EFFECT OF RISK MANAGEMENT STRATEGIES ON FINANACIAL PERFORMANCE OF INSURANCE COMPANIES IN KENYA

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NOVEMEMBER, 2016

DECLARATION

I declare that this project is my original work and has not been submitted for an award of a degree in any other university for examination /academic purposes.

MUCHERU, MERCY NJERI

D61/64272/2013

SIGNATURE…..…… DATE…….

This research project has been submitted for examination with my approval as the university supervisor

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DEDICATION

I would like to dedicate my research project to my family and future family. I would not have accomplished this much without the love and support you all accorded me. Thank you and God bless you.

ACKNOWLEDGEMENT

I thank God who gave me the strength, ability and resources to come to this far. I would also like to thank all my family who came in to support whenever I needed their assistance. My parents Mr. and Mrs. Gabriel Mucheru, you gave me all the support that I needed, emotional and financial. God bless you for your encouragement.

My supervisor, Mr. Churchil Kibisu, thank you for the support you accorded me and made this project a success. My friend s Beatrice Githua and Stephen Njoroge, thank you for your encouragement and support, may almighty God reward you.
The management of the insurance companies where I collected my data and also the management of the UON, thank you.

Lastly I like to thank everyone who took part in my entire coursework in one way or another, I am truly grateful. Thank you.

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LIST OF ABBREVIATIONS AND ACCRONAMES

AIBK:	Association of Insurance Brokers of Kenya
ANOVA	Analysis of Variance
AKI:	Association of Kenya Insurers
ERM:	Enterprise Risk Management
IRA:	Insurance Regulatory Authority
ROA:	Return on Assets
ROE:	Return on Equity
SACCOS:	Savings and credit cooperative societies
RMS	Risk Management Strategies
SPSS:	Statistical Package for Social Sciences

ABSTRACT

Risk management should be at the core of an organization's operations by integrating risk management practices into processes, methods and culture of the organization. This involves four major strategies which are risk identification, risk assessment, risk mitigation and risk monitoring. The objective of the study was to establish the effect of risk management strategies adopted by Kenyan insurance companies on the financial performance of these companies. The study adopted a descriptive research design. The target population was the 49 registered insurance companies in Kenya. Both primary and secondary data was used for the purposes of the study. Primary data was collected through questionnaires with 35 insurance companies giving a response. Secondary data was collected using desk search techniques from published reports and data from financial statements maintained by IRA for a period of five years from 2010 to 2014. Content analysis was used to analyse qualitative data whereas the quantitative data was analysed using SPSS. Regression analysis was also used in the study. The results were presented by use of tables and charts. The study established that a majority of insurance companies in Kenya had adopted risk management practices in their operations and that this had a strong effect on their financial performance. Risk mitigation was found to be the most significant in influencing financial performance, followed by risk assessment, risk management program implementation & identification respectively. This study conclusion is that there is a positive relationship between the adoption of risk management strategies and the financial performance of insurance companies in Kenya. The study recommends that insurance companies in Kenya should adopt a multifaceted approach to risk management in order to derive greater benefits from their risk management efforts.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Johnson and Scholes (2005) term strategy as the trend and scope of an organization over the long run, which achieves advantage for the business by its alignment of resources within a perplexing environment, to meet market needs and achieve expectations of shareholders. We strategize to win. A strategy is the unifying element that brings consistency and course to activities and decisions of firms. For a strategy to be effective, it has to be simple, steady and of a long term nature. With the increase in competition in the industry, firms need to evaluate both their internal and external environment where they operate. It's also critical to appraise the resources accessible as opposed to what is necessary. Effective implementation is critical. Implementation is the most challenging, yet the most important phase of strategy. Insurance business by nature involves risk and risk management. According to Kadi, (2003) risk management is an important discipline in business especially the insurance business. Managers' risk behaviours affect the activities concerning risk in the frim. A robust risk management program can help organizations to lessen their exposure to risks, and enhance their financial performance (Iqbal and Mirakhor, 2007).

Theories have been put across to explain risk management and financial performance. The theories include the agency theory that explains the different interests of shareholders and managers to the firm and how the objectives set for risk management can change from one party to another. The stakeholders' theory concentrates on the stakeholders' balance of interests as a major element of corporate policy, and the optimal capital structure theory. According to this theory, there is an optimal, finite debt equity ratio, resulting from a trade-off between the expected bankruptcy value costs and the tax savings related to the deductibility of interest payments (Kim, 1976). Bankruptcy comes as a result of not meeting fixed obligations to creditors. The strategies in which insurance companies have adopted to manage risk will depend largely on the type of risk affecting the company and the extent thereof. Among the various risks facing the insurance companies are liquidity risk; operational risk; market risk; strategic and investment risk; contagion and related party risk; legal risk, regulatory risk; and counterparty default risk.

Recently, insurance companies focus on risk management has improved. Meredith (2014) suggests that careful judgement by management of insurance companies should be enforced, of insurable perils in order to avoid unnecessary claim loss settlement. Risk management is therefore an important factor in improving financial performance (Okotha, 2003). According to Standard and Poor's (2013), insurers and other financial risk organisations can, flop there are no specific risk management strategies in place. Poor risk management by insurance companies can cause accumulation of claims from the clients, leading to bigger losses and hence poor financial performance (Magezi, 2003). In the Kenyan insurance industry, indications of severe threats to insurers' existence increased in the year 2005. The industry suffered a big blow when a key player, United Insurance- with a Passenger Service Vehicle (PSV) stake of 45 percent- collapsed. Even before this astounding exit, other firms had similarly gone under receivership in mysterious circumstances including, Lakestar Insurance, Stallion Assurance, Liberty Insurance and the Kenya National Assurance Company. Past studies literature reveals that the there is still a gap from the findings of most researchers done from the past. Explicitly, their results have not stipulated the relationship between all factors they considered to affect financial performance of insurance companies of Kenya, hence the motivation for this study.

1.1.1 Risk Management

A risk can be said to be the probability of damage, injury, loss, liability or an undesirable happening caused by inward or outward exposures, and which can be avoided by prevention. Risk is also defined as the uncertainty linked to a future outcome or event (Banks, 2004). Further, risk is a concept that signifies a potential negative effect to an asset or some characteristic of value that may arise from present process or future event (Douglas and Wildavsky, 2000). Rejda (2008) defines risk management as the process through which an organization identifies loss experiences facing it and selects the most appropriate techniques for treating such exposures.

Dowd et al (2007) defines risk management strategies for the financial industry to constitute clearly set out risk strategies, an independent risk management task headed by a Principal Risk Officer, risk modelling and timely communication of risk issues. The risk management role would be responsible for devising and implementation of risk control systems. Risk modelling involves the use of models that estimate risk measures and possibly carry out stress tests.

Kimball (2000) suggests that risk management is the human activity which integrates recognition of risk, risk assessment, strategies to manage it and mitigation of risk using managerial resources. In general, a proper risk management process allows a firm to lessen risk exposures; it's also able get ready for continued existence after any unanticipated catastrophe.

In risk management, a prioritizing process must be followed whereby the risk with the highest loss and greatest probability of occurrence is handled first and risks with lower loss are handled later (Kiochos, 1997, and Stulz, 2003). There is no specific model however, to determine the balance between risks with highest probability of loss and those with lower loss, hence making risk management problematic. Banks (2004) notes that the main emphasis of risk management is controlling, and not necessarily eliminating, risk exposure so that all shareholders are fully aware of how the firm might be impacted.

1.1.2 Financial Performance

A firm's profitability, liquidity and solvency are the major determinants of financial performance. A firm's profitability shows the magnitude to which a firm generates profit from its factors of production. Financial performance can be measured by monitoring the firm's productivity. The ratios (ROE), return on equity and (ROA) return on assets are the most common measures of profitability. Financial performance can be measured by monitoring a firm's profitability levels.

Liquidity indicates a firm's ability in payment of its financial responsibilities when they mature without affecting its normal operations. According to Quach (2005), liquidity can be analysed structurally and operationally. Further, operational liquidity is the measure of cash flow, and structural liquidity refers to the composition of the balance sheet.

Solvency measures signals a firm's ability to repay its entire obligation by selling its assets. It gives information on a firm's capacity to be operational after undergoing a key financial crisis. Quach (2005) states that solvency measures the amount of borrowed capital used by the business relative to the amount of owners' equity capital in the business as an indication of the safety of the creditors interests in the company.

While companies should produce enough expected revenues to support a net margin that absorbs expected risk losses from predictable core failures, they need to hold sufficient capital reserves to cover the unexpected losses or resort to insurance (Zsidison, 2003). This implies unnoticeable impact on the financial performance of the firm, in case of losses.

In general, companies in their operations are exposed to risks. These risks if not well managed, can ruin the business's financial performance. Efficient risk management structures if fitted in the business, means they are more prepared than their peers, and hence able to survive periods after the event of related risks. This study's aim is to derive relationship that is there between risk management and performance of insurance companies.

1.1.3 Insurance industry in Kenya

Insurance in Kenya was established in the early 20th century when in about 1922. Royal Exchange Assurance opened a branch office in Kenya and it was followed by the Commercial Union in 1929 (Wachira 2008). Apart from the insurance companies, there are other players in the market comprising of Agents, and Insurance Brokers, Insurance surveyors, Risk managers, Investigators, Loss Adjustors and Reinsurance Companies. There are two main Associations, The Association of Kenya Insures (AKI) and The Association of Kenya Insurance Brokers of Kenya (AIBK). The IRA is the industry regulatory body which is mandated to supervise and regulate the insurance industry players. The industry has also established self-regulation through the Association of Kenya Insurers (AKI). In 2011, IRA created the Insurance Investigation Unit for fraud investigation in the insurance sector and this was a partnership between IRA and Commissioner of Police. The peak of the insurance sector in Kenya has two reinsurance companies, Kenya Reinsurance Corporation (Kenya Re) and East African Reinsurance Company. There were 44 short term and long-term companies by 2010, where 21 are medical insurance providers.

There are many challenges facing the insurance industry including structural weaknesses, fraud by both clients and employees, high claims, delays in claim settlement, delayed premium collection, lack of liquidity leading to collapse of some firms, low economic growth, poor governance, low penetration of insurance services and industry saturation. Over the past decade, at least 9 insurance companies have

suffered and collapsed due to the above risks. The many risks and challenges facing the insurance industry in Kenya have prompted IRA to establish a comprehensive risk management guideline for the insurance sector, effective June 2013.

1.1.4 Insurance companies in Kenya

Many insurance companies came up in the 1980s and more companies joined in the 1990s after a liberalized economy. Numbers of the registered companies grew from 15 to 39 between 1978 and 2001. By 2012, there were more than 40 registered insurance companies in Kenya. This intensified competition in the industry as it also saw the collapse of the Kenya National Assurance in 1996 which was state owned.

There are 49 insurance companies in Kenya according to the Insurance Regulatory Authority.23 of these are life insurance companies while 26 are purely non-life insurance companies. The number of operational general insurance companies is 37 (IRA, 2014). There are 16 companies engaging in both life and non-life business, of the 23 life insurance companies, bringing the number of companies in purely life business to 7. The IRA is the industry regulatory body which is mandated to supervise and regulate the insurance industry players. The industry has also established self-regulation through the Association of Kenya Insurers (AKI).

1.2 Research Problem

The core business of Insurance companies is managing risks. This is by way of managing their client's risks as well as also their own. This calls for better integration of risk management into systems, processes and culture of the companies. New and evolving risks are emerging, and more 'familiar' risks are increasing. This suggests a greater need to emphasize on risk management by the insurance companies.

The Kenyan insurance industry reveals the lack of a significant risk management strategy and hence the main object of this study. Several scholars have carried out extensive studies on the Insurance Industry both internationally and in Kenya. However, these studies have focused on different contexts. For instance, Hameeda and Al Ajmi (2012) carried out a study on conventional and Islamic banks in Bahrain. This study's objective was to establish the risk management practices of the banks. The study found out that banks in Bahrain had good understanding of risk and risk management. It also found out that the banks had efficient risk identification, risk

assessment, monitoring and credit risk analysis processes. Pagach and Warr (2010) studied the effect of adoption of ERM principles on firms' long-term performance by scrutinising financial, asset and market characteristics around the time of ERM adoption. Their study found out that the effects of ERM adoption is felt with time as it revolves around all the key aspects of the firm. A survey conducted by Everis in 2009, categorized the various risks experienced in the insurance industry as underwriting risks, credit risks, market risks, operational risks and liquidity risks among other risks.

Lengopito (2004) did an analysis on strategic responses to increased competition in the healthcare industry. This study found out that the need for uptake of health insurance had increased and hence the need for better services by the providers of health insurance. Ogolla (2005) carried out a study on application of generic strategies by Insurance companies in Kenya. Ndeda (2014) also researched on underwriting risk management strategies for motor vehicle insurance. Her study found out that there was need to emphasize on risk management in the motor vehicle insurance industry as it was facing a large claim experience.

Literatures from past studies reveal that risk management and financial performance have not been satisfactorily researched. To the best of the researcher's knowledge, this study has not been done. A knowledge gap consequently exists and this study sought to bridge this knowledge gap, by unravelling the following research question:
What are the risk management strategies adopted adopted by Kenyan insurance companies, and their effect on financial performance?

1.3 Research Objective

The research objective of this study was to establish the risk management strategies adopted by Kenyan insurance companies, and their effect on financial performance.

1.4 The Value of the study

The findings from this research will create awareness amongst the insurance companies and enable them adopt better risk management strategies for risk mitigation. It will also enable them to improve on their existing strategies and hence increase their profitability. Executives of Different Insurance Companies will to use the results to support them in policy formulation so as to achieve growth. The

regulatory bodies, such as the Insurance Regulatory Authority (IRA) will use the results in deriving structures, and policies to assist the Industry grow and enhance contribution to the Gross Domestic Product

The scholars and researchers will also be major beneficiaries of the paper as it will add to the already existing information on Insurance as well as act as a motivator for further research in the insurance and financial fields sectors in the country and in the world as a whole. These research findings will also be referred to by upcoming Insurance companies both in Kenya and the worlds developing states. To the Development and Policy makers in Kenya, in reference to Millennium development goals and vision 2030, the findings will be critical because, they will contribute in the areas such as food security, reduce maternal deaths and alleviate poverty. This is because; it will be insightful on development of agriculture insurance, reach the majority of the population for medical insurance and develop a saving culture through life insurance investment products.

The general public will also benefit from this study through the improved services by the insurance companies, and better returns from their investments, through affordable premiums and reduced levels of fraud. The study will also benefit the government in terms of regulating the industry.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This is a theoretical foundation review chapter, on literature existing on risk management concept, financial performance, and empirical review. It also gives a literature review summary.

2.2 Theoretical Foundations

The study is anchored on three theories that have a direct relationship with RMS and financial performance. These are stakeholders' theory, agency theory and the optimal capital structure theory where stakeholder theory is the overarching theory.

2.2.1 The Stakeholder Theory

This theory was initially established by Freeman (2005) as a managerial tool, and has in time developed into a firm's theory with a high descriptive potential. It concentrates on the balance of stakeholders' interests as the determining factor of company policy. The most promising contribution to risk management is the extension of implicit contracts theory from employment to other agreements, including sales and financing (Cornell and Shapiro, 2000). Company value can be drawn from customers trust that a company will be able to offer its services in future. The value of the implicit claims however, can be sensitive to the anticipated costs of financial suffering and insolvency.

Since corporate risk management practices lead to a reduction in expected costs, company value rises (Klimczak, 2005). Therefore stakeholder theory, gives knowledge into the possible foundation for risk management. Surveys of financial distress hypothesis (Smith and Stulz, 1995) provide only indirect evidence (Judge,

2006). Hence, this theory is valuable to this research, as it addresses the importance of customers' trust and also costs to the insurance companies. Stakeholder theory has it that the smaller the firms, the more they are likely to go through financial difficulties, and this should see them intensify their interest in risk management strategies adoption.

This theory also emphasizes that insurance companies need more efficient risk management strategies to improve the company value. This theory however, does not specify the influence that risk management has on financial performance of the company, and the subsequent relationship between these variables apart from proposing that risk management brings growth in the value of the company.

2.2.2 Agency Theory

Agency theory covers firm analysis to comprise separation of ownership and control, as well as managerial motivation. In the field of corporate risk management, agency issues have been revealed to influence managerial attitudes toward risk taking and hedging (Smith and Stulz, 1995). The agency theory enlightens on a likely discrepancy of interest among debt holders, shareholders, and management, as a result of irregularities in income distribution.

Subsequently, agency theory suggests that defined hedging policies can have significant influence on firm value (Fite and Pfleiderer, 2001). Stulz (1995) proposed a reason for the managers of a firm to be interested in taking part in risk management. He stresses that company bosses or rather managers are assumed to be work on behalf of the main owners of the company, and hence they have a major role to play in the firm's profits and distribution of resource. This means they are inclined to avoid risk as much as possible so as to reduce the returns variability of a firm, to achieve the

firm's objectives. By doing this, managers are deemed to be maximizing wealth, which is in line with the shareholders' goal of wealth maximization.

Managerial motivation factors in implementation of corporate risk management have been empirically investigated in a few studies with a negative effect (Faff and Nguyen, 2002; MacCrimmon and Wehrung, 1990; Geczy et al., 1997). However, encouraging evidence was found by Tufano 2000) in his analysis of the gold mining industry in the US. Theories of financial policies were tested in studies of the financial theory, both theories give similar predictions in this respect. The bulk of empirical evidence however, seems to be against the agency theory hypotheses.

The agency theory offers solid support for risk management as a response to discrepancy between shareholder interests and managerial incentives. Shareholders and managers have diverse interests in the firm, and their risk management objectives vary from stakeholder to another. Management prefer low risk and hence lower return on investments, as opposed to shareholders who want higher risk – higher return on investments. Agency theory stresses on the importance of risk management to make even the interests of senior managers and stakeholders to take it up on themselves to the financial performance of the firm.

2.2.3 Theory of Optimal Capital Structure

Standard and Poor's (2013) observe that an insurance company failure may become known when regulators take action, unlike where bank fail due to late payment of its debts. According to the optimal capital structure theory, there is an optimal, finite debt equity ratio, resulting from a trade-off between the projected value of bankruptcy costs and the tax savings related to deductibility of interest payments (Kim, 1976). Bankruptcy follows when the fixed debts cannot be paid. There are direct and indirect

costs related to bankruptcy. The direct costs comprise of legal costs, accounting and trustee fees, possible denial of income tax carryovers and carrybacks. Costs that are not direct are costs of interruptions of the firm versus supplier. (Barker, 1988). Warner (1999) and Weiss (2000) give evidence of financial distress and state underline the significance of bankruptcy costs to a business.

Allen and Santomero (2006) propose that cost of bankruptcy is largely important in regulated industries where large losses may cause withdrawal of license or charter, and possible loss of the monopoly position. The theory therefore gives a substantial rationale for firms to manage their risks. Stulz (1996) also suggests that the expected present value of bankruptcy costs is reflected in the firm's current market value if shareholders sea bankruptcy as an actual possibility.

The cost of bankruptcy is substantial to Kenyan insurance business. If a company is unable to settle its pending claims to customers, the regulator has the power to declare it bankrupt and putting it under receivership. Blue Shield Insurance and Concord Insurance were recently put under receivership as a result of bankruptcy. This is a sign that bankruptcy costs should be well-thought-out in the risk management of insurance companies in Kenya.

2.3 Empirical Review

Various studies have earlier been carried out on risk management. Risk management in various firms entails regulating the industry to comply with policies of risk. In other firms, the function helps the organization learn about uncertainties in its strategy and in its external and competitive environment (Mikes, 2009; Mikes, Hall, and Millo, 2013; Power, Ashby, and Palermo, 2013).

2.3.1 Risk Management Strategies Adoption and Implementation

A brief history of risk management was given in Georges (2013), which emphasised on the development of pure risk management as a substitute to market insurance in mid 1950s. 1970s and 1980s saw the expansion and use of derived instruments which were further shunned due to their risky and ambiguous nature. Georges further exhibits that even after development of financial risk models and capital calculation formulas by the financial institutions, financial crises of 2002 and 2007 are inevitable. He pre-empts that this could be as a result of lack of implementation of risk management strategies.

Dionne (2009) isolates the major risk management hitches as lack of motivation deals in the existence of informational irregularity, substandard valuation of products by the agencies, poor rating of composite financial products and poor regulation of structured finance. Georges (2013) indicates that risk management has to do with minimizing the company's risk as well as maximizing the firm's value. A survey led by Everis in 2009, on the risk management in the insurance industry in Europe and South America portrayed various conclusions. In Spain, 73% of the companies that were studied had a reserve allocated to risk management, 18% had no reserve and the other 9% had no sign of putting up such a reserve. The identified risks include deviation risks, reinsurance risk, insufficient premium risk, technical reserve risk, major losses risk, general business risk, liquidity risk and operational risk among others.

Portugal was well thought-out as more advanced in terms of their risk management. 90% of the Portuguese companies being studied dealt with their own risk as a separate unit within the organization, the outstanding 10% had particular individuals tasked to

handle the affairs of risk within the organization. Brazilian firms were considered more innovative in regards to risk management as they were well responsive to all the existent risks. Interestingly they considered that the main reasons hampering efficient risk control was lack of systems growth and difficulty in implementation of methodology in the companies, a conclusion shared by Blanchard and Dionne (2003, 2004) in regards to the 2002 New York Stock Exchange Financial crisis. The methods used in risk calculation by the Brazilian companies included stress testing, the mix method, the parametric and the deterministic methods

According to Jason Thacker (2011), European insurance industry embraced the Solvency II risk management model. It was developed from the Basel II and Basel III framework of the Banking sector. The risk based requirements of the Solvency II model include technical requirements in the balance sheet, minimum capital requirements, among others. The solvency II model has been questioned as to reduce foreign insurance and long-tailed business exposure and hence a shift of foreign business to United States (US). As at 2011, Insurers in the US were yet to adopt regulations concerning stochastic reserving and capital adequacy requirements. Over the years, attention has been placed on financial risk management. Actuaries have been blamed for reliance on deterministic measures of risk rather than embracing stochastic measures. Actuaries have also given more priority to quantifiable and frequent risk events which are difficult to do without measuring operational risk

2.3.2 Risk management strategies and financial performance

Any insurance company's capacity to cover risk is dependent on how well they make profit and worth for their stockholders. Financial performance is an extent of the incomes, returns, and appreciations in value of an organization, as proven by an escalation in the firm's share price. For insurance companies, this is usually given as net premiums, profits from underwriting, yearly turnover, return on equity and return on investment. These measures are seen performance measures for profit and investment

Underwriting risk is a major determining factor of financial performance for an insurance company. Underwriting procedures that are sound are fundamental to an insurer's financial performance. Risk in underwriting hinges on the insurer's risk appetite. The ratio of benefits incurred to net premium is a measure of underwriting risk (Adams and Buckle, 2000). High retention ratios with low claim ratios often impacts positively on the performance of insurers. It follows therefore that, a more efficient insurance company in underwriting decisions accompanied by higher retention should have higher profitability (Charumathi, 2012).

Profit performance is actually the difference between the revenues and expenses, which are in turn subject to the firm-specific features, industry characteristics and also macroeconomic variations. Investment performance can be of two different forms. The return on assets employed in the business other than cash, and the return on the investment processes of the surplus of cash at different levels earned on operations (Chen and Wong, 2004; and Asimakopoulos, Samitas, and Papadogonas, 2009).

Liquidity is another determinant of financial performance. Liquidity is the degree to which debt responsibilities coming payable in one year can be knocked off with cash or other assets which can be turned to cash easily. Liquidity in insurance is measured by the capacity of the insurer to fulfill their direct obligations to policyholders without liquidating financial assets or increasing profits from its underwriting and investment activities. The cash and bank balances are to remain adequate to meet the immediate liabilities to claims due for payment but not yet settled (Chaharbaghi and Lynch, 1999).

The firm's size also limits the financial performance of an insurance company. It affects its financial performance in various ways. Bigger corporations are able to exploit economies of scale as compared to smaller firms, making them more competent. The size of a company can be determined by earning of an insurance company after subtracting the reinsurance ceded. Insurer's premium base dictates the quantum of policy obligations to be borne by them (Ahmed, Ahmed, and Ahmed, 2010; and Teece, 2009).

Ownership is another factor that influences the financial performance of an insurance company. Ownership structure effects the management of the company in choosing whether to pay dividends or interest, or decide whether to retain much of its profits for further use in the company (Agiobenebo and Ezirim, 2002).

2.4 Summary of literature review

For more than ten years now, the insurance industry has grown more and more sophisticated in its capacity to comprehend and manage their risk. Due to a string of natural catastrophes rising from 1989 to around 1994, the insurers, modelers, rating agencies, reinsurers, and the capital markets have made it a priority to quantify their

risk and manage their exposures to acceptable levels (Neha, 2010)**.** In the recent past, industry leaders have taken a more rounded assessment of risk, capital, and return

It is also evident that the decisions made by managers affect the risks and financial performance of an insurance company. This then emphasizes the need for a proper risk management strategy to direct the goals and interests of management to the interests of the organization. A firm's stakeholders also require an assurance that their interests are safeguarded by firm's management and strategies. From the literature, it is discovered that the desire to improve financial performance should be balanced with the risks related to the daily operations of the firm. This then leads to the development of a risk management program to meet the strategies of an organization.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Chapter three illustrates all research methods and procedures used in conducting the study. The chapter outlines the research design used, population of the study, data collection and analysis techniques used.

3.2 Research Design

This study assumed a descriptive research design. The descriptive research enables the researcher to describe the existing relationship by means of observation and interpretation. Mugenda & Mugenda (2003) describe a research design as the plan or structure of investigation conceived to obtain answers to research questions that includes an outline of the research work to enable the representation of results in a form understandable by all. This research design also offers the researcher the appropriate method to illustrate characteristics of the variables under study. Causal research determines causal linkages between study variables by studying existing phenomena and then reviewing available data so as to try to identify workable causal relationships. The research design will enable a comprehensive analysis by respondents on risk management strategies that Kenyan insurance companies can adopt to manage risk and improve performance.

3.3 Population of the Study

A population is the aggregate of all elements that conform to some general set of specifications (Paton, 2002). This study's used all the 49 registered insurance companies operating in Kenya (IRA, 2013). This ensured collection of more accurate and reliable data. The observable characteristics of the target population should be

strongly related to the characteristics intended to be generalized by the study (Mugenda & Mugenda, 2003).

3.4 Data Collection

Primary and secondary data was used for the purposes of this study. A questionnaire was used in collecting Primary data. The entire Questionnaire was dropped and picked to the risk managers in the insurance companies. A total of 35 respondents managed to give feedback. Respondents comprised of risk managers, claims and underwriting managers of insurance firms. This Questionnaire was structured to collect quantitative data for the study. Collection of secondary data was done from secondary data sources like insurance survey reports from AKI and the audited financial statements of all insurance companies as presented to IRA. Secondary data for the period 2009 to 2016 was used in this study.

3.5 Data Analysis

This research adopted descriptive statistics to analyze the data. It is argued (Mugenda & Mugenda, 2003) that descriptive statistics enable the researcher to get meaningful description of scores and measurements for the study through the uses of few indices or statistics. The data obtained from the questionnaires was edited and then coded for the purposes of data analysis. It was summarized using descriptive statistics which usually include measure of central tendency, measures of reliability, frequency, variability among others. The measures of central tendency, mean, median and mode, best approximate the expected score or size from a group of scores in the study. The Statistical Package for Social Sciences (SPSS) was used for analysis of the independent and dependent variables.

3.6 The Analytical Model

The goal of this study was majorly to describe risk management strategies that are adopted by Kenyan insurance companies, and their effect on financial performance. The study used a regression model to determine the existing relationship. The following regression model was used for the study:

$$\mathbf{Y = \beta 0 + \beta 1 X1 + \beta 2 X2 + \beta 3\ X3 + \beta 4 X4 + \varepsilon}$$

Where:

Y	= Financial Performance (Measured using ROA)
X1	= Risk identification (Measured using inspection, Financial statements analysis, establishing standards and risk rating and collateral.
X2	= Risk assessment (Measured using approximations & projections)
X3	= Risk mitigation (Risk control and risk financing measures)
X4	= Risk management implementation and monitoring (Controls, responses, reporting & review)
ε	= the error notation

The variables for X1, X2, X3&X4 were computed from the means of the responses on each of the Likert scaled data for the insurance companies (either life, general or composite). The mean score was obtained for the respective variables for each insurance company, and values used for the regression analysis. The Y value is an average for the 5 year period, 2010-2014.

3.7 Diagnostic Tests

F-test was tested for joint significance of all coefficients and t-test for significance of individual coefficients. The measures of central tendency, mean, and measure of variation, standard deviation, were used to analyse the data.

CHAPTER FOUR: DATA ANALYSIS, RESULTS & DISCUSSION

4.1 Introduction

This chapter looks at data analysis; it also discusses the study outcomes of risk management strategies adopted on the financial performance of insurance companies in Kenya.

4.2 Questionnaires return rate

Of the 49 Insurance companies in Kenya, only 35 of them responded. There were 94 respondents in total. They were edited for completeness and consistency. The study's response rate archived was 71.4%. According to Mugenda and Mugenda (2003) a response rate of 50% is satisfactory for an analysis, 60% is good and 70% is excellent. Thus a response rate of 71% was sufficient and reliable for the study.

Table 4.1: Response rate

Description	**Total**
Total Insurance companies	49
Companies that responded	35
Response rate	**71.4%**

Source: Research data 2016

4.3 Demographic data

The demographic information considered in this study included number of branches and the number of years the company has been in operation. These have been analyzed as follows:

4.3.1 Number of branches of the insurance companies

The results are summarized in table 4.2 and figure 4.1 below:

Table 4.2: Number of branches for each insurance company

Range	Frequency	Percentage
0-10	26	74%
11-20	5	14%
21-30	4	12%
Total	**35**	**100%**

Source: Research data 2016

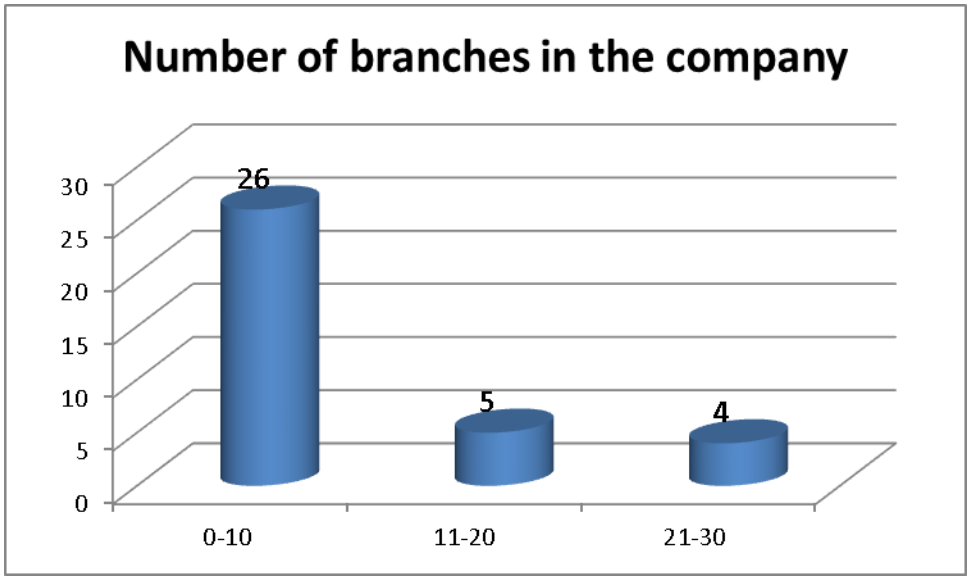

Figure 4.1: Number of branches of insurance companies

Source: Research data 2016

The graph above shows that most of the insurance companies in Kenya had less than ten branches. It shows 74% of the respondent companies had less than ten branches. 14% of the companies had 11-20 branches while 12% of the companies had 21-30 branches.

4.3.2 Number of years that the company had been in operation

The results are shown in table 4.3 and figure 4.2 below:

Table 4.3: Number of years in operation

Age/Years	Frequency	Percentage
1-10	10	29%
11-20	8	22%
21-30	17	49%
Total	**35**	**100%**

Source: Research data 2016

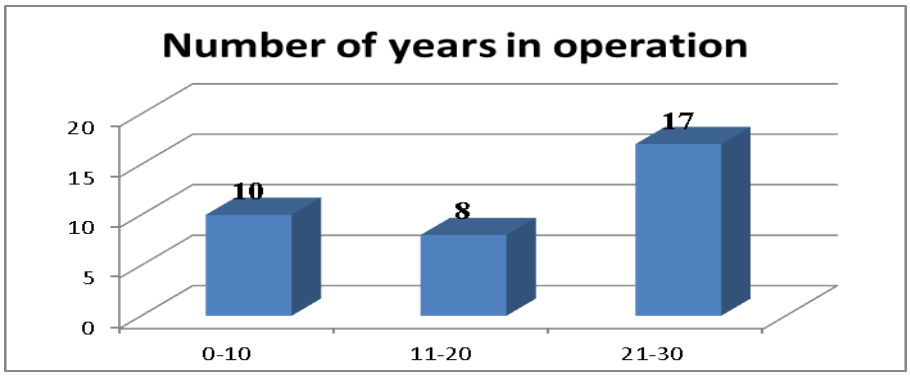

Figure 4.2: The number of years in operation

Source: Research data 2016

Table 4.3 and figure 4.2 above show that 49%, (17 companies) of the 35 insurance companies had been operational for 21-30 years, 22% (8 companies) for 11-20 years and 29% (10 companies) for 1-10 years. The results show that a most of the insurance companies in scope had been in operation for a long time hence they also had a lot of information on the impact of risk management practices in their companies.

4.3.3 Extent to which the risk management strategies adopted affect financial performance

The findings are presented in the table 4.4 and the figure 4.3 below:

Table 4.4: Extent to which the risk management strategies adopted affect financial performance

0-20%	21-40%	41-60%	61-80%	81-100%
0	4	10	18	62

Source: Research data 2016

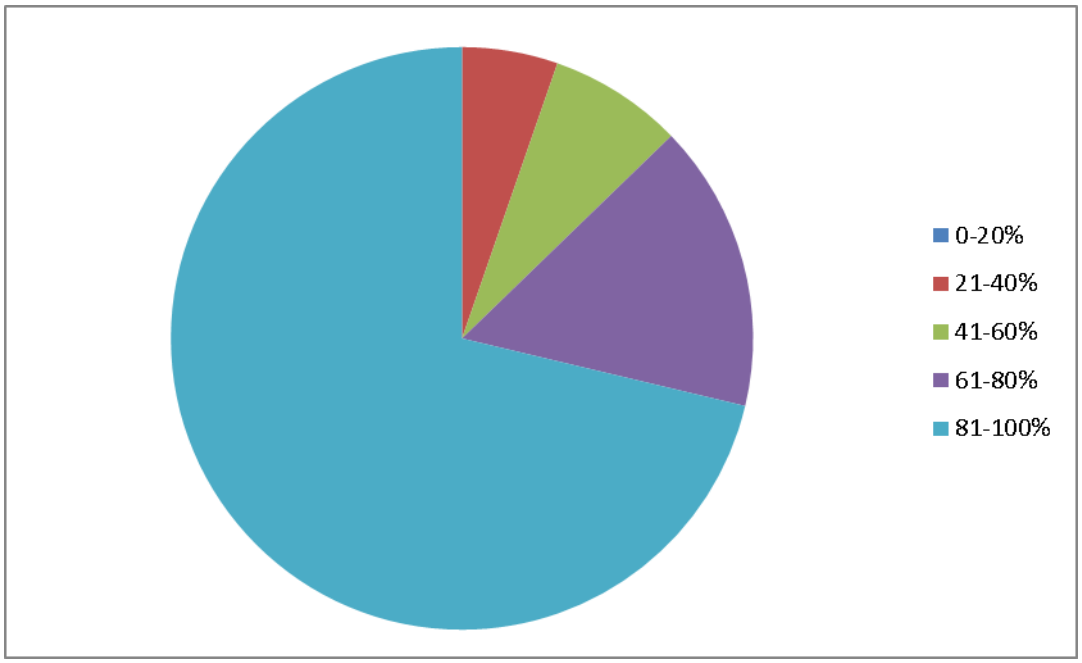

Figure 4.3: Extent to which the risk management strategies adopted affect financial performance
Source: Research data 2016

The table 4.4 and figure 4.3 above show the extent to which risk management strategies adopted by the insurance companies affect the financial performance of the companies, according to the respondent's opinions collected. 62 respondents out of the total 94 respondents believe that risk management affect financial performance by 81%-100%.

4.4 The effect of risk management strategies adopted on financial performance

Further, the study sought facts regarding the various risk management strategies that had been adopted by insurance companies in Kenya. To determine the degree to which risk management strategies were adopted by the insurance companies, the respondents were required to specify their level of agreement with statements that show the degree to which various risk management techniques were practiced in their respective companies.

According to the Likert scale, 5 point was assigned to the variable “strongly agree”, 4 to “agree”, 3 points to mean “not sure”, 2 to mean “disagree” and 1 point to “strongly disagree”. Using these points allocation as the variable values and absolute frequencies, weighted mean and standard deviation (to determine the response dispersion from the mean) were computed. Given that there were five variables and a range of 4 points from the lowest to the highest possible mean translating to a variable by variable range of 0.8, the following key was established:

1. Strongly Disagree (SD) - (1.0 – 1.8)
2. Disagree (D) - (1.81 – 2.6)
3. Not sure (NS) - (2.61 – 3.4)
4. Agree (A) - (3.41 – 4.2)
5. Strongly agree (SA) - (4.21 – 5.0)

4.4.1 Risk Identification

The study aimed to show the level to which the respondents agreed to the following statements as regards to risk identification techniques by the insurance companies. The findings are presented in table 4.5.

Table 4.5: Risk Identification

Indicators	SD	D	NS	A	SA	mean	Std. Dev.
Risk inspection is done by managers	-	-	3	14	18	3.94	0.1882
Roles and responsibilities for risk identification are clearly defined	-	-	1	15	19	4.21	0.1631
Financial statement analysis enhances risk identification	-	-	1	13	21	4.58	0.4571
Establishing standards enhances risk identification	-	-	3	14	18	4.12	0.1451
Risk rating and collateral enhances risk identification	-	-	2	9	24	4.18	0.2167

Source: Research data 2016

According to table 4.5, the respondents agreed that risk inspection was done by managers with a representative mean of 3.94. Respondents agreed that the roles and responsibilities for risk identification were clearly defined with a representative mean of 4.21. This study also discovered that the respondents strongly agreed to the statement, financial statement analysis enhances risk identification with a representative mean of 4.58. The respondents agreed that the insurance companies establish standards enhances risk identification and that risk rating and collateral enhances risk identification with representative means of 4.12 and 4.18 respectively.

4.4.2 Risk Assessment

The study aimed to show the level to which the respondents agreed to the given statements as regards to risk assessment and measurement in the company. The findings are presented in table 4.6.

Table 4.6: Risk Assessment

Indicators	SD	D	NS	A	SA	mean	Std. Dev.
Risks are evaluated with assumptions and uncertainties being clearly considered and presented	-	-	1	13	21	4.08	0.187
Risk is evaluated in terms of both quantitative and qualitative value	-	-	1	9	25	4.29	0.259
Measurement of the quantities where risk assessment is concerned - potential loss and probability of occurrence – is carried out by the company	-	-	5	11	19	3.82	0.257
Risk with large potential loss and low probability of occurrence is treated differently from the one with a low potential of loss and a high likelihood of occurring	-	-	1	24	10	3.97	0.264
Risks are subdivided into individual levels for further analysis	-	-	13	22	54	4.03	0.152

Source: Research data 2016

According to table 4.6, the respondents agreed that risks are evaluated with assumptions and uncertainties being clearly considered and presented with a representative mean of 4.08. The study also established that the respondents strongly agreed that risk is evaluated in terms of quantitative and qualitative measure with a representative mean of 4.29. It further established that the respondents agreed to the statement, measurement of the quantities where risk assessment is concerned, is carried out by the company with a representative mean of 3.82. The study established that the respondents agreed that risk with a large loss potential and low probability of occurrence is tackled differently from ones with low potential loss and high

possibility of occurring and risks are subdivided into individual levels for further analysis with a representative means of 3.97 and 4.03 respectively.

4.4.3 Risk Mitigation

The study tried to find out the extent to which the respondents agree that the company adopt the give risk mitigation practices. The findings are presented in table 4.7.

Table 4.7: Risk Mitigation

Indicators	SD	D	NS	A	SA	mean	Std. Dev.
The company insures different types of risks but not all risks	-	-	-	14	21	4.02	0.157
The company does not insure catastrophic risks	-	-	6	11	18	4.19	0.219
The organization has a mechanism for estimating potential losses at the time of entering into insurance contracts	-	-	-	12	23	3.95	0.398
The company trains insured parties on ways to avoid or minimize the chances of losses occurring	-	-	5	8	22	3.84	0.188
The company has a mechanism for transferring bigger risks to other third parties e.g. through reinsurance or hedging	-	-	3	11	21	3.91	0.149

Source: Research data 2016

The findings in table 4.7 reveal that the respondents agreed that the company insures different types of risks but not all risks with a representative mean of 4.02. The respondents agreed that the company does not insure catastrophic risks with a representative mean of 4.19. The study findings noted that the respondents agreed that the organization has a mechanism for estimating potential losses at the time of entering into insurance contracts; company trains insured parties on ways to avoid or

minimize the chances of losses occurring and that the company has a mechanism for transferring bigger risks to other third parties e.g. through reinsurance or hedging with a representative means of 3.95; 3.84 and 3.91 respectively.

4.4.4 Risk Management Implementation and Monitoring

The study sought to determine the extent to which the given facets of risk management implementation and monitoring are applicable to the company. The findings are presented in table 4.8.

Table 4.8: Risk Management Implementation and Monitoring

Indicators	SD	D	NS	A	SA	mean	Std. Dev.
Risk management program is well documented	-	-	-	7	28	3.93	0.248
Risk management efforts are supported by senior management	-	-	1	9	25	3.56	0.269
Employees are well trained on risk management policies of the firm	-	-	1	12	22	4.12	0.187
The roles of each employee and their responsibilities in the risk management efforts of the firm are communicated to them effectively.	-	-	8	11	16	3.47	0.128
Controls are in place to evaluate the efficiency of the risk management program	-	-	-	14	21	4.19	0.159
Regular reviews of risk management efforts and reporting to senior management	-	-	3	6	26	3.89	0.192
Risks are subdivided into individual levels for further analysis	-	-	6	8	21	4.11	0.281

Source: Research data 2016

Table 4.8 reveals that the respondents agreed that risk management program is well documented with a representative mean of 3.93. The respondents agreed that risk management efforts are supported by senior management with a representative mean of 3.56. The study established that employees are well trained on risk management policies of the firm with a representative mean of 4.12. The study findings revealed that the respondents agreed that the roles and responsibilities of each employee in the risk management efforts of the firm are well communicated to them; controls are in place to evaluate the efficiency of the risk management program; regular reviews of risk management efforts and reporting to senior management and risks are subdivided into individual levels for further analysis with representative means of 3.47; 4.19; 3.89 and 4.11 respectively.

4.5 Financial Performance

In addition to primary data, the study utilized secondary sources of data in order to determine the financial performance of the insurance companies. The data for financial performance was obtained from the financial statements of the insurance companies for 5 years (2010-2014). ROA was used as the financial performance indicator for the purposes of this study. Data collected on ROA was presented in a table shown in Appendix 5.

4.5.1 Ratio Analysis of Financial Performance

Return on Assets (ROA) was used as a measure of the financial performance of the insurance companies. ROA is computed as follows:

ROA=Net Income/Average Total Assets

Table 4.9: Descriptive statistics for return on assets

YEAR	N	MIN ROA	MAX ROA	MEAN	STD DEV
2010	35	-11.65	8.79	2.8925	3.51169503
2011	35	0.78	10.73	3.27171429	2.61728472
2012	35	-2.46	11.2	3.70857143	2.96874517
2013	35	0.01	9.53	3.554	2.262754
2014	35	0.58	10.21	3.744857	2.348116

Source: Research data 2016

The findings as depicted in Table 4.9 shows the lowest value for ROA as -11.75 in year 2010 and the highest as 11.2 in 2012. In addition a low standard deviation is a sign of lower variation in financial performance of the insurance companies. On the other hand, a steady rise in ROA values from 2010 indicates that the Kenyan insurance companies have been performing well financially over the last four years.

4.6 Inferential Statistics

Multiple regressions were applied to determine the predictive power of the risk management practices on financial performance of insurance companies in Kenya.

4.6.1 Regression Analysis

A multiple regression analysis was conducted to examine the relationship that lies between the independent variables (risk management strategies) and the financial performance of insurance companies in Kenya. The SPSS tool was used to compute the measurements of the multiple regressions for the study.

Table 4.10: Regression results for the relationship between Risk management practices and financial performance

		Model Summary			
Model	***Pearson Correlation R***	***R Square***	***Adjusted R Square***	***Std. Error of the Estimate***	
Risk management	0.8599	0.739	0.696	0.246	
		ANOVA[b]			
Model	***Df***	***Sum of Squares***	***Mean Square***	***F***	***Sig***
Regression	8	2.532	1.0320	10.020*	0.004
Residual	27	9.364	2.3206		
Total	35	11.896			
		Coefficient[a]			
Model	***Unstandardized coefficients***		***Standardized Coefficients***		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
Constant	0.920	0.577		1.594	0.162
Risk Management	0.913	0.221	0.8599	4.125*	0.006
Risk Identification	*0.348*	*0.1828*	*0.0937*	*4.685*	
Risk Assessment	*0.454*	*0.2156*	*0.1178*	*4.626*	
Risk mitigation	*0.668*	*0.1102*	*0.1032*	*7.287*	
Risk monitoring	*0.398*	*0.3164*	*0.1425*	*3.418*	

Source: Research data 2016

*p < 0.01

a. Predictors: (Constant), Risk Management Practices

b. Dependent Variable: Financial performance

The regression results presented in Table 4.6 shows a positive relationship between independent variables (risk management practices) and the financial performance, and significant ((R Square = 0.739, F = 10.020, p < 0.05). The results show that 73% of the changes in variations in financial performance of insurance companies in Kenya can be credited to the four independent variables studied. The F ratio shows that the regression of risk management practices on financial performance is significant at p < 0.01, which is evidence of the goodness of fit of the regression model.

However, the model did not explain 27 percent of the variations in financial performance, implying that there are other factors associated with financial performance, which were not captured in the regression model. The beta was significant ($\beta = .859$, $t = 4.125$, at $p < 0.01$). The beta value implies that for one unit increase in the use of risk management practices, financial performance increase by .859 or 86%. From the regression results, it is noted that the relationship between risk management strategies and financial performance is positive and also statistically significant. The theory of a positive relationship between risk management strategies adopted and financial performance was supported.

As per the SPSS table above, regression equation;

($Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$) come to be:

($Y = 1.147 + 0.668X1 + 0.348X2 + 0.454X3 + 0.398X4 + \varepsilon$)

According to the regression equation, taking all factors into account (risk identification, risk assessment, risk mitigation and risk monitoring) constant at zero, financial performance of insurance companies in Kenya will be 0.920. The data findings analyzed also indicate that taking all other independent variables at zero, a unit increase in risk identification will lead to a 0.348 increase in financial performance, a unit increase in risk assessment and measurement leads to a 0.454 increase in financial performance, a unit increase in risk mitigation will lead to a 0.668 increase in financial performance while an increase in a unit of risk management program implementation and monitoring leads to 0.398 increase in financial performance of insurance companies in Kenya.

This implies that risk mitigation contributes the most to the financial performance of insurance companies in Kenya, then risk assessment, risk management program

implementation & monitoring and risk identification in that order. At 5% level of significance and 95% level of confidence, risk identification, risk mitigation, risk management program implementation & monitoring and risk assessment & measurement all significantly influenced the financial performance of insurance companies in Kenya.

4.7 Discussion of Findings

This study found that most insurance companies in Kenya had been in operation for 10 to 20years, and a majority of these companies had countrywide branch network. This also translates to the level of risk involved in their operations as they are relatively large companies. Majority of the companies according to the study had adopted various risk management strategies in their risk management efforts. There was a need for a risk management program due to the high levels of risk involved.

Four risk management strategies adopted by the insurance companies were found to affect financial performance in the following order, risk identification risk mitigation risk management program implementation & monitoring and risk assessment & measurement. At 5% level of significance and 95% level of confidence, all the four strategies adopted were found to affect financial performance of the insurance companies. In essence, the study findings supported the practice of starting with risk mitigation, then exploring ways to manage these risks.

Improved financial performance can be achieved through proper implementation of risk mitigation measures. From the study, all companies do not have the technical capacity to assess and measure risk, but they can still put in place measures to mitigate the risks. In order for the company to achieve significantly from its risk management endeavors, they need to measure and assess the impact of potential

losses in advance. It is therefore important for the firms to embrace a comprehensive risk management framework in order to realize greater benefits from risk management. The study found that companies with a more comprehensive risk management framework were more likely to continue performing well financially. The findings are consistent with the findings of a study by Aon Risk Solutions and Wharton School (2011), whose results revealed that there exists a positive relationship between the development of a firm's risk management framework and its financial performance.

CHAPTER FIVE: SUMMARY OF FINDINGS AND CONCLUSION

5.1 Summary

The chapter gives a summary of findings and conclusion, and recommendations of the study as per the study objectives. The study objective was to find the relationship between risk management strategies adopted by Kenyan insurance companies and their financial performance. In terms of the years in operation, the study found that 71% of the insurance companies registered in Kenya had been in operation for over 10 years. It also found that 12% of the companies had a countrywide branch network of up to 30 branches.

The focus of the study was on the four risk management strategies adopted by the insurance companies. Of the four strategies, risk mitigation was found to be the most significant in influencing financial performance where a unit increase in risk mitigation leads to a 0.668, identification leads to a 0.348 increase in financial performance, a unit increase in risk assessment and measurement will lead to a 0.454 increase in financial performance, while a unit increase in risk management program implementation and monitoring will lead to a 0.398 increase in financial performance of insurance companies in Kenya. Generally, from the results of this study, adoption of risk management practices was found to have great impact on the financial performance of insurance. This further indicates that better risk management by companies leads to better financial performance.

5.2 Conclusion

Most of the companies are faced with great risks in their daily operations, and the sizes of the companies also influence the risk involved. There is hence great need for risk management. Most of the companies had measures already put in place to manage risk and this also explains the stability and financial performance over the years. The companies with robust risk management systems were found to have better financial performance.

The study also concludes that risk mitigation play the most significant role in influencing financial performance of insurance companies. Conversely, the study results show that all the four risk management practices were of some importance in influencing financial performance and hence the conclusion of this study is that insurance companies need to implement a multifaceted approach in their risk management efforts.

The study shows a significant relationship between Risk management and financial performance of insurance companies with adoption of risk management practices explaining 73% of the variation in financial performance of these companies. The study, therefore, concludes that there is a strong relationship between adoption of risk management practices and financial performance of Kenyan insurance companies. This is a suggestion that there are other factors that influence financial performance of insurance companies and that these explain the remaining 27% of the variation in financial performance of these companies.

5.3 Recommendations for policy and practice

Risk mitigation was found to have a massive effect on financial performance of insurance companies. The recommendation of the study therefore is that the management of insurance companies should ensure worthwhile measures are taken in risk mitigation to ensure that their financial performance remains stable. Risk mitigation is therefore a major factor to consider in ensuring the financial performance of a company is stable.

The study also recommends that insurance companies' management should constantly evaluate their risk management strategies to check are relevance in the face of a continuously changing operating environment. Information technology should be reinforced in risk management by installing information systems relevant in risk assessment & measurement for monitoring their risk management programs for efficiency. Employees should get training on risk management policies of the firm, and defined with clearly defined roles and responsibilities given for risk management. There is also need for insurance companies to assign the role of risk management to specific individuals especially in management in order to address corporate governance issues in their risk management programs. This will enhance the financial performance of the companies.

Finally, the study recommends that the management of insurance companies should enforce risk management frameworks such as ERM that conform to international best practice. This will enhance global competitiveness of the Kenyan insurance companies and also ensure they meet international standards. The management should ensure an all -round process of risk management in its endeavor to improve financial performance.

5.4 Limitations of the Study

The study mainly used ROA, the return on assets as the measure of financial performance. However, there are other measures of financial performance that can be used in other future studies, for instance return on equity (ROE). There was a therefore a possibility of getting more accurate data if all the measures of financial performance were used for the study.

The study partially used secondary data which had been collected and prepared by the Insurance Regulatory Authority (IRA). This data was used as obtained by the researcher who did not have means of independently confirming the validity of the data, which was otherwise assumed to be true for the purpose of the study. The study findings are, therefore, partially subject to the rationality of the secondary data used. Lastly, the time and resources that were available for this study could not allow for the study to be conducted in a more comprehensive manner.

5.5 Suggestions for Further Research

This study established the effect of risk management strategies on the financial performance of insurance companies in Kenya. A more profound study should be done on the effect of specific risk management strategies and ERM models adopted by the various insurance companies in Kenya and the effect of this on their financial performance.

Lastly, further studies should be encouraged to establish the other features that cause 27% variation in the financial performance of Kenyan insurance companies. This will help the management of these companies to increase firm value through better management of these other factors, in addition to risk management. It is therefore

important that further studies be done in relation to what have already been studied in the past.

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APPENDICES

Appendix I: INTRODUCTION LETTER

Mercy Njeri Mucheru,
P.O Box 350 0618,
Nairobi.
July 2016

To whom it may concern

RE: DATA COLLECTION FOR STUDY ON RISK MANAGEMENT STRATEGIES ADOPTED BY THE KENYAN INSURANCE COMPANIES, AND THEIR EFFECT ON FINANCIAL PERFORMANCE.

I am Mercy Mucheru, National Identity No. 25946714, a student at the University of Nairobi, School of Business, registration Number D61/64272/2013. I am currently undertaking my research project as a requirement for the award of degree of Master of Business Administration. My study will focus on risk management strategies adopted by the Kenyan insurance companies, and their effect on financial performance**.**

The purpose of this letter is kindly seeks for permission to interview the managers in the following departments: risk, claims and underwriting, with the aim of collecting data to facilitate this study. The data that will be provided by the respondents will be treated with utmost confidentiality and only used for the purpose of this research. The details of respondents and other sources of information shall also be kept confidential.

I look forward to your cooperation.

Thank you,

Mercy Mucheru

Appendix II: LIST OF INSURANCE COMPANIES IN KENYA BY 2013

#	**COMPANY NAME**
1.	AAR Insurance Kenya Limited
2.	A P A Insurance Limited
3.	Africa Merchant Assurance Company Limited
4.	Apollo Life Assurance Limited
5.	AIG Kenya Insurance Company Limited
6.	British-American Insurance Company (Kenya) Limited
7.	Cannon Assurance Limited
8.	Capex Life Assurance Company Limited
9.	CFC Life Assurance Limited
10.	CIC General Insurance Limited
11.	CIC Life Assurance Limited
12.	Continental Reinsurance Limited
13.	Corporate Insurance Company Limited
14.	Directline Assurance Company Limited
15.	East Africa Reinsurance Company Limited
16.	Fidelity Shield Insurance Company Limited
17.	First Assurance Company Limited
18.	G A Insurance Limited,
19.	Gateway Insurance Company Limited
20.	Geminia Insurance Company Limited
21.	ICEA LION General Insurance Company Limited
22.	ICEA LION Life Assurance Company Limited
23.	Intra Africa Assurance Company Limited
24.	Invesco Assurance Company Limited
25.	Kenindia Assurance Company Limited
26.	Kenya Orient Insurance Limited
27.	Kenya Reinsurance Corporation Limited
28.	Madison Insurance Company Kenya Limited
29.	Mayfair Insurance Company Limited
30.	Mercantile Insurance Company Limited
31.	Metropolitan Life Insurance Kenya Limited
32.	Occidental Insurance Company Limited
33.	Old Mutual Life Assurance Company Limited
34.	Pacis Insurance Company Limited
35.	Pan Africa Life Assurance Limited
36.	Phoenix of East Africa Assurance Company Limited
37.	Pioneer Assurance Company Limited
38.	Real Insurance Company Limited
39.	Resolution Insurance Company Limited

40.	Shield Assurance Company Limited
41.	Takaful Insurance of Africa Limited
42.	Tausi Assurance Company Limited
43.	The Heritage Insurance Company Limited
44.	The Jubilee Insurance Company of Kenya Limited
45.	The Monarch Insurance Company Limited
46.	Trident Insurance Company Limited
47.	UAP Insurance Company Limited
48.	UAP Life Assurance Limited
49.	Xplico Insurance Company Limited

Source: Research Data 2016

Appendix III: DATA COLLECTION QUESTIONNAIRE

This study aim is to collect data that will assist in determining the risk management practices and how they affect the financial performance of the insurance companies in Kenya. The information provided will be confidential and used for the purpose of the study only.

Part 1: Demographic Data

1) Name of the insurance company

2) How many branches does the insurance company have?

0-10 ☐

11-20 ☐

21-30 ☐

3) How many employees does the company have?

10-100 ☐

100-500 ☐

500-1000 ☐

4) How long has the Company been in operation (In Years)?

0-10 ☐

11-20 ☐

21-30 ☐

31-40 ☐

5) What is the ownership structure of the company?

Locally owned ☐

Foreign owned ☐

Both locally and foreign owned ☐

6) Do you think there is a relationship between risk management and performance of this company?

Yes ☐

No ☐

7) To what extent do you think risk management strategies adopted by this company affect its performance?

0-20% ☐

21-40% ☐

41-60% ☐

61-80% ☐

81-100% ☐

Part II: Business information

SECTION I: RISK IDENTIFICATION

8) Indicate your level of agreement with the following statements as regards risk Identification techniques used by your company. Use a scale of 1-5, where:

Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**
1	2	3	4	5

NB: This scale be used for question number, 8, 9, 10, 11, and 12

Statement	1	2	3	4	5
Risk inspection is done by managers					
Roles and responsibilities for risk identification are clearly defined					
Financial statement analysis enhances risk identification					
Establishing standards enhances risk identification					
Risk rating and collateral enhances risk identification					

SECTION II: RISK ASSESSMENT

9) Indicate your level of agreement with the following statements as regards to risk assessment and measurement in the company. Use a scale of 1-5

Statement	1	2	3	4	5
Risks are evaluated with assumptions and uncertainties being clearly considered and presented.					
Risk is evaluated in terms of both quantitative and qualitative value.					
Measurement of both of the quantities in which risk assessment is concerned - potential loss and probability of occurrence – is carried out by the company					
A risk with a large potential loss and a low probability of occurring is often treated differently from one with a low potential loss and a high likelihood of occurring					
Risks are subdivided into individual levels for further analysis					

SECTION III: RISK MITIGATION

10) To what extent does your company adopt the following risk mitigation practices? Use a scale of 1 – 5

Statement	1	2	3	4	5
The company insures different types of risks but not all risks.					
The company does not insure catastrophic risks					
The organization has a mechanism for estimating potential losses at the time of entering into insurance contracts					
The company trains insured parties on ways to avoid or minimize the chances of losses occurring					
The company has a mechanism for transferring certain risks to third parties e.g. through reinsurance/hedging.					

SECTION IV: RISK MANAGEMENT IMPLEMENTATION AND MONITORING.

11) To what extent are the following facets of risk management implementation and monitoring applicable to your company? Use a scale of 1 – 5.

Statement	1	2	3	4	5
Risk management program is well documented					
Risk management efforts are supported by senior management					
Employees are properly trained on risk management policies of the firm.					
The roles and responsibilities of each employee in the risk management efforts of the firm are well communicated to them.					
Controls are in place to evaluate the efficiency of the risk management program.					
Regular reviews of risk management efforts and reporting to senior management.					
Risks are subdivided into individual levels for further analysis					

Appendix IV: FINDINGS ON RISK MANAGEMENT STRATEGIES

AVERAGE MEAN SCORES ON RISK MANAGEMENT STRATEGIES FOR EACH INSURANCE COMPANY					
		risk identification	**risk assessment**	**risk mitigation**	**risk monitoring**
	name of the insurance company	**average**	**average**	**average**	**average**
1	AAR Insurance Kenya Ltd	3.9	4.1	3.2	4.1
2	Africa Merchant Assurance Company Ltd	3.8	3.9	3.5	3.9
3	AIG Kenya Insurance Company Ltd	3.8	3.8	4	3.9
4	APA Insurance Ltd	3.2	3.5	3.6	3.6
5	British American Insurance Company	4.1	4.3	4.2	4.6
6	Cannon Assurance Company Ltd	4.1	4.2	3.6	3.5
7	CFC Life Assurance Company Ltd	4.2	4.4	3.8	3.9
8	CIC General Insurance Company Ltd	4.3	4.5	4.2	3.8
9	CIC Life Assurance Company Ltd	4.3	4.4	4	4.6
10	East Africa Reinsurance Company Ltd	4.2	4.4	3.6	4.5
11	Continental Reinsurance Company Ltd	3.9	3.9	3.9	4
12	East Africa Reinsurance Company Ltd	4.2	4.3	3.7	4.4
13	Fidelity Shield Insurance Company	3.9	4.0	3.5	4
14	First Assurance	4.0	4.0	3.8	4.1
15	GA Life Assurance	3.7	3.8	3.1	3.9
16	GA Insurance Ltd	3.6	3.8	3.5	3.8
17	Saham Assurance Company K Ltd	3.6	3.7	3.5	3.7
18	Geminia Insurance Company	3.9	4.2	3.6	3.8
19	ICEA LION General Insurance Company Limited	3.8	4.0	3.9	4.1

20	ICEA LION Life Insurance Company Limited	4.3	4.3	3.8	4.2
21	Invesco Assurance Company Limited	3.8	3.9	3.5	4.2
22	Kenindia Assurance Company Limited	3.7	4.0	3.9	3.6
23	Kenya Orient Insurance	3.9	3.8	4	4.3
24	Kenya Reinsurance Corporation Limited	4.3	4.5	3.8	4.4
25	Madison Insurance Company Limited	4.1	4.3	4	4.6
26	Mayfair Insurance Company Limited	3.2	3.6	3.8	3.6
27	Metropolitan Life Insurance Company Limited	3.8	3.9	4	4.4
28	Occidental Insurance Company Limited	4.3	4.4	3.8	4
29	Old Mutual Life Insurance Company Limited	4.4	4.5	4	4.3
30	Pacis Insurance Company Limited	3.8	4.0	3.9	4.1
31	Sanlam General Insurance Ltd	4	4.2	3.2	4.5
32	Sanlam Life Assurance Ltd	3.6	3.9	4	3.9
33	Resolution Insurance Company Limited	3.5	3.8	3.6	4
34	Takaful Insurance	3.4	3.8	3.9	4.4
35	The Heritage Insurance	4.2	4.5	3.9	4.1
	totals	**136.80**	**142.60**	**131.30**	**142.80**
	mean	**3.91**	**4.07**	**3.75**	**4.08**

Appendix V: FINDINGS ON ROA FOR THE INSURANCE COMPANIES

	FINANCIAL PERFORMANCE					
	name of the insurance company	ROA PER YEAR FOR EACH INSURANCE COMPANY				
		2010	**2011**	**2012**	**2013**	**2014**
1	AAR Insurance Kenya Ltd	4.5	1.25	1.81	2.23	2.32
2	Africa Merchant Assurance Company Ltd	1.21	1.13	4.58	2.12	2.23
3	AIG Kenya Insurance Company Ltd	6.03	4.9	4.61	5.23	5.23
4	APA Insurance Ltd	0.94	1.75	2.52	0.23	2.1
5	British American Insurance Company	1.02	1.64	2.79	1.23	2.2
6	Cannon Assurance Company Ltd	1.56	1.27	2.08	1.26	3.2
7	CFC Life Assurance Company Ltd	1.53	1.02	-0.12	2.11	2.4
8	CIC General Insurance Company Ltd	2.85	3.23	3.73	4.12	3.5
9	CIC Life Assurance Company Ltd	0.58	0.91	0.97	1.12	0.89
10	East Africa Reinsurance Company Ltd	0.81	0.99	0.43	0.01	0.58
11	Continental Reinsurance Company Ltd	2.61	2.51	2.56	2.54	2.97
12	East Africa Reinsurance Company Ltd	2.85	1.7	0.9	2.52	2.65
13	Fidelity Shield Insurance Company	4.53	5.62	6.02	5.32	5.66
14	First Assurance	8.78	7.12	7.67	6.54	7.68
15	GA Life Assurance	7.38	9.05	11.2	6.52	7.85
16	GA Insurance Ltd	5.3	6.32	8.21	6.23	7.75
17	Gateway Insurance Company Ltd	8.79	10.73	9.7	9.53	10.21
18	Geminia Insurance Company	1.18	2.5	2.42	3.21	3.23
19	ICEA LION General Insurance Company Limited	1.83	2.3	2.44	2.84	1.25
20	ICEA LION Life Insurance Company	7.5	9.2	9.98	8.88	8.65

	Limited					
21	Invesco Assurance Company Limited	1.65	2.16	2.22	2.23	1.65
22	Kenindia Assurance Company Limited	3.1	4.54	5.13	5.19	5.21
23	Kenya Orient Insurance	6.8	4.56	5.35	6.23	6.52
24	Kenya Reinsurance Corporation Limited	1.6	2.54	2.63	2.32	2.33
25	Madison Insurance Company Limited	1.96	2.11	2.16	2.32	2.21
26	Mayfair Insurance Company Limited	1.12	1.75	2.52	2.22	2.32
27	Metropolitan Life Insurance Company Limited	1.56	1.64	2.79	1.89	1.89
28	Occidental Insurance Company Limited	2.61	1.27	2.08	2.16	2.21
29	Old Mutual Life Insurance Company Limited	-11.75	2.51	2.56	2.52	2.56
30	Pacis Insurance Company Limited	4.53	0.78	-2.46	3.52	3.21
31	Pan Africa Life Insurance Company Limited	4.52	5.62	6.02	4.11	4.15
32	Real Insurance Company Limited	6.03	1.25	1.81	5.25	3.56
33	Resolution Insurance Company Limited	0.9	4.9	6.24	5.22	4.25
34	Takaful Insurance	3.3	1.75	3.73	3.2	3.55
35	The Heritage Insurance	1.53	1.99	2.52	2.22	2.9
	totals	**101.24**	**114.51**	**129.8**	**124.39**	**131.07**
	mean	**2.892571**	**3.271714**	**3.708571**	**3.554**	**3.744857**
	standard deviation	3.511695	2.617285	2.968745	2.262754	2.348116
	Lowest figure	-11.75	0.78	-2.46	0.01	0.58
	Highest figure	8.79	10.73	11.2	9.53	10.21