of ERM that influence financial performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section covers various literatures that dealt with enterprise risk management and its effect on the firms' performance. The section starts with a detailed review of theories that underlie the study; specifically the modern portfolio theory and the agency theory. In addition, it covers the various factors that determine the value of a firm and also the empirical studies on the research subject area is covered. Finally, the section ends with a summary of the literature covered and the research gap.

2.2 Theoretical Framework

This section examines the different theories that were used to inform this study. These theories try to explain the link between the risk management and monetary performance of finances of Kenyan Insurance firms. The study was guided by the following theories; Modern portfolio and Agency Theory.

2.2.1 Modern Portfolio Theory

Markowitz (1952) is considered the pioneer authority behind the portfolio theory and posits that investors can reduce variance in their investment by diversifying their investment portfolio. His argument is that by investing in assets whose returns move in diverse directions, shareholders can actively offset the specific risks characteristic of the specific stocks in the market (Beasley, Clune & Hermanson, 2005). Markowitz recommends the selection of financial assets by different investors to their individual portfolios on the account of the contributions made by the particular asset in the general mean as well as variance linked to the portfolio (Bozac & Tipuric, 2005).

Hence, portfolio theory aims at maximizing the anticipated returns by each of the risks or even a decline in the risk characterizing a particular return realized from choices made on the various assets on proportional basis. Crouhy and Galai (2012) discourses on the basis of such a position through which diversified practices, investors can reduce the risk particular to specific stock recoding almost zero cost.

Berger (2005) attempted to construct and analyse optimal portfolios based on single period models but found it not to be adequate in the reflection of the real but dynamic fiscal world and in which different tactics have been developed with the aim of solving the multi-period portfolio assortment challenges.

Portfolio theory posits that risk management seems to be not valuable to shareholders since it incurs costs to implement, yet investors can diversify their own risk at almost cost. This means that risk management activities have negative present values and should not be undertaken by insurance firms.

2.2.2 Agency Theory

Agency theory is rooted in economic principles created by Alchian and Demsetz (1972). Agency theory shows the association between the principals, who have been cited as shareholders and the agents, the organizational executives as well as managers. This relationship is documented to have originated from the situation where shareholders hire the agents as the individuals running the daily activities of the organization. The agency theory, features in the context of the ownership separation and the controls categorized in the operational part of the organization. There exist two influential factors in the theory's influencing importance the first one is a simple tool that reduces the business into two applicants, the shareholders and the administrators while the second portion of the theory is represented by the suggestion

on self-interests on the corporation's managers (Gatzert & Martin, 2015). According to Stulz (1990), Managers can be risk averse to the detriment of shareholders by misusing resources through hedging diversifiable risks. Managers can also be short-sighted since they are compensated on short-term financial results. These conflicts between managers and shareholders can be minimized by creating compensation plans that are linked to stock performance and giving executives stock options to ensure managers have vested interest in the stocks thus reducing the likelihood of action detrimental to shareholders.

2.2.3 Moral Hazard Theory

Moral hazard refers to the situation whereby one party engages in extra risks because the consequences if their actions will be borne by another party. The term 'moral hazard' appeared in the late 19th century within the English insurance industry (Baker, 1996). Moral hazard situation is characterized by information asymmetry whereby the party risk-taker in the transaction has more information about their activities than they disclose to the other party who is paying dearly of the risks (Krugman, 2009).

The insurance contract forms a basis for the moral hazard regarding the agency model. Insurance firms have to worry about their clients behaving in riskier ways since they are insured. Here the insurance firm is the less educated client, and the safeguarded individual is the agent (Jorion, 2001). For example in automotive insurance, drivers being insured can be less cautious because the insurance firm will bear the costs of their accidents. In unemployment insurance the client can be slack in looking for employment since the insurance firm pays part of their living costs.

2.2.4 Stakeholder Theory

Freeman (1984) developed this theory as an instrument of management. Stakeholder theory explains that the focus of corporate policy should be the balancing of interests of all stakeholders of an organization. For example in some industries consumer trust in an organization's continued operation in future contributes to the organization's performance. The expected costs of financial distress and bankruptcy greatly affect the value of these trust claims. Risk management is able to mitigate these costs thus increasing the value of the organization (Klimczak, 2005).

Aabo (2004) investigated the connection between a firm's risk management strategy and its objectives. The study found that management is more conservative and concerned with value preservation when their focus is on the stakeholders and more risk forward and concerned with value addition when their focus is on shareholders. Stakeholder theory helps to understand management decisions and its effect on value creation or value preservation for a firm.

2.3 Determinants of financial performance

The profitability of Insurance firms is influenced by factors both internal and external to the firm. Internal factors refer to characteristics that are unique to the firm while the external factors refer to industry features and macroeconomic variables.

2.3.1 Enterprise Risk Management

Financial service industries are considered to be more probable to adopt ERM so as to be able to increase oversight of managerial risk-taking which would increase the firm's corporate governance and market efficiency (Hoyt & Liebenberg 2011).

Several studies suggest that ERM and firm performance are correlated. For example McShane and Cox (2011) in their studies found that ERM creates a positive and significant influence on firm value in firms with low or adequate ERM ratings, but no significant influence in organizations with robust ERM implementation scores. Gordon, Loeb and Tseng (2009) supported that the internal characteristics of a firm such as firm size and complexity determine the extent to which ERM positively impacts on firm performance. Hoyt and Liebenberg (2011) studied of 125 insurance firms that are publicly traded in the United States and found clearer results to show that ERM premium accrued on firm value was about 17% of firm value. The relationship between risk and return is a delicate balance and the extent of the underwriting risk of a firm influences the firm's performance. Insurers rely on sound underwriting policies guided by the risk appetite to guide financial performance. Underwriting risk is measured as the ratio of benefits incurred to net premium earned (Mirie & Murigu, 2015).

According to Jorion (2001), the risk supervision strategies and understanding the firm's sensitiveness to various risks determines the success of a corporation. Lam (2003) further states that managing risk cuts down the earning volatility whereas making the best use of returns for stakeholders and promoting stability of finance in the enterprise. Thus it can be seen that it will be advantageous for organizations to establish risk management practices. COSO (2004) outlines the main objectives of ERM as namely; risk and control self-assessment, identification of risk indicators, incident management, internal and external regulatory compliance and finally action tracking.

2.3.2 Firm Size

Another variable that influences firm performance is the size of the firm. Deloitte (2012) studied finance managers and found that larger firms are more agile at handling the interconnected challenges of managerial oversight, control, and strategic effectiveness. The larger a firm, the higher its market power and underwriting capabilities. This allows them to participate in more profitable risk undertakings that are usually taken up by reinsurance market. They are also able to accumulate large reserves to cushion for claims bursts and to grow their reserves meant for settling of claims and dealing with catastrophes.

Liebenberg and Sommer (2008) in their studies suggested that larger firms have greater resources which they are able to deploy across different lines of business and diversify. This enables larger firms to cope with volatile environments which affect different businesses at different times. Therefore suggesting that larger firms enjoy higher returns is no surprise. Economies of scale also improve as size increases which also lowers bankruptcy risk. Size is measured by subtracting reinsurance ceded from the net premiums received.

2.3.3 Leverage

Leverage is the extent of debt financing a firm utilizes. When a firm obtains more debt to finance its operations it reduces the risk of manager pursuing their own interests and investing the free cash flows into projects that do not maximize returns for the shareholders (Jensen, 1986). The use of leverage also carries with it the benefit of tax being a deductible expense which reduces the tax payable. Therefore, leverage can increase a firm's performance. However as leverage increases, lenders will insist

more on robust risk management structures and corporate governance so as to lower the risk of default due to financial distress (MacKie-Mason, 2000).

2.3.4 Sales Growth

Myers (1977) conducted studies where they concluded that the growth of sales positively impact the financial performance. However ERM comes into play when it is considered that over aggressive, unmanageable sales growth in financial bodies contributed to the 2008 global financial crisis. This was largely viewed as a cultural problem appropriate ERM would have checked. Nonetheless King and Santor (2008) maintain that sales growth has a positive influence on firm performance.

2.3.5 Age of the firm

Shiu (2004) concluded from studies that the older a firm is the more experienced it will be in dealing with arising issues effectively thus enjoying superior performance compared to newer firms. Older firms have also established reputations which allow them to operate and earn higher sales margins. However, there is danger of inertia and bureaucracy in older firms making them drop out of touch with market conditions. In this case there would be an inverse relationship observed when comparing age and financial (Demirgüç& Maksimovic, 2008).

2.4 Empirical Studies

The relationship between ERM and financial performance has led to the attraction of many studies in both developed and developing world have different conclusions. Schmit and Roth (2000) wanted to make an establishment on the effectiveness of various risk management practices within insurance firms in Belgium. At the time of controlling risk characteristics of the organization, the research found that the cost of capital cash flow volatility of the structure is lowered by the risk management

practices and thus causing financial distress. Additionally, the chance of a firm implementing an ERM program was found to be dependent upon the firm size and the ownership structure. Regarding the results of the connection between ERM and the several measures of the enterprise, amounts have been mixed up.

Beasley (2008) investigated the reaction of equity markets to high-ranking supervision schedules to direct a firm's ERM progressions. Consequently, their outcomes concluded that the benefits of ERM are firm-specific. They found that the reactions of non-financial companies to the appointments are related positively to the previous earnings volatility and the size of the company while relating negatively to leverage and liabilities to cash ratio. They noticed that financial companies do not apply in this case because such companies seem to be determined by stringent risk management demands mostly from regulators.

Hoyt and Liebenberg (2011) found the connection between the selection of a CRO and firm value to be significantly positive. This position was also supported by Gordon (2009) in their study and suggesting that the association between ERM and the performance of the firm depended on how well ERM programs was harmonized with specific dynamics of the firm.

Allayannis and Weston (2001) examined the connection between the value of an enterprise and the risk management for prominent nonfinancial firms that are primarily exposed to foreign currency. They found an average of 5% higher firm value for foreign currency derivatives users than for non-users.

Gatzert and Martin (2013) while undertaking liberal studies of empirical substantiation could find that the size of the company and institutional ownership influenced positively influenced the ERM adoption and that ERM has a positive influence on firm performance. However, they found that the ERM has no immediate benefits because implementing ERM components takes a longer time to penetrate the organization.

In contrast, Gates, Nicolas, and Walker (2012) examined the influence of ERM framework (based on four components of COSO) on firm performance in both US and Europe. They reported that ERM adoption enriched managerial performance. Further, they linked the implementation of ERM to more considerable management harmony, better-informed judgments, and better accountability. These suggest that the ability of an improved management decision making can be carried by ERM implementation framework.

Lin, Wen, & Yu, (2012), by applying multiple regression analysis studied the risk integration, value creation and strategic determinants of ERM. They targeted the casualty and property insurance firms of U.S.A. Their results, however, showed that firms that purchase more reinsurance and are more distributed geographically are better adopters of ERM. Furthermore, their outcomes also showed a negative correlation between the adoption of ERM and value of firms having a discount of 5% as markets responded negatively to ERM adoption.

On their part, Liebenberg and Hoyt (2013) made a contrast of the characteristics of the firms between 26 firms that adopted ERM and other non-adopters and could not point out any variance except the former being more levered and smaller in size.

However, their earlier study using publicly-traded insurers summarised that the adoption of ERM is connected to an enterprise of high value, designated by a Tobin's Q premium of approximately 20%.

Soyemi, Ogunleye, and Ashogbon (2014) used descriptive statistics and OLS regression to find an estimation of the effectiveness of practices of managing risks on the general enactment of financial status of the firm. However, their findings support that depending on the robustness, risk management risk can affect the financial performance of an enterprise. Though the scholar has not looked into whether the company adopts an integrative risk management strategy or the study provided evidence of how risk management practices influenced firm performance.

In a Nigerian context study, Olamide, Uwalomwa, and Ranti (2015) gave out a negative report stating non-significant rapport between risk management practices and firm enactment in Nigeria. The study, therefore, used Return on Equity as the indicator for financial performance against those loans that are not performing, capital ratio that is risk disclosure and loan-depositrate as indicators of risk management practices

However, Locally, Weru (2008) carried out a case study of Practical Action, an NGO firm to investigate the information systems risk management practices. The investigation revealed that the business had implemented several information system risk management strategies as per the recommendations of the COSO framework.

Waweru and Kisaka (2013) made a study on the relationship between ERM and the worth of 20 firms in the Nairobi Securities Exchange whereby, the level of

implementation measured the ERM while the substantial amount was estimated by means of Tobin Q. Their research revealed a definite connection between the level of ERM operationalization and firm value.

Cheplel (2013) sought to establish the influence of ERM practices in the financial performance of Kenyan banks. He adopted a descriptive approach and regression analysis. The five segments of risk hazard administration that were used as independent factors were Risk and Control self-assessment, Key Risk Indicators, Incident Management, Compliance to Internal and External Regulations and Action Tracking. He concluded that ERM requires substantial resources to implement but is beneficial and critical in ensuring continued survival organizations

Nyagah (2014) studied the influence of firm risk management on the financial enactment of retirement benefit management firms in Kenya. The investigator, therefore, adopted descriptive statistics and linear regression to establish the relationship. However, the results of the regression show that a significant variance in the financial performance of 99.3% was found among in the relationship between the variables. On the same note, F-statistic of 38.3 stayed at 5% significant level, suggesting that the classical model was suitable to elaborate the rapport between enterprise risk management and financial performance.

Mirie and Mirigu (2015) investigated the main factors determining financial enactment in overall insurance firms in Kenya using multiple linear regressions, with return on assets as the dependent variable. They found that leverage was positively related to profit, management competence index and equity capital while negatively

related to ownership structure and size. However, they did not see any relationship between performance and liquidity, retention ratio, underwriting risk, and age.

2.5. Summary of the Literature Review

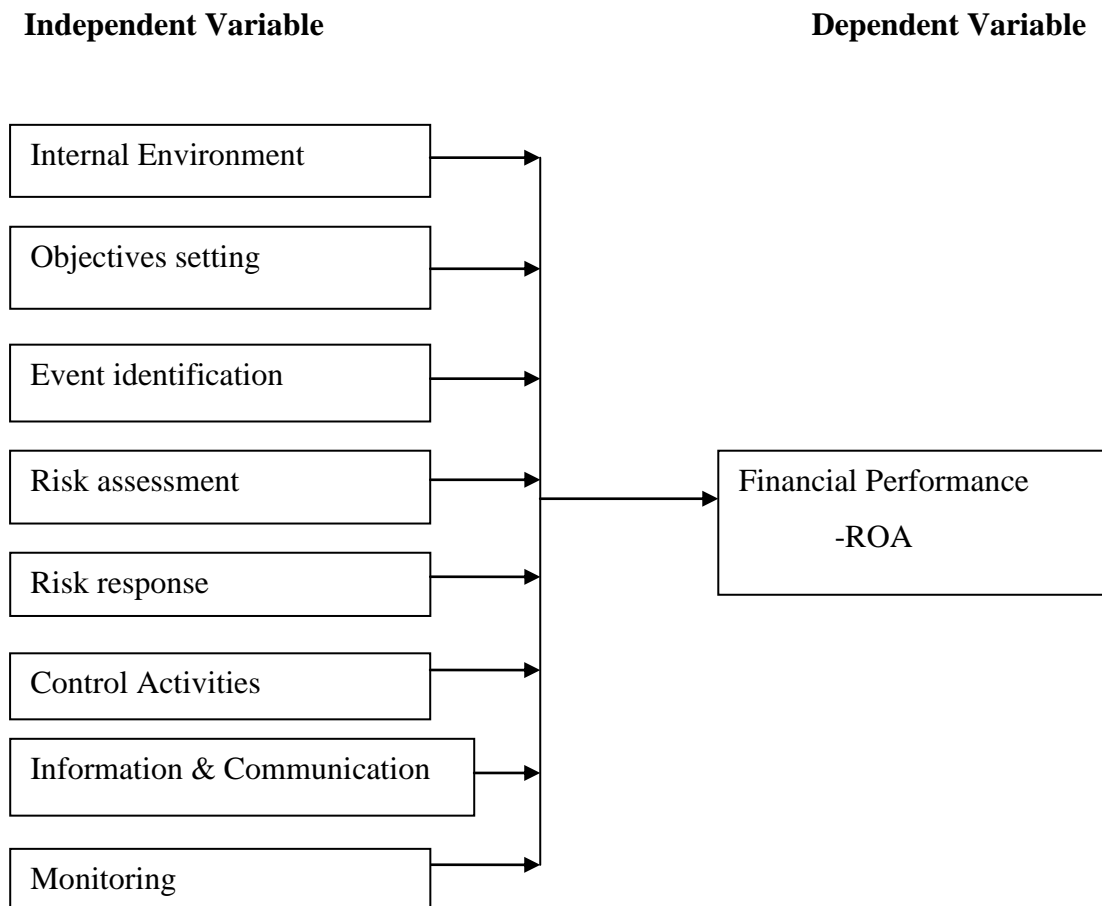
The importance of a firm employing the enterprise resource management system and the various ERM practices has been expounded in detail both in the literature reviewed and the empirical studies done on the subject area. Every day, the global markets experience volatility based on economic data, political news and other social-economic factors and as a result, the companies need to employ a management system that can easily identify the existence of the risk and also come up with the mechanism of mitigating itself against the risk (Crouhy & Galai, 2012).

Effective risk management was recorded as a method about identification, analysis and the implementation of procedures to minimize risks to the core business. It is also about guaranteeing some level of financial predictability to future earnings. A review of prior literature reveals the existence of significant relationship between the business's financial performance and its' risk management activities (Allayannis & Weston, 2001). A number of ERM practices employed by various firms include; risk identification, determination of organizations health, risk analysis, information and communication, risk evaluation. These measures are taken to mitigating underinvestment problem, to reduce asset substitution problem, undiversified managers wanting to reduce risk and management incentives structures, harmonizing investment and financing policies, bankruptcy reduction as well as the financial misery costs and decreasing the burden in corporate tax (Bozac & Tipuric, 2005).

However, from the previous studies it is evident how no previous studies record data showing the ability of improving their performance even as appropriate ERM practices for a particular industry or business line. Instead the literature and studies suggest the various ERM practices that can be adopted by a firm and also there exist an empirically validated model that provides the relationship that exists between adoption of various ERM practices and firm performance.

2.6 Conceptual Frame work

Figure 2.1 shows the conceptual framework of this research



Source: (Self, 2018)

Figure 2. 1: Conceptual Frame work

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Section three of this part enlighten the research design, the targeted population that the researcher is interested in, the secondary data and primary data to be collected, data sources and the analyzing skills that were employed.

3.2 Research Design

This refers to the system employed for amassing of the information to be investigated. This research study adopted a descriptive survey research design. A descriptive research gives more detailed information about the individual respondents. According to Kothari (2004), a descriptive design involves planning, organizing, collection and analysis of data so as to provide information being sought. This design also helps in collecting qualitative data to provide a great depth of responses resulting in a better and elaborate understanding of the phenomenon under study.

The descriptive survey design is a research design that describes variables (Cooper & Schindler, 2008). This design helped the study to collect quantitative and qualitative data. This will provide responses on information require by the study and that helped in testing hypotheses or to answer the questions of the current status of the subject under study.

3.3 Population of the Study

The target population of this study was all insurance firms in Kenya that have been in operation for the year 2012 to 2017 which are currently 51 insurance firms (Appendix II). The financial statements of these businesses are available and reliable in that they are subject to the mandatory audit by the Insurance Regulatory Authority (IRA) as a

regulator. Due to the limited number of the respondents, the study will be a census survey (Crouhy, & Galai, 2012).

3.4 Data Collection

A structured questionnaire was applied during data collection at primary level (Appendix I). Since some new explanation of the observed practices is likely to be found, a questionnaire is, therefore, an appropriate method of data collection, and any assumptions underlying any of the exercises can be studied in more detail. Further, it gives appropriate disaggregated information which can be used to study the methods of firms on an individual basis rather than in a collection. The questionnaires were hand-delivered to the respondents' offices with a request to fill in the questionnaire in one week's time whereupon it was collected.

The finance managers or those people who manage the firm's risks are the target respondents. The instruments applied in the survey included both closed and open-ended questions. The purpose of the open-ended questions is to encourage respondents to share as much information as possible in an unrestricted way while on the other hand; the closed-ended questions included questions which are answered merely by checking a box from a pre-determined set of responses presented on a five-point Likert scale. The secondary data was gathered from various insurance published reports and IRA reports. The research period was five years from the year 2012-2016.

3.5 Data Analysis

The descriptive statistics were applied during analysis of the collected data (measures of central tendency and measures of variations) together with regression analysis. However, multiple regression analysis was used to determine the effect of various aspects of ERM practices on financial performance of the insurance firms in Kenya.

The variable which is dependent in the study was Return on Assets ROA. On the other hand, the independent variables for the study will be various ERM practices based on COSO Risk management model 2004 components; Risk and Control Self-Assessment, Key Risk Indicators, Incident Management, Compliance of both Internal and External Regulations and Action Tracking.

3.5.1 Analytical Model

Regression equation assumed the following form:

$$ROA = f(x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8);$$

However, the regression was specifically of the form;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + e$$

Where Y = Financial performance which will be measured by ROA

α = Constant

X1 = Internal environment

X2 = Objectives setting

X3 = Event identification

X4 = Risk assessment

X5 = Risk response

X6 = Control activities

X7 = Information & Communication

X8 = Monitoring

e = Standard Error

3.5.2 Test of Significance

An F - the test was applied determining the degree in which the set of independent variables determines the variation in the dependent variable/ usefulness of the model as a whole in explaining the dependent variable. However, the services of the T-test were applied in measuring the significance level for the individual regression constraints/assessing whether the coefficients of individuals are statistically

significant. Thus, the confidence interval of the regression model was set at 95% and 5% significance level.

3.6 Pilot Testing

Pilot study was done to assess the appropriateness of the questionnaire and respondents' understanding of questionnaire and to eliminate ambiguities and errors. The study selected a pilot group of 5 respondents were selected from the target population of population for this test and they were not included in the actual data collection.

3.6.1 Validity of the instrument

The important criterion of research is validity which is the degree to which a questionnaire measures what it purports to measure. The content validity was tested with the guidance of supervisor and content validation by restricting the questions to the conceptualization of the study variables. 4.1.3 Validity Outcomes

Validity refers to the accuracy or truthfulness of a measurement in terms of the likelihood that research questions was understood or misinterpreted and on whether the research instruments provided adequate coverage of research objectives. Mugenda and Mugenda, (1999), states that to enhance validity of a questionnaire, data should be collected from reliable sources, the language used in the questionnaire should be kept simple to avoid any ambiguity and misunderstanding.

The validity of data collected was ensured through collecting data from the relevant respondents having been permitted by the University and the insurance company's management. The validity of the instrument was established by being given to experts with experience in enterprise risk management activities done in insurance firms in Kenya, who could evaluate the items in relation to the study objectives which was to

examine the relationship between enterprise risk management and financial performance of insurance firms in Kenya.

3.6.2 Reliability of the Instrument

Reliability is defined as the consistency of answers provided by an instrument this means that different measures of the same variable or repeated measurements should produce the same results. Cronbach coefficient alpha, which was based on internal consistency, was calculated where a value that was at least 0.70 was sufficient to confirm reliability of research instrument. In this study, reliability was ensured through a piloted questionnaire that was subjected to a sample of 5 respondents from the target population of population for this test and they were not included in the actual data collection. The results obtained are presented in Table 4.2.

Table 4.1: Reliability Results

Variable	Cronbach's Alpha	No. Of Item
Internal environment	0.8771	5
Objectives setting	0.8555	7
Event identification	0.8684	5
Risk assessment	0.7263	6
Risk response	0.7509	6
Control activities	0.8116	5
Information & Communication	0.7895	6
Monitoring	0.7108	6

From the findings, coefficient of internal environment was 0.8771 making question items reliable. The Cronbach Alpha of objectives setting was 0.8555 making items reliable. The items concerning event identification were reliable as they had a

Cronbach Alpha coefficient of 0.8684. The 4 items concerning risk assessment were reliable with Cronbach Alpha coefficient of 0.7263.

Coefficient of risk response was 0.7509 making question items reliable. The Cronbach Alpha of control activities was 0.8116 making items reliable. The 6 items concerning Information & Communication were reliable with Cronbach Alpha coefficient of 0.7895. The items concerning monitoring were reliable as they had a Cronbach Alpha coefficient of 0.7108.

This clearly indicated that the instrument for relationship between enterprise risk management and financial performance of insurance firms in Kenya presented to staff working in the selected insurance companies for data collection was reliable as all the Cronbach Alpha were closer to 1 and greater than 0.7.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The results are presented on the relationship between enterprise risk management and financial performance of insurance firms in Kenya. The primary data was gathered exclusively from a questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study. To enhance quality of data obtained, Likert type questions were included whereby respondents indicated the extent to which the variables were practiced in a five point Likert scale.

A total of 51 staff working in the selected insurance companies in Nairobi County were asked to respond to the relationship between enterprise risk management and financial performance of insurance firms in Kenya by use of a questionnaire. Out of 51 questionnaires administered 44 (86%) responded in time for data analysis. This rate was considered appropriate to derive the inferences regarding the objectives of the research

4.2 General information

The study sought the background information of the respondents based on the designation and period in which their firms they work at has been in operation.

4.2.1 Designation

The respondents were requested to indicate their designation in the company. The results are as indicated on Table 4.3.

Table 4. 2: Designation

	Frequency	Percent
Credit Manager	12	27
Financial Officer	21	48
Operation Officers	11	25
Total	44	100

From the findings, majority 48% of the respondents were financial officer, 27% of the respondents were credit managers while 25% of the respondents were operational officers. This implies that the information was collected from the staff best suited to offer the information- data on the relationship between enterprise risk management and financial performance.

4.2.2 Period that organization has been in operation

Table 4.4 shows the respondent's response on the period in which the organization has been in operation.

Table 4.3: Period that organization been in operation

	Frequency	Percent
Less than two years	2	5
2-5 years	19	43
6-10 years	16	36
Over 10 years	7	16
Total	44	100

From the findings, majority 43% of the respondents indicated that the organization has been in operation in a period of 2-5 years, 36% of the respondents indicated that the organization has been in operation in a period of 6-10 years, 16% of the respondents indicated that the organization has been in operation for over 10 years while 5% of the respondents indicated that the organization has been in operation for less than two years. This implies that respondents were from companies that have

been in operation for more than 2 years therefore had information required for the study.

4.3 Descriptive Analysis

4.3.1 Rating the extent of use of internal environment set up to enable managing of risks.

The study sought to establish the extent of use of internal environment set up to enable management of enterprise risks in insurance companies. The results were as presented on Table 4.5.

Table 4.4: Extent of Use of internal environment set up to manage enterprise risks in the company

	Mean	Standard deviation
Has communicated a risk management mission statement to entire organization employees	3.55	1.44
Has shared information on company innovations	3.41	1.15
Has incorporated responsibility for risk management into the job of each employees	4.55	0.50
Active involvement of Board of Directors management process	4.50	0.51
Manage execute risk management responsibilities with integrity and adhering to ethical values	4.37	0.49
Managers possesses adequate appraisal and monitoring skills, experience and good knowledge of risk management practices	4.59	0.50
Average	4.1616	0.765

From the findings, majority of the respondents indicate that use of internal environment set up to enable managers to possess adequate appraisal and monitoring skills, experience and good knowledge of risk management practices to a very great extent as indicated by mean of 4.59 with standard deviation of 0.50. Most of the respondents indicated that use of internal environment is set up to enable managing credit risks as the company has incorporated responsibility for risk management into

the job of each employees and have active involvement of Board of Directors management process to a very great extent as indicated by mean of 4.55 and 4.50 with standard deviation of 0.50 and 0.51. Respondents indicated that use of internal environment set up to enable management enterprises risks as company manage execute risk management responsibilities with integrity and adhering to ethical values to a great extent as indicated by mean of 4.37 with standard deviation of 0.49.

The results indicated that the use of internal environment set up enable managing enterprise risks as the companies have communicate risk management mission statement to entire organization employees and shared information on company innovations to a very great extent as indicated by a mean of 3.55 and 3.41 with standard deviation of 1.44 and 1.15. Overall, the results indicated that internal environment setup had been deployed in enterprise risk management in insurance companies to a great extent as indicated by a mean of 4.1616 and standard deviation of 0.765. This implies that use of internal environment set up enabled management of enterprises risks in insurance companies thus influencing financial performance. The results concurred with Athanasoglou and Panayiotis (2006) that internal environmental set up and deploying internal policies influence financial performance.

4.3.2 Use of the Objective Setting in Managing Enterprise Risks in Company

Respondents were requested to rate the extent of use of the objective setting in managing Enterprise risks in the company. The results were presented on Table 4.5

Table 4.5: Extent of use of the objective setting in managing enterprise risks in company

	Mean	Standard deviation
Has aligned its business risks with its corporate level and business unit level goals and objectives	3.30	0.90
Has established explicit, corporate and wide risk tolerance levels or limits for all major risk categories	3.57	0.79
Has clearly communicated its expectations for risk taking to senior managers	3.50	0.85
Align business strategic objective to compliance objectives	4.52	1.50
Has a reporting framework to report potential risk events and mitigation strategies	3.41	1.57
Average	3.661	1.122

From the findings, the respondents indicated that use of the objective setting in managing risks influence the company to established explicit, corporate and wide risk tolerance levels or limits for all major risk categories and to clearly communicated its expectations for risk taking to senior managers to a great extent as indicated by mean of 3.57 and 3.50 with standard deviation of 0.79 and 0.85. Most of the respondents indicated that aligned its business risks with its corporate level and business unit level goals and objectives to a great extent as indicated by mean of 3.30 with standard deviation of 0.90.

The respondents indicated that company align business strategic objective to compliance objectives and has a reporting framework to report potential risk events and mitigation strategies to a moderate extent as indicated by mean of 2.52 and 2.41 with standard deviation of 1.52 and 1.57. Overall, the results indicated that objective setting had been deployed in enterprise risk management in insurance companies to a

great extent as indicated by a mean of 3.661 and standard deviation of 1.122. This implies that use of the objective setting in managing credit risks in company influence financial performance. This is in line with Suranarayana (2013), that setting of objectives and across the entity designed recognises potential events of impact to a business venture as well as manage the operational hazards within acceptable standards in the process of realizing the objectives.

4.3.3 Rate the extent of use of Event Identification in Management of Enterprise Risk

The study sought to establish the extent to which event identification was used in managing enterprise risks. The results are presented in Table 4.6.

Table 4.6: Extent to which event identification is used in managing enterprise risks

	Mean	Standard deviation
Has established a comprehensive business risk inventory of the risks you expect your managers to manage	3.99	1.09
Its business units utilize facilitated self-evaluation and/or survey techniques to map risks	3.95	0.71
Has competent staff that predict risks based on losses incurred and devise mitigation measures	3.90	0.74
Has policy governing information collection and quantify risks	3.50	0.85
The company has clients' track record of premium repayment.	3.93	0.66
Has a risk screening, list and offer active mitigation and management to reduce occurrence of losses	3.56	0.79
Composite Mean	3.805	0.806667

From the findings, the respondents indicated that event identification influence financial performance as the company established a comprehensive business risk inventory of the risks managers manage, it's business units utilize facilitated self-evaluation and/or survey techniques to map risks and the company has clients' track

record of premium repayment to a great extent as indicated by mean of 3.99, 3.95 and 3.93 with standard deviation of 1.09, 0.71 and 0.66. Most of the respondents indicated that company has competent staff that predict risks based on losses incurred and devise mitigation measures, has a risk screening, list and offer active mitigation and management to reduce occurrence of losses and has policy governing information collection and quantify risks to a great extent as indicated by mean of 3.90, 3.56 and 3.50 with standard deviation of 0.74, 0.79 and 0.85. Overall, the results indicated that event identification had been deployed in enterprise risk management in insurance companies to a great extent as indicated by a mean of 3.805 and standard deviation of 0.8067. This implies that event identification in managing enterprise influence financial performance in insurance companies. This was supported by Allayannis and Weston (2001) that effective risk management was recorded as a method about identification, analysis and the implementation of procedures to minimize risks to the core business. It is also about guaranteeing some level of financial predictability to future earnings.

4.3.4 Rate the extent of use of risk assessment as a tool in managing enterprise risks.

The study sought to establish the extent to which risk assessment was used in managing enterprise risks. The results are presented in Table 4.7

Table 4.7: Extent of use of risk assessment in management of enterprise risks

	Mean	Standard deviation
Has a risk evaluation committee to determine risks in business activities.	3.61	0.84
Evaluates premium performance on a monthly basis to assess impact of risks on investment	3.70	0.76
Assess efficiency and leverage of business before venturing in it	3.54	0.90
Classification of risks based on the amount of damage they cause and correct measure to manage risks.	3.45	0.97

Has a risk loss recovery methods to increase earnings	3.20	0.97
Has a rating scale to be used for approval or sanctions to minimize risks facing the company	3.52	1.11
Composite Mean	3.503	0.925

Table 4.8 shows the respondents response on the extent to which use of risk assessment influence financial performance. From the findings, majority of the respondents indicated that risk assessment influence financial performance in the company as it evaluates premium performance on a monthly basis to assess impact of risks on investment and has a risk evaluation committee to determine risks in business activities to a great extent as indicated by mean of 3.70 and 3.61 with standard deviation of 0.76 and 0.84. Most of the respondents indicated that assessment efficiency and leverage of business before venturing in it and using of rating scale to for approval or sanctions to minimize risks facing the company influence financial performance to a great extent as indicated by mean of 3.54 and 3.52 with standard deviation of 0.90 and 1.11. Most of the respondents indicated that classification of risks based on the amount of damage they cause and correcting measure to manage risks and use of risk loss recovery methods increase earnings to a great extent as indicated by mean of 3.45 and 3.20 with standard deviation of 0.97 and 0.97. Overall, the results indicated that risk assessment had been deployed in enterprise risk management in insurance companies to a great extent as indicated by a mean of 3.503 and standard deviation of 1.076. This implies that use of risk assessment affect financial performance in insurance companies. This concurred with Nocco and Stulz (2014) that through ERM, corporate wide assessment, quantification, funding and management of risk is made possible and this creates value for the firm.

4.3.5 Rate the extent of use of risk response in managing enterprise risks

Table 4.8 shows the respondents response on the extent of use of the risk response in managing enterprise risks.

Table 4.8: Extent of use of the risk response in managing enterprise risks

	Mean	Standard deviation
Risk response methods are chosen in line with the risk appetite and tolerance of the organization	3.30	0.99
Risk management department assess the root cause , impact an interrelationship of the risk the organization	3.20	1.17
Address resource constraints in the selection of alternatives methods of risk mitigation	3.06	1.38
Has quantified its key risk to a large extent	3.38	0.96
Its business units actively participate in development and determination of risk responses	3.75	0.82
The company has a process to integrate the effects of the major risk types	3.33	1.14
Composite Mean	3.536	1.076

From the findings, the respondents indicated that use of the risk response as company's business units actively participate in development and determination of risk responses to a great extent as indicated by mean of 3.75 with standard deviation of 0.82, company quantified its key risk to a large extent and has a process to integrate the effects of the major risk types to a great extent as indicated by mean of 3.38 and 3.33 with standard deviation of 0.96 and 1.14. The respondents indicated that companies have risk response methods chosen in line with the risk appetite and tolerance of the organization, have risk management department assess the root cause, impact an interrelationship of the risk the organization and addresses resource constraints in the selection of alternatives methods of risk mitigation to a great extent as indicted by mean of 3.30, 3.20 and 3.06 with standard deviation of 0.99, 1.17 and 1.38. Overall, the results indicated that risk response in enterprise risk management had been deployed in insurance companies to a great extent as indicated by a mean of

3.536 and standard deviation of 1.076. This implies that use of the risk response in managing enterprise risks in insurance companies. This is in line with Deloitte (2012), that company capabilities in responding to risk and seizing opportunities are intensified through ERM.

4.3.6 Rate the extent of Use of the Risk Control Activities in managing enterprise risks. Table 4.9 shows the respondents response on the extent of use of the risk control activities in managing enterprise risks.

Table 4.9: Extent of use of the risk control activities in managing enterprise risks

	Mean	Standard deviation
Has established Policies executed to help ensure the risk responses management selects are effectively carried out	3.73	0.76
Has security framework that foster application and networking in the company	3.36	1.10
Has clear authorizations and approvals on business operations	3.11	1.32
Has policies governing verifications, reconciliations and company performance reviews in managing risks	3.72	1.22
Apply change management in managing occurrence of risks	3.54	0.67
Has framework that foster automation of business operations to mitigate major risks	3.50	1.52
Composite Mean	3.493	1.093

From the findings, the respondents indicated that use of the risk control activities such as establishment of policies executed to help ensure the risk responses and policies governing verifications, reconciliations and company performance reviews in managing risks to a great extent as indicated by mean of 3.73 and 3.72 with standard deviation of 0.76 and 1.22. Most of the respondents indicated that use of the risk control activities enable companies' application of change management in managing occurrence of risks and have framework that foster automation of business operations to mitigate major risks to a great extent as indicated by mean of 3.36 and 3.11 with standard deviation of 0.76 and 1.50.

From the findings, the respondents indicated that companies have security framework that foster application and networking in the companies and have clear authorizations and approvals on companies operations to a moderate extent as indicated by mean of 3.54 and 3.50 with standard deviation of 0.67 and 1.52. Overall, the results indicated that risk control activities in enterprise risk management had been deployed in insurance companies to a moderate extent as indicated by a mean of 3.493 and standard deviation of 1.093. This implies that there is deployment of risk control activities in insurance companies. This concurred with Deloitte (2012) that insurance companies and entities adopt risk controlling measures in managing enterprise risks.

4.3.7 Rate the extent of use of the Information and Communication in managing enterprise risks

The study investigated on the extent of use of the Information and Communication in managing enterprise in the company and results presented in Table 4.10

Table 4.10: Extent of use of the Information and Communication in managing enterprise risks

	Mean	Standard deviation
Has a corporate wide common language for communicating risk type exposures	3.59	0.97
Has regular briefs to the Board and Executive committee on risk management issues	3.37	0.67
Company has communication system to communicate risk control activities and monitoring effort	3.68	1.01
The company has communication	3.27	1.26
The company has adequate risk communication capabilities to identify, measure, and manage most major risk exposures and losses,	3.80	0.98
Composite Mean	3.542	0.978

From the findings, the respondents indicated that companies had adequate risk communication capabilities to identify measure and manage most major risk exposures and losses to a great extent as indicated by mean of 3.80 with standard deviation of 0.98. Most of the respondents indicated that companies were having communication systems to communicate risks control activities and monitoring effort as well as having corporate wide common language for communicating risks type exposures to a great extent as indicated by mean of 3.68 and 3.59 with standard deviation of 1.01 and 0.97. The respondents indicated that companies were having regular briefs to the Board and Executive committee on risk management issues to a moderate extent as indicated by mean of 3.37 and 3.27 with standard deviation of 0.67 and 1.26. Overall, the results indicated that information and communication in enterprise risk management had been deployed in insurance companies to a great extent as indicated by a mean of 3.542 and standard deviation of 0.978. This demonstrated that insurance companies use information and communication in managing enterprise risks. The results were supported by Bozac and Tipuric (2005) that information and communication practice employed by various insurance companies foster enterprise risk mitigation and resolve underinvestment problems and to reduce asset substitution problem.

4.3.8 Rate the extent of use of the risk monitoring in managing enterprise risks

Table 4.11 shows the respondents response on the extent of use of the risk monitoring in managing enterprise risks.

Table 4.11: Extent of use of the risk monitoring in managing enterprise risks

	Mean	Standard deviation
Has established written risk policy and procedure manuals that are consistent across all major risk	3.39	1.06
Its business units monitor and report on current status of key risks	3.59	0.97
Has identified the key metrics required for reporting on risk management performance	3.70	0.82
Monitors all significant risks on a regular basis, with timely and accurate measures of risk	3.89	0.95
Has a framework for tracking risk responses	4.43	0.50
Composite Mean	3.80	0.860

From the findings, the respondents indicate that companies were availing framework for tracking risk responses to a very great extent as indicated by mean of 4.43 with standard deviation of 0.50. Most of the respondents indicated that were monitoring all significant risks on a regular basis, were timely and accurate measuring of risk, identify the key metrics required for reporting on risk management performance and its business units monitor and report on current status of key risks to a great extent as indicated by mean of 3.89, 3.70 and 3.59 with standard deviation of 0.95, 0.82 and 0.97. The respondents indicated that companies established written risk policy and procedure manuals that were consistent across all major risks to a moderate extent as indicated by mean of 3.39 with standard deviation of 1.06. The results indicated that risk monitoring was deployed in insurance companies to a great extent as indicated by a mean of 3.80 and standard deviation of 0.860. This was in line with Deloitte (2012) that companies capabilities in monitoring to enterprise risks foster ERM.

4.4 Rate the extent of enterprise risks management influence on financial performance

Table 4.12: Extent of enterprise risks management influence on financial performance

Table 4.12 shows the respondents response on the extent of perceived influence of ERM on financial performance of the company.

	Mean	Standard deviation
Perceived benefit of ERM to increase profitability	3.66	0.83
Perceived benefit of ERM to reduce earnings volatility	3.59	0.97
Perceived benefit of ERM to increase strategic goals	3.05	1.19
Perceived benefit of ERM to measure risk adjusted performance	2.73	1.45

From the findings majority of the respondents indicated that perceived benefit of ERM increase profitability and reduce earnings volatility to a great extent as indicated by mean of 3.66 and 3.59 with standard deviation of 0.83 and 0.97. Most of the respondents indicated that perceived benefit of ERM increase ability to meet strategic goals thus influencing financial performance to a moderate extent as indicated by a mean of 3.05 with standard deviation of 1.19. The respondents indicated that perceived benefit of ERM measure risk adjusted performance to a less extent as indicated by mean of 2.73 with standard deviation of 1.45. This implies that use of enterprise risks management influence financial performance in insurance companies in Kenya. This is in line with Deloitte (2012) that ERM improve companies profitability levels.

4.5 Financial performance of insurance companies from 2013 to 2017

Table 4.18 shows the financial performance of insurance companies from 2013 to 2017

Table 4.13: ROA per year from 2012 to 2015 for insurance companies

	2013	2014	2015	2016	2017
Total	92.77	81.75	113.39	131.35	152.87
Mean	2.20881	1.946429	2.699762	3.127381	3.639762
Standard Deviation	0.141421	0.035355	1.979899	0.403051	0.502046
Maximum Mean	3.639762				
Minimum Mean	1.946429				

The study found that total return on asset for the year 2013 is 92.77, year 2014 is 81.75, year 2015 is 113.39, year 2016 is 131.35 while year 2016 is 152.87. The study found that year 2017 had the maximum return on asset as indicated by mean of 3.639762 with standard deviation of 0.502046. The study found that year 2014 had the minimum return on asset as indicated by mean of 1.946429 with standard deviation of 0.035355.

4.6 Inferential statistics

The study carried out correlation and regression to establish the relationship between the enterprise risk management and financial performance of insurance firms in Kenya.

4.6.1 Correlation Analysis

Table 4.14 shows the Pearson Moment Correlation analysis matrix presenting the association between enterprise risk management and financial performance of insurance firms in Kenya. The correlation factor ranged from $-1 \leq 0 \leq 1$. The acceptance confidence level was 95% or significance level of 0.05.

Table 4.14: Pearson Moment Correlation matrix

		Return On Asset
Return On Asset	Pearson Correlation	1
	Sig. (2-tailed)	
Internal environment	Pearson Correlation	.739*
	Sig. (2-tailed)	.000
Objectives setting	Pearson Correlation	.806*
	Sig. (2-tailed)	.000
Event identification	Pearson Correlation	.829*
	Sig. (2-tailed)	.000
Risk assessment	Pearson Correlation	.656**
	Sig. (2-tailed)	.000
Risk response	Pearson Correlation	.946*
	Sig. (2-tailed)	.000
Control activities	Pearson Correlation	.710*
	Sig. (2-tailed)	.000
Information & Communication	Pearson Correlation	.905
	Sig. (2-tailed)	.000
Monitoring	Pearson Correlation	0.267
	Sig. (2-tailed)	.0080

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

* . Correlation is significant at the 0.05 level (2-tailed).

The results revealed that there was significant, strong and positive correlation between internal environments and return on asset $r=0.739^*$. The correlation was statistically significant $P=0.000<0.05$ at 95% confidence level. The results were similar to Gordon, Loeb and Tseng (2009) that the internal characteristics of a firm such as firm size and complexity determine the extent to which ERM positively impacts on firm performance. There was strong positive correlation between objectives setting and return on asset $r=0.806^*$. The correlation was statistically significant $P=0.000<0.05$ at 95% confidence level. This is in line with Aabo (2004) who investigated the connection between a firms risk management strategy and its objectives. The study found that management is more conservative and concerned with value preservation

when their focus is on the stakeholders and more risk forward and concerned with value addition when their focus is on shareholders.

There was strong positive correlation between event identification and return on asset $r=0.829^*$. The correlation was statistically significant $P=0.000<0.05$ at 95% confidence level. This is in line with Jorion (2001), that the risk supervision strategies and understanding the firm's sensitiveness to various risks determines the success of a corporation. There was strong positive correlation between risk assessment and return on asset $r=0.656^{**}$. The correlation was statistically significant $P=0.000<0.05$ at 95% confidence level. The findings were supported by Allayannis and Weston (2001) who examined the connection between the value of an enterprise and the risk management for prominent nonfinancial firms that are primarily exposed to foreign currency. They found an average of 5% higher firm value for foreign currency derivatives users than for non-users.

There was significant, strong and positive correlation between risk response and return on asset $r=0.946$ $P=0.000<0.05$ at 95% confidence level. There was strong positive correlation between control activities and return on asset $r=0.710$ $P=0.000<0.05$ at 95% confidence level. The findings were supported by Hoyt and Liebenberg (2011) that the connection between the selection of a CRO and firm value to be significantly positive

There was significant, strong and positive correlation between information & communication and return on asset $r=0.905$ $P=0.000<0.05$ at 95% confidence level. This is in line with Weru (2008) carried out a case study of Practical Action, an NGO firm to investigate the information systems risk management practices. The investigation revealed that the business had implemented several information system

risk management strategies as per the recommendations of the COSO framework. There was positive weak correlation between monitoring and return on asset $r=0.267$. The correlation was statistically significant $P=0.0080 > 0.05$ at 95% confidence level.

4.6.2 Regression Model summary

Table 4.15 shows the model summary that was used to test whether there existed a significant variation between independent variables and dependent variable. Model summary was also used to test the proportion variation of enterprise risk management and financial performance.

Table 4. 15: Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856 ^a	.732	.689	.40772

- a. Dependent Variable: Financial performance Return on Asset
- b. Independent Variable: Internal environment, Objectives setting, Event identification, Risk assessment, Risk response, Control activities, Information & Communication and Monitoring

From the summary R squared 0.732 indicated that there existed a variation of 73.9% in return on asset in the insurance companies due to use of enterprise risk management practises. Adjusted R squared is called the coefficient of determination and indicate proportion change in return on asset due to change in enterprise risk management practises. This implied that there was proportion variation of 68.9% of return on asset due to the influence of enterprise risk management practises.

4.6.3 Analysis of variance

The results are presented in the Table 4.16 below are the Analysis of variance (Anova) establishing the significance of a regression model. Analysis of variance indicated that the Total variance (22.977).

Table 4. 16: Analysis of variance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.826	6	2.804	16.870	.000 ^b
	Residual	6.151	37	.166		
	Total	22.977	43			

- a. Dependent Variable: Financial performance Return on Asset
- b. Independent Variable: Internal environment, Objectives setting, Event identification, Risk assessment, Risk response, Control activities, Information & Communication and Monitoring

Analysis of variance (Anova) allows simultaneous comparisons between two or more means thus testing whether a significance relationship exists between variables. Anova helps in establishing the significance of a regression model. The Anova findings are presented in Table 4.16, the Total variance (22.977) was the difference into the variance which can be explained by the independent variables (Model) and the variance which was not explained by the independent variables (Error). The model has a margin of error of $p=0.000^b$. This indicates that the model has a probability of 0.00% of giving false prediction. This points out the significance of the model. The study also established that there existed a significant goodness of fit of the model $Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \epsilon$ (1). Based on the findings in Table 4.11, the $F_{Cal}=16.870$ far exceeds $F_{Cti} = 2.735$, $P=0.000<0.05$ implying the model has goodness of fit.

4.6.4 Coefficients analysis

Table 4.17 provides information on coefficients of the model predictors as used in this study. The estimates of the regression coefficients, t-statistics, standard errors of the estimates and p values are shown in Table 4.17 below.

Table 4.17: Coefficients Analysis

		Coefficients ^a					
Model			Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std.	Beta		
1	(Constant)		3.150	.877		3.591	.001
	Internal environment	β_1	.350	.060	.622	5.807	.000
	Objectives setting	β_2	.500	.170	.488	2.945	.006
	Event identification	β_3	.900	.250	.794	3.606	.001
	Risk assessment	β_4	.200	.161	.240	1.243	.222
	Risk response	β_5	.300	.114	.343	2.642	.012
	Control activities	β_6	.450	.102	.367	4.419	.000
	Information & Communication	β_7	.665	.230	.843	2.892	.006
	Monitoring	β_8	.445	.122	.876	3.648	.001

- a. Dependent Variable: Financial performance Return on Asset
- b. Independent Variable: Internal environment, Objectives setting, Event identification, Risk assessment, Risk response, Control activities, Information & Communication and Monitoring

From Table 4.17 above, the established multiple linear regression equation becomes:

$$Y = 3.150 + 0.350IE + 0.500OS + 0.900EI + 0.200RA + 0.300RR + 0.450CA + 0.665IC + 0.445M + \epsilon$$

From the results on Table 4.17, $\beta_0 = 3.150$ represented the constant which predicted value of Financial performance (Return on Asset) while internal environment, objectives setting, event identification, risk assessment, risk response, control activities, information & communication and monitoring were constant at zero (0). The coefficient column gives estimated regression coefficients. It can be estimated that there would be 35 per cent positive change in the financial performance (Return on Asset) in the insurance company as a result of a unit change in internal environment. The t-statistic for this coefficient is 5.807 and p – value of 0.000 which implies that as the insurance company's internal environment improves, it will help the company to increase their return on asset, a finding that is similar to the finding of Klimczak (2005) that management reporting of internal risk mitigation strategies to company board committees such as finance, audit and risk committees has become an important function.

The results show that the insurance company that use objectives setting in managing credit risks in company increase their likelihood of improving their return on asset outcomes by 50% ($t = 2.945$) and p – value of $0.006 < 0.05$ which implies that use of objectives setting has a significant effect on return on asset. Regression results revealed that event identification has a significance influence although positive on return on asset as indicated by $\beta_3 = 0.900$, $p = 0.001 < 0.05$, $t = 3.606$. This implied that an increase in chances of company not identify the potential events of impact to a business it decreases the probability of that company to improve return on asset by 90%. The findings were supported by the Committee of Sponsoring Organizations (2004) that ERM are designed to recognise potential events of impact to a business venture as well as manage the operational hazards within acceptable standards in the process of realizing the objectives.

The beta coefficient of risk assessment is 0.200 ($t=1.243$) $p=0.222>0.05$. It shows that there will be a 20% insignificant positive change in the return on asset of insurance company due to a degree change in the risk assessment. The more regular risk assessment means opportunities to exploit risk assessment and feedback thus low effort on risk assessment will affect the financial performance of the insurance company insignificantly. This is supported by Nocco and Stulz (2014) that through ERM companies increase financial earnings.

The financial performance of the insurance company is increased by 30% with a unit increase in risk response and vice versa. There is a positive relationship between risk response and return on asset as $r=0.300$. The t value of this coefficient is 2.642 and is significant at $p=0.012<0.05$.

Control activities from the insurance company have an influence although positive, on company's return on assets $r= 0.450$. An increase in control of enterprise risks led to increase in return on assets by 45% ($t = -4.419$) and significant p – value of 0.000. These results were consistent with Beasley *et al.* (2008) that control of enterprises risks impact on financial performance in insurance companies.

Information and communication was found out to significantly influence return on asset of insurance companies as indicated by $\beta_7 =.665$, $PV=.006$, $t=2.8925$. A unit change of Information and communication was found to trigger a 66.5% change in the level of return on asset of insurance companies. These results were supported by Weru (2008) that the business had implemented several information system risk management strategies as per the recommendations of the COSO framework. $B_8 =.445$, $PV=.001<0.05$, $t=3.648$ shows that one unit change in monitoring results in 0.445 units increase in financial Performance

The results of this study reveal a significant impact of all the elements of enterprise risk management on financial performance of the insurance companies. An increase in internal environment, objectives setting, event identification, risk assessment, risk response, control activities, information & communication and monitoring will help insurance companies to increase their return on assets. This is supported by COSO (2004), that essential components for enterprise risk management namely, internal environment, objectives setting, event identification, risk assessment, risk response, control activities, information & communication and monitoring.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings from chapter four. The data analysis, findings and discussions presented in the previous chapter were guided by the issues identified in the problem statement. A literature review identified the research gap, the research design and the subsequent analysis. A summary and concluding remark on the discourse, recommendations and suggestions for further research are laid out in the synopsis below based on the objectives of the study.

5.2 Summary of Study Findings

The study sought the relationship between enterprise risk management and financial performance of insurance firms in Kenya. The study established there was proportion variation of 68.9% of return on asset due to change in enterprise risk management activities which include internal environment, objectives setting, event identification, risk assessment, risk response, control activities, information & communication and monitoring.

The study sought the influence of use of internal environment influence financial performance. From the findings, use of internal environment set up enable managers to possess adequate appraisal and monitoring skills, experience and good knowledge of risk management, incorporate responsibility for risk management into the job of each employee and have active involvement of Board of Directors management process. Use of internal environment enable the company manage execute risk management responsibilities with integrity and adhering to ethical values, communicated a risk management mission statement to entire organization employees

and share information on company innovations. The correlation results revealed that there was strong positive correlation between internal environments and return on asset $r=0.739^{**}$ $P=0.000<0.05$. Regression results revealed that internal environments has a significance influence on return on asset as indicated by $\beta_3= 0.350$, $p=0.001<0.05$.

The study established that use of the objective setting influence the companies to established explicit, corporate and wide risk tolerance levels or limits for all major risk categories and to clearly communicate its expectations for risk taking to senior managers. The companies were able to align risks with corporate level and business units' level goals and objectives, align companies' strategic objective to compliance objectives and have reporting framework to report potential risk events and mitigation strategies. The correlation results revealed that there was significant, strong and positive correlation between objectives setting and return on asset $r=0.806^*$ $P=0.000<0.05$. Regression results revealed that objective setting has a significance influence on return on asset as indicated by $\beta_3= 0.500$, $p=0.006<0.05$.

The study revealed that event identification influence the insurance companies to establish a comprehensive business risk inventory for risks managers, it's business units utilize facilitated self evaluation and/or survey techniques to map risks and the company has clients' track record of premium repayment. Companies were able to have competent staff that predict risks based on losses incurred and devise mitigation measures, has a risk screening, list and offer active mitigation and management to reduce occurrence of losses and has policy governing information collection and quantify risks. The correlation results revealed that there was significant, strong and positive correlation between event identification and return on asset $r=0.829^*$, $P=0.000<0.05$. Regression results revealed that event identification has a significance

positive relationship with return on asset as indicated by $\beta_3 = 0.900$, $PV = 0.001 < 0.05$, $t = 3.606$.

The study established that use of risk assessment influence the company in evaluating premium performance, to have a risk evaluation committee to determine risks, assess efficiency and leverage of business before venturing in it and has a rating scale to be used for approval or sanctions to minimize risks facing the company. Use of risk assessment influence the company in having classification of risks based on the amount of damage they cause and correct measure to manage risks and has a risk loss recovery methods to increase earnings. The correlation results revealed that there was strong positive correlation between risk assessment and return on asset $r = 0.656^{**}$ $P = 0.000 < 0.05$. Regression results revealed that risk assessment has insignificance influence on return on asset as indicated by $\beta_3 = 0.200$, $p = 0.222 > 0.05$, $t = 2.243$.

The study established that use of the risk response enables the companies' business units to actively participate in development and determination of risk responses. Use of the risk response influence the companies to quantify key risks, have processes to integrate the effects of the major risk types and have risk response methods chosen in line with the risk appetite and tolerance of the organization. The risk management department assesses the root cause, impact an interrelationship of the risk the organization and addresses resource constraints in the selection of alternatives methods of risk mitigation. There was strong positive correlation between risk response and return on asset $r = 0.946^*$ $P = 0.000 < 0.05$. Regression results revealed that risk response has significance influence on return on asset as indicated by $\beta_3 = 0.300$, $p = 0.012 < 0.05$, $t = -2.642$.

The study established that use of the risk control activities affect financial performance as there has been establishment of policies executed to help ensure the risk responses management selects are effectively carried out and policies governing verifications, reconciliations and company performance reviews in managing risks. It was revealed that use of the risk control activities influence the company in applying change management in managing occurrence of risks and having a framework that foster automation of business operations to mitigate major risks. From the findings, risk control activities enables the company to have security framework that foster application and networking in the company and has clear authorizations and approvals on business operations. The correlation results revealed that there was significant, strong and positive correlation between control activities and return on asset $r=0.710^*$ $P=0.000<0.05$. Regression results revealed that control activities has significance influence on return on asset as indicated by $\beta_3= 0.450$, $p=0.000>0.05$, $t=-4.419$.

The study established that use of the information and communication influence company in having adequate risk communication capabilities to identify measure and manage most major risk exposures and losses, having communication system to communicate risk control activities and monitoring effort as well as having a corporate wide common language for communicating risk type exposures and having regular briefs to the Board and Executive committee on risk management issues communication. The correlation results revealed that there was strong positive correlation between information and communication and return on asset $r=0.905^{**}$ $P=0.000<0.05$. Regression results revealed that information and communication has significance influence on return on asset as indicated by $\beta_7= 0.665$, $p=0.006>0.05$, $t=2.8925$.

The study established that use of the risk monitoring in managing enterprise risks avails framework for tracking risk responses. Risk monitoring influence the companies to monitor all significant risks on a regular basis, influence timely and accurate measurement of risks, promote adoption of risk policy and enhance identification of risks foster enterprise risk management performance and its business units monitor and report on current status of key risks as well as establishing written risk policy and procedure manuals that are consistent across all major risk. There was significant positive correlation between monitoring and return on asset $r=0.267$ $P=0.0080<0.05$. Regression results revealed that monitoring has significance influence on return on asset as indicated by $B_8 =0.445$, $PV=.001<0.05$, $t=3.648$

5.3 Conclusion

Most of the insurance companies in Kenya have enterprise risks management in place. Enterprise risks management is applied throughout an organization to pin point and mitigate the major risks while enabling the firm achieve its objectives. It serves as guard to an organization from extreme financial disturbance. The research established enterprise risks management have a significant effect on the insurance companies return on asset as they as able to benefit increased profitability and reduce earnings volatility and meet strategic goals.

From the Pearson Moment Correlation analysis revealed that there was strong significant positive correlation between internal environments, objectives setting, event identification risk assessment, risk response, control activities, information & communication. However there was insignificant negative correlation between monitoring and return on asset.

From the regression analysis the study established a significant strong positive relationship between internal environments, objectives setting, risk response, control activities, information & communication and financial performance of insurance firms in Kenya. The study established a significance negative relationship between event identification and return on asset. The study further established insignificant positive relationship between risk assessment and return on asset of insurance company.

5.4 Recommendations

The study has revealed that enterprise risk management components have significant, strong and positive relationship with financial performance in the insurance companies in Kenya. The study recommends that insurance companies in Kenya should ensure that management effectively deploy internal environments, objectives setting, risk response, control activities, information & communication is enhanced in order to improve financial performance.

It is also clear that the insurance companies in Kenya use the internal environments, objectives setting and risk response as a valued based analytical tool enabling insurers to generate cutting-edge services. It will also be important for insurance companies to consider continuing using control activities, information & communication in order to recognize potential events of impact to a business venture as well as manage the operational hazards within acceptable standards in the process of realizing the objectives and improve profitability level.

The study also recommends that enterprise risk management practices should be emphasized and made more effective in the insurance companies in order to intensified capabilities in responding to risk and seizing opportunities, avoid intolerable threats as well as effective adoption of acceptable risks and mitigate underinvestment problem as well as to reduce asset substitution problem to achieve high level of profitability.

5.5 Suggestion for Further Research

The study focused on the relationship between Enterprise Risk Management and financial performance of insurance firms in Kenya. It is suggested that the same research be done in a different scope and on different financial institutions other than insurance companies.

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APPENDICES

Appendix I: Questionnaire

This questionnaire seeks to collect information on ERM practices on the financial performance of Insurance firms in Kenya. The information provided will be used for academic purposes only and will be treated with highest discretion possible.

SECTION A: GENERAL INFORMATION

1. Name of your institution.....
2. Your designation.(Tick as appropriate)

Credit Manager	[]
Financial Officer	[]
Operation Officers	
Other (specify).....	

2) For how long has your organization been in operation?

- | | |
|-------------------------|-------------------|
| Less than two years [] | 6-10 years [] |
| 2-5 years [] | Over 10 years [] |

SECTION B: ENTERPRISE RISK MANAGEMENT PRACTICES USING COSO MODEL 2004

Part A: Internal Environment

1. Rate the extent to which the internal environment is set up to enable managing risks in your company. Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Internal Environment	1	2	3	4	5
Has communicated a risk management mission statement to senior managers					
Has shared information on company innovations					
Has incorporated responsibility for risk management into the managers positions					

Active involvement of Board of Directors management process					
Manage execute risk management responsibilities with integrity and adhering to ethical values					
Managers posses adequate appraisal and monitoring skills, experience and good knowledge of risk management					

Part B: Objectives Setting

2. Rate the extent of use of the objective setting in managing enterprise risks in your company. Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Objectives Setting	1	2	3	4	5
Has aligned its business risks with its corporate level and business unit level goals and objectives					
Has established explicit, corporate and wide risk tolerance levels or limits for all major risk categories					
Has clearly communicated its expectations for risk taking to your senior managers					
Align business strategic objective to compliance objectives compliance					
Has a reporting framework to report potential risk events and mitigate					

Part C: Event Identification

3. Rate the extent to which event identification in managing enterprise risks in your company. Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Event Identification	1	2	3	4	5
Has established a comprehensive business risk inventory of the risks you expect your managers to manage					
Its business units utilize facilitated self-evaluation and/or survey techniques to map risks					
Has competent staff that predict risks based on losses incurred and devise mitigation measures					
Has policy governing information collection and quantify risks					
The company has clients' track record of premium repayment.					
Has a risk screening, list and offer active mitigation and management to reduce occurrence of losses					

Part D: Risk Assessment

4. Rate the extent of use of risk assessment in managing risks in your company. Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Risk Assessment	1	2	3	4	5
Has a risk evaluation committee to determine risks in business activities.					
Evaluates premium performance on a monthly basis to assess impact of risks on investment					
Assess efficiency and leverage of business before venturing in it					
Classification of risks based on the amount of damage they cause and correct measure to manage risks.					
Has a risk loss recovery methods to increase earnings .					
Has a rating scale to be used for approval or sanctions to minimize risks facing the company					

Part E: Risk Response

5. Rate the extent to which use of the risk response in managing enterprise risks in your company Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3- Moderate, 4- Great Extent and 5- Very Great Extent.

Risk Response	1	2	3	4	5
Conducts formal risk assessment across the company on a regular basis.					
The company risk management department analyze the root cause, impact, and interrelationships of its risks					
Has quantified its key risk to a large extent					
Its business units develop and determine risk mitigation strategies					
The company has a process to integrate the effects of the major risk types					

Part F: Control Activities

6. Rate the extent of use of the risk control activities in managing risks in your company. Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Control Activities	1	2	3	4	5
Has established Policies executed to help ensure the risk responses management selects are effectively carried out					

Has security framework that foster application and networking in the company					
Has clear authorizations and approvals on business operations					
Has policies governing verifications, reconciliations and company performance reviews in managing risks					
Apply change management in managing occurrence of risks					
Has framework that foster automation of business operations to mitigate major risks					

Part G: Information & Communication

7. Rate the extent of use of the Information and Communication in managing enterprise risks in your company Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Information and Communication	1	2	3	4	5
Has a corporate wide common language for communicating risk type exposures					
Has regular briefs to the Board and Executive committee on risk management issues					
Company has communication system to communicate risk control activities and monitoring effort					
The company has communication					
The company has adequate risk communication capabilities to identify, measure, and manage most major risk exposures and losses,					

Part H: Enterprise risk Monitoring

Rate the extent of use of the risk monitoring in managing enterprise risks in your company. Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Enterprise Risk monitoring	1	2	3	4	5
Has established written risk policy and procedure manuals that are consistent across all major risk					
Its business units monitor and report on current status of key risks					
Has identified the key metrics required for reporting on risk management performance					
Monitors all significant risks on a regular basis, with timely and accurate measures of risk					
Has a framework for tracking risk responses					

Part I: Financial Performance

8. Rate the extent of use of enterprise risks management influence financial performance in your company? Use a scale of 1 to 5 where, 1-No Extent, 2- Less extent, 3-Moderate, 4- Great Extent and 5- Very Great Extent.

Enterprise Risk monitoring	1	2	3	4	5
Perceived benefit of ERM to increase profitability					
Perceived benefit of ERM to reduce earnings volatility					
Perceived benefit of ERM to increase ability to meet strategic goals					
Perceived benefit of ERM to measure risk adjusted performance					

Indicate the financial performance of your company from 2012 to 2015

Financial performance	2012	2013	2014	2015	2016
Return of Assets					

Appendix II: List of Insurance Companies in Kenya

1. Aar Insurance of Kenya
2. African Merchant Assurance
3. AIG Insurance Company
4. Allianz Insurance Company
5. APA Insurance Company
6. APA Life Assurance Company
7. Barclays Life Assurance
8. Britam General Insurance Company
9. Britam Life Assurance Company
10. Cannon Assurance Company
11. Capex Life Assurance Company
12. CIC General Insurance Company
13. CIC Life Assurance Company
14. Corporate Insurance Company
15. Directline Assurance Company
16. Fidelity Shield Insurance
17. First Assurance Company
18. GA Insurance Company
19. GA Life Assurance Limited
20. Gateway Insurance Company
21. Geminia Insurance Company
22. Heritage Insurance Company
23. ICEA Lion General Insurance
24. ICEA Lion Life Assurance Company
25. Intra-Africa Assurance
26. Invesco Assurance Company
27. Jubilee Insurance Company
28. Kenindia Assurance Company
29. Kenya Orient Insurance
30. Kenya Orient Life Assurance
31. Liberty Life Assurance Kenya
32. Madison Insurance Company

33. Mayfair Insurance Company
34. Metropolitan Life Assurance
35. Occidental Insurance Company
36. Old Mutual Assurance Company
37. Pacis Insurance Company
38. Pan Africa Insurance Company
39. Phoenix of East Africa
40. Pioneer Assurance Company
41. Prudential Life Assurance Kenya
42. Resolution Health Insurance
43. Saham Insurance Company
44. Takaful Insurance of Africa
45. Tausi Assurance Company
46. The Kenyan Alliance Insurance
47. The Monarch Insurance Company
48. Trident Insurance Company
49. Uap Insurance Company
50. Uap Life Assurance Company
51. Xplico Insurance Company