

**RISK MANAGEMENT STRATEGIES AND PERFORMANCE OF INSURANCE  
COMPANIES IN NYERI COUNTY, KENYA**

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**OCTOBER, 2021**

**DECLARATION**

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

Signature..... Date.....

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This research project has been submitted for review with my approval as a university supervisor.

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## **DEDICATION**

This project is dedicated to my son Eythan, daughter Shiku and husband Richard for your prayers, understanding and encouragement in my pursuit of the master's degree.

## **ACKNOWLEDGEMENT**

First is to thank the Almighty God for His grace in the pursuit of this academic journey. Secondly, I sincerely appreciate Dr. Ann Muchemi for her intellectual guidance and supervision which has made this research project a success. Lastly, I thank Kenyatta University fraternity as a whole for the opportunity to pursue this academic ladder.

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## OPERATIONAL DEFINITION OF TERMS

<b>Enterprise Risk Management</b>	Methodical process employed by organizations to manage risks and maximize opportunities for competitive advantage.
<b>Performance</b>	Process that ensures that resources are properly utilized to realize a given task, that is measured against preset objectives and goals.
<b>Risk</b>	Anticipation surrounding a firm's ability to achieve its goals and objectives due to uncertainties
<b>Risk Management</b>	A process where an organization proactively identifies, what could go wrong, the impact it would have and determining how to address the risk.
<b>Risk Management Strategy</b>	A structured and articulate approach to identify, assess and manage risks.
<b>Risk Avoidance Strategy</b>	A risk treatment that seeks to avoid or discontinue the actions that trigger a particular risk.
<b>Risk Reduction Strategy</b>	Minimizing losses and control through measures that reduce the chances of the risk actualizing.
<b>Risk Retention Strategy</b>	Deliberate awareness and self -financing of risks by an organization.
<b>Risk Transfer Strategy</b>	Technique which aims at limiting damage from negative event through transfer to a third party.

## **ABBREVIATIONS AND ACRONYMS**

<b>AIBK</b>	Association of Insurance Brokers of Kenya
<b>AKI</b>	Association of Kenya Insurers
<b>BSC</b>	Balanced Score Card
<b>COSO</b>	Committee of Sponsoring Organization of the Treadway Commission
<b>ERM</b>	Enterprise Risk Management
<b>GDP</b>	Gross Domestic Product
<b>IFRS</b>	International Financial Reporting Standards
<b>IRA</b>	Insurance Regulatory Authority
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>PwC</b>	Pricewater house Coopers
<b>ROE</b>	Return on Equity
<b>SGR</b>	Standard Railway Gauge
<b>SME</b>	Small and Medium Enterprises
<b>SPSS</b>	Statistical Package for Social Sciences

## ABSTRACT

Insurance companies cover the uncertainty of a financial loss on a variety of risks from policy holders. Effective risk management is therefore crucial to operations of insurance companies. An appropriate risk strategy enables insurance companies take risks knowingly and manage them appropriately. Insurance companies in Kenya have over time developed mechanisms of assessing risks for the policy holders but still face challenges in effectively managing risks. It is against this background that this study sought to examine the effects of risk management strategies on the performance of insurance companies in Nyeri County. Specifically, the study focused on establishing the effects of risk retention strategies, risk avoidance strategies, risk reduction strategies and risk transfer strategies on performance of insurance companies. Enterprise Risk Management theory, Balance Score Card and Agency theories formed the theoretical focus on the variables respectively. The study's target population consists of 66 managerial level employees made up of three employees from 22 insurance companies who are directly involved in risk management process. The study adopted descriptive census survey. Both descriptive and explanatory research design were utilized. Self-administered questionnaires were used to collect primary data. Validity and reliability of the questionnaire was ensured through a pilot study which was carried out in Real Insurance company which was excluded in the actual study. Quantitative data was analyzed using inferential and descriptive statistics with the assistance of Statistical Package for Social Sciences computer software. Qualitative data was analyzed using content validity. Construct validity was ensured by operationalization of the study's variables while content validity was achieved expert review in the fields of insurance. Multiple regression analysis was used to establish the nature and degree of relationship between the independent and dependent variables. The study concluded that risk management strategies affect performance of insurance companies in Nyeri County. Risk retention strategies and risk avoidance strategies were found not to be statistically significant while risk reduction strategies and risk transfer strategies were found to have significant on the effect organizational performance of insurance companies in Nyeri County. The study recommend that insurers should focus more on risk reduction and risk transfer strategies with emphasis being on risk transfer strategies which had the highest level of significance. Insurance companies' managers should focus more on insurance derivatives, risk reinsurance, partnerships on high risks and development of group insurance products to derive greater performance benefits. Further research was recommended on other risk management strategies not included in the study and how they affect performance of insurance companies.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

The importance of the insurance industry in any economy cannot be gainsaid. Insurance provides financial security to households thereby laying a firm foundation for thriving economic activities, innovation and sustainable growth (Muawya and Shabbir, 2019). Insurance offers protection to people's properties and securing them against catastrophes, accidents and expanding investment opportunities for policy-holders (Ogutu, 2012). Risk taking is at the heart of insurance companies' business therefore, risk management is critical in minimizing their exposure to risks (Mucheru, 2013). According to Johnson and Scholes (2005) a strategy is a carefully developed plan under conditions of uncertainty aimed at ensuring goals are attained in a manner that both meets the customer's needs as well as the shareholders desires.

There are over 10,000 insurance companies globally who are facing a lot of challenges. According to a Klynveld Peat Marwick Goerdeler (2020) insurance industry insights, the combined effects of disruptive forces that include technological, societal, globalization and economic forces have led to many global insurers struggle to grow and remain profitable. World over, insurers have had to rethink innovative and cost-effective ways to not only survive but to grow their business as well. This has seen an increase in the focus on risk management strategies (Pricewater house Coopers, 2018). Western Europe, North America and Asia account for the largest regions in terms of global percentage contribution of insurance

premiums. In the United States of America, leading insurers have focused on four strategic aspects, namely; customers of the future, integrated interactions, broad insurance services and proactively seeking flexible structures. In Africa, South Africa, Morocco, Egypt and Kenya tops the list of insurance markets which are facing various challenges which have also presented opportunities for growth and profitability. These opportunities include; developing new talent capabilities, emerging technologies and risk-based supervision which help shape strategies implemented (Ernst & Young, 2019).

According to Ouma (2016), a vast majority of Kenyan insurance companies have not been profitable. Fraud, management, premium undercutting, regional regulators and risk-based capital are some key challenges that the Kenyan insurance industry is facing (Kiragu, 2014). However, opportunities for growth largely driven by risk-based supervision, devolved government, merger and acquisition and micro insurance are some of the key drivers identified to spur growth in the insurance sector (AKI, 2018). Recent infrastructure projects undertaken by the government including Standard Railway Gauge (SGR) and Lamu Transport Corridor; amendments to the Insurance Act and introduction of marine insurance are seen as new avenues that will boost performance of insurance companies in Kenya (Okumu, 2017). For every risk undertaken, a corresponding risk management strategy is required in place. Due to the complexity of each insurance market, a standardized approach is not applicable hence insurance companies have to evaluate each strategy to address risks in a commercially viable manner.

### **1.1.1 Organizational Performance**

Organizational performance is defined as a firm's capability to meet its goals using resources efficiently and effectively (Daft, 2000). Organizational performance has three dimensions, namely; the acquisition of suitable inputs as regards to quality and quantity at the lowest price referred to as economy, maximization of output from specific input referred to as efficiency and the ability of output to meet set objectives referred to as effectiveness (Chien, 2004). Hansen and Wernefelt (1989) identified factors that influence organization performance through two models of firm performance. First, the organizational model which focuses on aspects such as human resources, culture within an organization and leadership styles. Secondly, the economic model, which notes industry characteristics, value of resources and a firm's position in comparison to its competitors as elements of organizational performance. Chien (2004) identified organizational culture, policies on human resources, the style of leadership and environment, and job design as factors that contribute towards performance of an organization.

A combination of both financial and non-financial metrics are utilized to gauge how firms perform. Financial performance focus is on profitability, solvency and liquidity (Muia, 2016). Non-financial aspects of performance encompass; service delivery, quality, reliability, customer satisfaction, quality of product or service (Karanja, 2017). A mix of monetary and non-monetary criterion gives a clear image about the performance of an organization.

An organization's books of accounts reflect performance from a financial perspective only which in a business environment that is rapidly changing while use of non-financial measures



are used to gauge performance that cannot be monetized. For the purposes of this study, performance was measured using; profitability, market penetration, customer retention and employee satisfaction.

### **1.1.2 Risk Management Strategies**

Rejda (2001) states that risk is the uncertainty surrounding the materialization of a loss. According to Gweyu (2012), risk management strategy is defined as a set of means which minimizes the negative effect of a risk occurrence thus providing an organization with a systematic approach to identify, assess and effectively manage its risks. Different scholars have identified different risk management strategies. According to Lepteva (2009), risk management strategies include hedging, diversification and insurance whose focus is risk pooling and transfer. Rejda (2003) identified risk retention strategy, risk transfer strategy, risk reduction strategy and risk avoidance strategy as some of strategies used by firms. According to Ondiek (2017) risk management strategies include financial risk management strategies, operational risk strategies, human resource strategies and regulatory risk management strategies. This study adopted retention, avoidance, reduction and transfer strategies as identified by Rejda (2003) as the most suitable for the study.

Nyakundi (2011) contends that risk retention is the acceptance of either a positive or negative effect accruing from the actualization of a risk. Risk retention can either be approached by design or unintentional (Ondu & Muchemi, 2020). By design, an organization makes a rational decision to retain risk, whereas unintentional approach, an organization may either fail to grasp the scope of risk, insurance policy exclusions or may fail to consider the risk in totality. According to Gweyu (2012), any amounts of potential loss over and above the insure amounts

is viewed as retained risk. The general rule for its application is risks whose severity of loss is small and frequency of occurrence is low. Risk retention strategies include reserve fund to cater to claims, risk premium charged to high-risk products and customers, continuous training of key employees and a sound risk analysis mechanism that informs on premiums to be charged.

According to William (1998) risk avoidance involves the total avoidance of an activity that results to a risk. Kokobe and Gemenchu (2016) posits that the aim of risk avoidance reduces chances of losses to acceptably low level since it is impossible to reduce the losses to zero. Okumu and Wanjira (2017) noted that it is not practical for insurers to entirely avoid all risks since this would culminate to the possibility of losing out on potential profits thus the need for a delicate balance to be used in deciding what extent of risk avoidance will be undertaken. Risk avoidance strategies include; setting clearly defined limits in insurance contracts, obtaining all material disclosures from insured persons, warranties which stipulates certain requirements that insured must fulfill for any claim to be made and pre-insurance valuation checks.

Risk reduction strategy involves the incorporation of techniques to minimize the effects of the loss (Lambiano, 2019). This is mostly achieved through adequate internal policies and procedures within an organization to ensure that the risk exposures are minimized. It is best suited where the severity of loss is small whereas the frequency of occurrence is high (Moriassi, 2007). Risk reduction strategies include; providing the insurance with advisory services to reduce chances of the risks materializing, amount of money subtracted from a loss that is not covered by the insurance (deductible), independent assessments by professionals prior to

undertaking risk and claim payment, and finally any deletions, additions and any other modifications to the original contract referred to as endorsements.

William (1998) posits that risk transfer entails sharing of risks through third parties. Risk transfer can be between organizations, organizations to insurance companies, insurance companies to insured and insurance companies to reinsurance companies. Risk transfer can be achieved through insurance contracts and third parties contracting. Insurance contracts involve undertaking specific insurance policies as respective risks dictate and payment of insurance premiums which transfers effects of the risks to the insurance company (Delloite, 2015). Non-insurance agreement with third parties containing indemnification provisions also transfers the burden of risk to the third party by wording. The general rule for its application is risks are transferred when the activity is not a core competence. Risk transfer strategies include: use of insurance derivatives that transfer risks faced by insurance to capital market investors (Cummings, Richard & Stephen, 1996), reinsurance where insurance companies insure their risks with reinsurance companies (Sing'ombe, 2016), multiple insurance coverages where multiple insurances come together to cover very high risk under one contract, and finally group life insurance that covers an entire homogenous group under one contract.

In conclusion, the assessment of significant risks, development and implementation of suitable risk strategies are critical to achieve superior performance in the rapidly changing environment. Organizations need to be conscious of limitations of strategies adopted to manage risks and the potential impact on the limitations present. A universal approach towards the implementation of various risk management strategies does not apply due to differences in business

environment, hence organizations have to adopt different types of risk management strategies depending on the nature of risks faced.

### **1.1.3 Global perspective of Insurance Industry**

According to PwC, global survey report (2018), the insurance industry worldwide experienced growth for period covering 2015 – 2017 while in 2018 witnessed slow growth. Insurance business grew in many European countries but insurance companies' failures were witnessed as well. The report went on to note that insurance company's failure was not attributable to a specific cause but poor management practices was evident of every company's failure. Further, it is noted that the cause of failure may just be a symptom and therefore the main cause being a systemic failure in the operations of the company, including rapid growth which may be as result of a flawed strategy, underpricing or inadequate underwriting controls.

The failure of the insurance companies to make settlement of the claims made by policyholders when they fall due, risks the company to possible collapse. In the event of a catastrophe occurring and subsequently affecting businesses, policyholders would lose the premiums already paid when it collapses and consequently loose savings and assets (Pricewater house Coopers, 2018).

### **1.1.4 Kenyan perspective of Insurance Industry**

In Kenya, Insurance Regulatory Authority (IRA) acts as the regulatory body established under the Insurance Act Cap 487 of the Constitution of Kenya. The regulated entities include insurance companies which are fifty-four in number as at the end of 2020, reinsurance companies, medical insurance providers, insurance agents, insurance surveyors, claims

specialists, claim settling agents, investigators and risk managers and motor assessors (AKI, 2020). The Association of Kenya Insurers (AKI) together with the Association of Insurance Brokers of Kenya (AIBK) acts as the self-regulators in the sector (IRA, 2017). The insurance industry in Kenya is one of the crucial drivers of financial services sector and thus plays a fundamental role in the realization of Vision 2030 financial services goals which proposes financial reforms to increase savings from 17% to 40% of GDP. According to Delloite 2018, Kenya historically revealed a relationship between the growth of insurance premiums to the country's GDP which stood at 17% in 2018. This was greatly attributed to the rise in pension market as the life expectancy increases therefore driving the demand for retirement packages. According to an Insurance Outlook Report for period 2020 (Delloite, 2020), various opportunities for growth have been presented in the form of innovations to harness underserved segments and customer centricity. Amid these prospects, insurance companies are facing a myriad of challenges key among them being; income-sensitive population, cultural mindset, large informal economy, insurance being viewed as a discretionary spending, level of distrust and insurance being more of a push rather than a pull product (AKI Report ,2019). Further compounding these challenges are regulatory changes key among them being interest rate capping, risk-based supervision as well as adoption of International Financial Reporting Standards (IFRS) 9 and 17 which have impacted on their profitability (IRA, 2018).

In conclusion, insurance companies by their nature of assessing and insuring potential losses to business, they incorporate risk management as a core function. In a business environment that is constantly undergoing transformation, the need to critically address and continually enhance risk management strategies cannot be overemphasized (Delloite, 2015).

## **1.2 Statement of the Problem**

Risk management is essential to the achievement of a firm's strategic, operational and financial objectives. Pignanelli and Csillag (2008) found a direct relationship between risk management and profitability of firms over a 10years in Brazil. A direct relationship exists between the level of risk and the rate of return by an organization (Chepkoech & Rotich, 2017). In 2019, total premiums in Kenya were USD 2,239 ranking Kenya in second position in Africa and 58<sup>th</sup> globally largely attributed to rising income levels (Swiss Re institute. 2020). the insurance sector in Kenya has witnessed increase in losses whereas the revenue has steadily grown. Revenue of Ksh 3.3 billion in respect to 2019, Ksh 1.08 billion in 2018 and Ksh 514 million in 2017. Conversely, Ksh 133.5 billion in 2019, Ksh 128.9 billion in 2018 and Ksh 126.1 billion losses were reported respectively (AKI, 2019). The Kenyan insurance industry has witnessed collapse of several insurance including Invesco, Standard Assurance, Blue Shield Insurance due to failure to focus on risk management strategies (Chepkoech & Rotich, 2017). The 2007 financial crisis saw some renowned financial institutions collapse served as a wakeup call on the effects of unexpected risk exposures and poor management of risks (Chipa & Wamiori, 2017). In Kenya, the traditional approach to manage risks has primarily focused on three aspects; underwriting, adequate reserves and reinsurance (Delloite, 2015). This traditional approach to risk management is narrow in scope and hence need for insurance companies to critically assess strategies employed to not only boost performance but to bring about growth (Ernst & Young, 2016).

In 2013, IRA launched risk management framework for insurance companies to ensure risks are prudently managed. Kiragu (2014) noted that financial reforms, technological advancements, globalization have posed a challenge for insurance companies which has had an effect on performance as they seek a proactive approach to risk strategy. Insurance companies have to transform from the inside out (AKI, 2020). Kenya is still one of the fastest growing economies in the sub-Saharan largely driven in part by financial services. According to Babbel and Santomero (2006) as cited by Chipa and Wamiori (2017) note that there is need for insurance companies to assess risks and come up with mitigation measures to manage the risks. Managers therefore have to rethink operating models, restructure workforce and innovate products to bring about transformative changes in insurer's strategies (Delloite, 2020; Gitau, 2013).

Empirical literature review in this study highlights that research surrounding risk management strategies and performance have been carried out in different contexts. Internationally, Kokobe and Gemechu (2016) found out that risk management practices that included; loss financing, risk avoidance, loss prevention and control resulted to poor financial performance of Ethiopia's insurance industry. Sibomana (2015) pointed out that avoidance strategies, transfer strategies, control and retention strategies were used in different phases of project performance in Rwandan construction industry which positively affected completion time of the projects.

Locally, several scholars have studied risk management and performance in different content and context. Mucheru (2016) investigated how risk identification, risk assessment, risk mitigation and risk monitoring strategies affected financial performance of insurance

companies. The study concluded that proper implementation of risk mitigation measures led improved financial performance. Karanja (2017), determined that risk transfer strategies and risk absorption strategies affected bank's competitive while risk avoidance had a positive but insignificant influence. Chipa and Wamiori (2017) investigated the effects risk management on the financial performance of insurance companies. The findings of the study observed that liquidity risk management, operational risk management, and enterprise risk management enhanced profitability, customer satisfaction and quality of services rendered. Kinyua, Ogolla and Mburu (2015) found out that project risk assessment strategies and risk identification strategies were found to influence performance of small and medium information technology enterprises' projects in Nairobi. The studies did not address risk management strategies from an ERM approach that seeks to address potential impact of all organizational risks on activities, stakeholder products and services in the insurance sector.

Studies on risk management strategies and insurance companies remain scanty. From the literature available, empirical gaps were clear on the need to focus on different dimensions of risk management strategies. In 2018, out of 47 counties in Kenya, Nyeri County was ranked as 6<sup>th</sup> in terms of contribution to the annual industry gross written premiums (AKI,2019). The researcher has not come across a study on risk management strategies and their effect on insurance companies in Nyeri and therefore this formed the basis of the research.

### **1.3 Objectives of the Study**

The objectives of this study were categorized into general and specific objectives.



### **1.3.1 General Objective**

The general objective of this study was to examine the effects of risk management strategies on the performance of insurance companies in Nyeri County

### **1.3.2 Specific Objectives**

The specific objectives of this study were:

- i) To determine the effects of risk retention strategies on the performance of insurance companies in Nyeri County
- ii) To examine the effects of risk avoidance strategies on the performance of insurance companies in Nyeri County
- iii) To analyze the effects of risk reduction strategies on the performance of insurance companies in Nyeri County
- iv) To establish the effects of risk transfer strategies on the performance of insurance companies in Nyeri County

### **1.4 Research Hypothesis**

The study sought to yield comprehensive answers to these research hypotheses:

**H<sub>01</sub>:** Risk retention strategy has no effect on the performance of Insurance Companies in Nyeri County

**H<sub>02</sub>:** Risk avoidance strategy has no effect on the performance of Insurance Companies in Nyeri County

**H<sub>03</sub>:** Risk reduction strategy has no effect on the performance of Insurance Companies in Nyeri County

**H<sub>04</sub>:** Risk transfer strategy has no effect on the performance of Insurance Companies in Nyeri County

### **1.5 Significance of the Study**

The findings of the research are useful to IRA in providing deeper understanding of impact of various risk management strategies in its bid to improve efficiency and outreach of insurance service providers through policy formulation and implementation guidelines within the sector. The findings are useful to the management of insurance firms in providing need for a proactive approach towards understanding the significance of risk management strategies formulation, implementation as an asset to enhance performance. Findings are beneficial to employees understanding their role in risk management strategies implementation. Additionally, the study builds into to the existing literature on risk management strategies being an area that lately has shown considerable interest among scholars in the broader corporate governance area as well as propose areas of further related research by researchers.

### **1.6 Scope of the Study**

The scope of the study included twenty-two insurance companies licensed in both general life and long-term insurance business in Kenya with the geographical focus being Nyeri County. The study objective was to evaluate how risk mitigation strategies impact insurance companies in Nyeri County, Kenya. Specifically, the study aimed at establishing the effects of risk avoidance, risk retention, risk transfer and risk reduction strategies and on performance of insurance companies in Nyeri County. Nyeri County was chosen. The study covered a total of twenty-two insurance companies whose presence within Nyeri County. The study was conducted in period between November 2020 to February 2021. Various studies in the field of

risk management strategies from which this study borrows have been carried out, but the primary focus of this study was on the four types of risk strategies covered in the literature namely; risk retention, risk avoidance, risk reduction and risk transfer and how they affect performance of insurance companies in Nyeri.

### **1.7 Limitations of the Study**

The study was conducted in the insurance industry and given that different industries differ in operations, policies and structures, the findings therefore cannot be generalized in other sectors. Due to Covid-19 pandemic restrictions, there was difficulty in distribution of questionnaires to respondents since the insurance companies were using shift system of work. To overcome this, prior bookings were done with the respondents to ensure that they were available.

### **1.8 Organization of the Study**

The study is organized into five chapters. Chapter one covered background of study variables, research problem, objectives of the study, and justification of the study. Chapter two covered theoretical grounding of the study's variables, review empirical literature culminating into the conceptual framework that supports the study and conclude with knowledge gap identification. Chapter three covered into the research methodology and research design, study population, sampling design, research instrument, data analysis and presentation and ethical consideration. Chapter four covered data analysis and findings while chapter five covered summary, conclusion, policy recommendations and practice and recommendations for further studies.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter focusses on theories underpinning the study, review of past related studies, research gaps identified and conclude with conceptual framework.

#### **2.2 Theoretical Literature Review**

This review sought a theoretical approach to the relation between risk management strategies and performance. This study was anchored on Enterprise Risk Management while Balanced Score Card and Agency theory were complimentary theories.

##### **2.1.1 Enterprise Risk Management Theory**

Committee of Sponsoring Organization of the Treadway Commission (COSO) enterprise risk management framework (2004) was probably the first contribution to the field of enterprise risk management. The theory was an extension of the traditional risk management approach that looked at risk from a reactive silo perspective where individual departments were assigned the responsibility to handle particular risks without sharing information with the rest of the departments of techniques they would use to deal with the risks (Acharyya, 2009; Augustina and Baroroh, 2016). The framework that seeks to equip managers at all levels in the organization planning and decision making on organizational risks (COSO, 2004; Shad and Lai, 2015)

Ondiek (2017), opine that ERM is a pro-active approach that whose purpose is to align the corporate strategy, processes, technology and people as a tool to effectively manage the risks

in a manner that generates value to the organization. Managers are therefore required to identify, evaluate, manage and keep track of all risks that might interfere with achievement of the overall objectives (Muslih, 2018). According to Deloach (2000), ERM is a logic process that is holistic in nature and utilizes a top-down approach that converges risk management to strategy in an effective manner that enhances organizational value. Wanjohi (2013) contends that ERM is crucial in attaining the balance between managers requirement to grow value to the shareholders and management of risks in a commercially viable manner. Studies have shown that firms practicing enterprise risk management have improved performance (Ping and Muthuveloo, 2015; Girangwa, Rone and Mose, 2020; Hoyt and Lienbenberg, 2011) By keeping a close eye on events that are happening both internally and externally, managers are able to strategically analyses the opportunities and threats that the risks bring forth to the organization. Managers therefore need to continually be conscious of the risks that their organizations are faced to facilitate proper monitoring so as to inform on how effective the strategies in place are faring.

As the global business environment is evolving, the volume and complexity of risks are rapidly increasing. Insurance companies in Kenya are faced with disruption in technological developments, competition, changing consumer needs as well as a regulatory change that seek more responsibilities and disclosures, which call for a formal approach to risk management through the strategies employed.

The Enterprise Risk Management theory was relevant and applicable to the study of risk management by insurance companies. Given that insurance companies deal with a variety of risks, they adopt a have a pro-active approach to risk management in their operations to ensure

that risks effectively addressed in a commercially viable manner. The managers have to develop sound risk management strategies in order for them to not only remain competitive and realize growth in their industry.

### **2.1.2 Balanced Score Card**

The Balanced Score Card (BSC) theory was developed by Kaplan and Norton in 1992. Previously, it was assumed that organizations merely existed to satisfy stakeholders through the use of only financial measures of performance. The authors sought to disapprove and believed that financial measures were in fact ineffective in creating value (Kaplan and Norton, 1992). According to Lipe and Salterio (2000), the BSC is a strategic management tool that organizations use to manage various stakeholder demands and translate strategies into actions. It is anchored on four measurement perspectives (Kumari, 2011). First, financial perspective by the use of traditional financial metrics. Secondly, customer perspective that focusses on value delivery to customers. Thirdly, internal process that look into internal activities and processes put into place in the creation of value and lastly, innovation and growth perspective that measures intangible assets required to complete organization's processes (Kassahun, 2010). These perspectives link performance to strategic goals and enable organizations manage stakeholders' expectations through translation of strategies into actions thus creating ripple effect on the drivers and the outcomes. Each perspective has applicable strategic goals, indicators and ways to achieve them (Kaplan & Norton, 1997).

According to Kaplan and Norton (1997), the BSC's focus is used by organizations to aid in the following management processes. First, make clear and translate organization's vision to strategy. Second, connect and link strategic objectives to actions. Third, planning, setting of

targets and alignment of the strategic initiatives and fourth, strengthening strategic feedback and organizational learning. In practice, the theory not only helps organizations translate strategies into actions but also facilitates employees focus their efforts on important business drivers. Through this framework, strategies are developed and monitored to evaluate their effectiveness with deviations being noted responded to ensure attainment of set goals.

The theory offers a framework for translating an organization's objectives into performance measures which gauge how effective implemented strategies (Kairu, Wafula, Okaka, Odera & Akerele, 2013). The insurance industry is a service industry hence the BSC sets of performance measures are important. The study measured financial perspective using profitability, customer perspective using repeat customer and market penetration metrics and employee satisfaction.

### **2.2.3 Agency Theory**

Originated from risk sharing among individuals explored by economists in 1960's and 1970's. The theory attempts to describe agency problem using a metaphor of a contract where the principal delegates work to an agent (Jensen & Meckling, 1976). The theory contends that the asymmetrical distribution of earnings amongst the shareholders, management and debt holders results in mismatched interests consequently resulting to an organization either failing to engage in projects whose net value is positive or taking too much risks than it should (Cheplel, 2013; Horvey and Ankamah, 2020). According to Stulz (1984) since managers are agents of the shareholders, they aim at profit maximization hence will avoid risks which invariably saves on agency costs. Agency costs are made up of cost of having a board of directors, bonding costs to align their interest to their actions by the agent and residual loss and

are present in all levels of management in every organization. In managing the agency problem, the managers are given incentives through stock or stock options coupled with management behavior monitoring mechanisms to induce value maximizing decisions which results in positive performance of the organization (Mayers & Smith, 1987).

Shareholder's desire high risk investments that yield high return while managers favor low risk investments that offer low return. Risk management according to shareholders is therefore perceived as a tool that managers use to align wealth maximization goal to the management interests (Osiero, 2016; Cheplel, 2013). However, the theory has faced criticism from (Brickley & Zimmerman , 1994) who contend that performance-based pay induces certain managerial behavior responses where the agent musters specific performance aspects that are of interest to the principal which agent focusses on which ultimately may often fail to create value and organizational growth in the long term.

The theory emphasizes on managing the conflicting interest of the principal and shareholder (Mucheru, 2016). Through risk management, managers are aware about the organization's risk appetite as set by the board. In so doing, managers can come up with effective risk mitigation strategies appropriate for the opportunities identified as wealth maximization avenues (Muia, 2016). The theory was therefore relevant to this study since it provides balance of shareholders and principal in the pursuit of organizational performance.

### **2.3 Empirical Literature Review**

This section presents the review of empirical studies regarding the relationship between risk management strategies and performance. In the review, the section focuses on Risk retention



strategies, risk avoidance strategies, risk reduction strategies and risk transfer strategies contribute to the performance of an organization.

### **2.3.1 Risk Retention Strategy and Organizational Performance**

Nyakundi (2011) researched how retention strategies impacts youth projects in Nyamira County. Profits, sustainability, sound bank statements, ability to attract more funding and community acceptance were variables used to measure performance while reserve funds, realistic budgets and project's ability to generate more funding were used as risk retention strategies. The study concluded that risk retention strategy was observed to positively impact on projects performance. The study's limitation was that it focused on financial indicators to measure performance.

A study by Kokobe (2016) was conducted on impact of the risk retention strategies on the financial performance in Ethiopia's insurance industry. The study assessed monetary performance on return on equity and loss ratio over a period of twelve years and found out that risk avoidance technique had a negative relationship with financial performance evaluated using Return on Equity (ROE) loss ratios. The study focused on financial performance and was conducted in different country hence need to determine how risk avoidance strategies affect general performance of insurance industry in Kenya.

Gakure, Ngugi, Ndwiga and Waithaka (2012) studied how unsecured bank loans were affected by credit risk retention strategies within commercial banks in Kenya. 33 respondents consisting of top, middle and low-level management were sampled. Frequent contact with borrowers, frequent monitoring of borrower's business, culture of supporting borrowers when facing difficulties and onsite visits strategies were found to have had great influence on performance

of unsecured bank loan. The study was conducted in different sector which limits the generalization of findings.

Berger, Hasan and Zhou (2010), investigated how diversification as a risk retention strategy affected the performance of China's commercial banks. The study covered a sample size of 88 banks over a 10-year long period. The diversification strategies included: nature and type of deposit, different locations, type of loans and assets. The study concluded that risk retention negatively affected performance of the banks. The study was carried out in banking sector in China while the study was done in Kenyan insurance companies.

Ndambiri and Kimutai (2018) investigated risk retention response and performance of health systems in public hospitals in Nyeri County whose objective was the assessment of risk responses planning on performance of health systems digitization projects. Performance was measured using cost, quality, schedule, customer metrics, learning and growth. The research designed adopted was descriptive with a target population of 65 heads of departments drawn from five public hospitals. The study concluded that risk retention response had the highest level of application which had a greatest impact on system. The study focused on public hospital while the current study focused on insurance companies.

Ochieng (2017) analyzed contribution of risk mitigation strategies on performance of organizations in the motor industry. The design used was descriptive and a sample size of 133. The results revealed that risk retention strategies had negative and insignificant effect on the performance. The study was conducted in different sector which limits the generalization of findings.

### **2.3.2 Risk Avoidance Strategy and Organizational Performance**

Aduma and Kimutai (2018) analyzed impact of risk avoidance strategies on performance of NHIF projects in Kenya. Out of 651 management staff drawn from all departments targeted 241 responded. The study utilized descriptive statistics and analyzed using multiple regression analysis. The authors concluded that risk avoidance strategies through the use of safety inspections, safety systems and detailed planning considerably affected the project's performance. The parameters used to test risk avoidance variables used were unique to the industry and it would be of interest to determine effect of risk avoidance using different parameters in a different industry.

Karanja (2017) in a study of how risk avoidance strategies impact commercial banks' sustainable performance. Sustainable organizational performance was measured using the following variables; product uniqueness, demand, costs, improved returns. The study identified risk avoidance strategies used were; documented policies, credit monitoring, employee training and risk assessment which had positive but an immaterial effect on the bank's performance. The study was limited to banking sector.

A study conducted by Olweny (2018) investigated risk avoidance strategies used by insurance companies in Kenya and their how they affect corporate governance. The study's population consisted of 42 insurance companies with the study adopting descriptive research design. The results suggested that insurance companies had adopted risk avoidance strategies namely; mechanism that facilitate the estimation of potential losses prior to entering into any contract, training of employees as well as frequent monitoring and communication of risks to employees which resulted to not only stable but financially sound companies. The study emphasis was on

corporate governance aspect thus a gap on how risk avoidance strategies affect performance using financial measures.

Nturanu and Mundia (2019), conducted a study whose aim was to evaluate how risk avoidance strategies affected buildings projects in Judiciary at Narok County. The study's sample size was 45 and findings indicated that risk avoidance strategies through the elimination of perils and risks, minimizing weaknesses and finally training and education were important but the effect on project's success was insignificant. The study was conducted in a different sector hence and it would be interesting to find out how results of insurance industry would compare with results from construction industry.

Kinyua et al., (2015) studied how the small and medium ICT enterprise projects were influenced by risk avoidance strategies. The study had a target population of 48 SME's. The findings concluded that risk avoidance strategy was adopted and had significant influence in successful completion of projects. The study was limited completion of projects thus the findings cannot be replicated in other industries.

In his study, Okumu (2017) investigated risk avoidance strategies and performance of motor insurance companies Kenya. Risk avoidance strategies measurement metrics included; use of expertise, intra company communication and reducing scope. Through random purposive sampling, 54 respondents made up of management and other employees from 18 motor insurance companies responded. Risk avoidance strategies were found to improve performance of insurance corporations. Insurance industry comprises of general, composite and long-term classes of business and it is important to appraise the effects of risk avoidance on all classes of businesses in insurance companies.

### **2.3.3 Risk Reduction Strategy and Organizational Performance**

Lambaino (2019) sought to find out how risk reduction strategies applied in Kenya's petroleum sector impacts on supply chain resilience. The target population was made up of 87 oil marketing companies licensed by Energy Regulatory Commission (ERC). Depot managers and logistics managers provided primary data which concluded that collaborations, buffering and flexibility as risk reduction strategies greatly contributed to performance. The study was limited to the petroleum industry and it was vital to determine if these effects can be replicated in other sectors.

In a study conducted by Njeri (2014) on how risk reduction strategies that included internal controls, contingency planning and separation of duties affected the financial performance of 46 manufacturing firms based in Nairobi, Kenya. A descriptive approach was adopted. The study concluded that risk reduction strategies greatly affected manufacturing firms. There was need to determine if they can be replicated in the insurance industry.

As indicate by Amemba (2013) researched on Kenya Medical Supplies Agency (KEMSA) risk reduction strategies on performance of the supply chain. The study adopted census approach with descriptive statistics analysis. A target of 28 KEMSA supply chain staff was sampled. The study found out that risk reduction strategies that include; clarifying product requirements, stipulating quality assurance aspects and standards, testing and inspection, third party guarantee were found to affect to a great extent the supply chain performance of KEMSA. The findings were based on a case study and therefore generalization of the findings in other sectors is limited.

Gweyu (2013) investigated the use credit risk reduction strategies on banks that majorly focus on supporting local businesses. Primary data was obtained through self-administered questionnaire in 44 banks as well as secondary data. The research revealed that banks to a large extent bank used risk reduction strategies particularly; developing customized action plan to reduce fair lending risk and avoiding fair lending problem that is brought about by various products and process of loan lending strategies to address credit risk which had a positive impact on performance. The study's findings were limited to commercial banks hence need to determine how risk reduction strategies affect insurance companies.

Murungi and Omwenga (2017) undertook research to determine women funded projects in Meru County, Kenya were affected by risk reduction strategy. A descriptive survey design was adopted. 100 respondents drawn from project representatives' managers, members of the committees, monitoring and evaluation officers provided information. The conclusion of the findings was that risk planning to identify project risks affected performance to a large extent. Due to difference in industry dynamics, there is need to determine how risk reduction affects insurance companies in Nyeri County.

#### **2.3.4 Risk Transfer Strategy and Organizational Performance**

Wabomba (2015) surveyed particular international developmental organizations domiciled in Nairobi to assess the value of risk transfer strategies on project realization. The study employed outsourcing, insurance premiums and binding contractual agreements as risk sharing strategies to evaluate performance of the projects. The respondents were project managers with predictive research design being adopted. The study found out the risk transfer strategy was the most utilized as well as the strategy that had significant effect on the project's duration.

The study was conducted in different industry than the current study thereby limiting the generalization of the findings.

In a study undertaken by Sing'ombe (2016), the research sought to determine how risk transfer through reinsurance programmes affected the fiscal performance of Kenya's insurance companies. The population included all insurance companies in existence in the period covering 2013-2015 and the source of data was secondary. The study concluded that reinsurance programmes which is a form of risk transfer had a positive but insignificant relationship to insurance firms' performance. The study was limited to reinsurance companies only.

Macharia and Kirui (2018) in a study assessed risk transfer strategy influence on the completion of construction projects in public high schools in Muranga county, Kenya. The strategies assessed included; purchase of insurance premiums, legal agreements and outsourcing. The study's population was made up of principals, board of management chairpersons and accountants where purposive sampling was applied and sample size was 136. The authors concluded that transfer strategies had some value on the projects in stages used. The study was limited to construction projects in Muranga County.

Aduloju and Ajemunigbohun (2017) examined reinsurance as a risk transfer strategy and performance of insurance firms in Nigeria that transfer all risk to reinsurance businesses. Return of equity, ceded ratio, return on asset and ratio of reinsurance recoverables to policyholders' surplus were used to measure performance. The study adopted descriptive

research and purposive sampling technique. The population was 56 insurance companies with primary data obtained from 248 respondents as well as information obtained from published fiscal annual reports covering 2014 and 2015 years. The study revealed that insolvency risk faced by insurance companies is reduced by purchasing reinsurance which stabilizes loss experience. Different industries in different countries are bound to have different modes of operations therefore need to determine effect risk transfer strategies in Kenyan insurance companies.



## 2.4 Summary of Research Gaps

**Table 2. 1: Summary of Research Gaps**

<b>Author(s)</b>	<b>Focus of the study</b>	<b>Findings</b>	<b>Research Gap</b>
Karanja (2017)	How risk management strategies impact sustainable competitive advantage of Kenya's commercial banks	Risk absorption strategy, risk avoidance strategies and risk transfer strategies had positive impact on competitive advantage of commercial banks	Risk mitigation strategies differ from one industry to another therefore current study focused on insurance companies
Okumu (2017)	Evaluation of risk mitigation strategies on motor insurance businesses	Risk avoidance strategy, risk-based audit strategies, risk controlling strategies and product mix strategies had positive relationship on performance	The study was carried out was limited to motor insurance companies and had different strategies to the current study's strategies and scope of all insurance companies within Nyeri County
Lambaino (2019)	Relationship between risk management strategies and supply chain resilience.	Avoidance, acceptance, reduction and transfer strategies create value on supply chain resilience	The study was done in petroleum industry and performance was on supply chain. This study was done in insurance industry in Nyeri County.

Kinyua et al., (2015)	Risk management practices impact on performance of Nairobi's SME's that are ICT based	Project risk assessment and project identification strategies were widely used and effective	The study carried out in ICT enterprises within Nairobi while the current study will be carried out in insurance industry using different risk management strategies.
Macharia (2017)	Whether construction projects in high schools improve performance by utilizing risk mitigation strategies	Performance was improved by use of retention, avoidance, transfer and reduction strategies.	The study was done in construction industry in Murang'a County while the current will be done in insurance companies within Nyeri County.
Wabomba (2015)	Value of risk transfer strategies on international developmental organizations	Risk transference strategies added value to performance.	The study was done on projects funded by international developmental organizations based in Nairobi while the current was undertaken in Insurance companies in Nyeri County
Amemba (2013)	How risk practices impact supply chain at KEMSA.	The identification of risk analysis and evaluation, monitoring and control created value in supply chain process.	The study focused on risk practices whereas the current study investigated risk mitigation strategies in different industries.

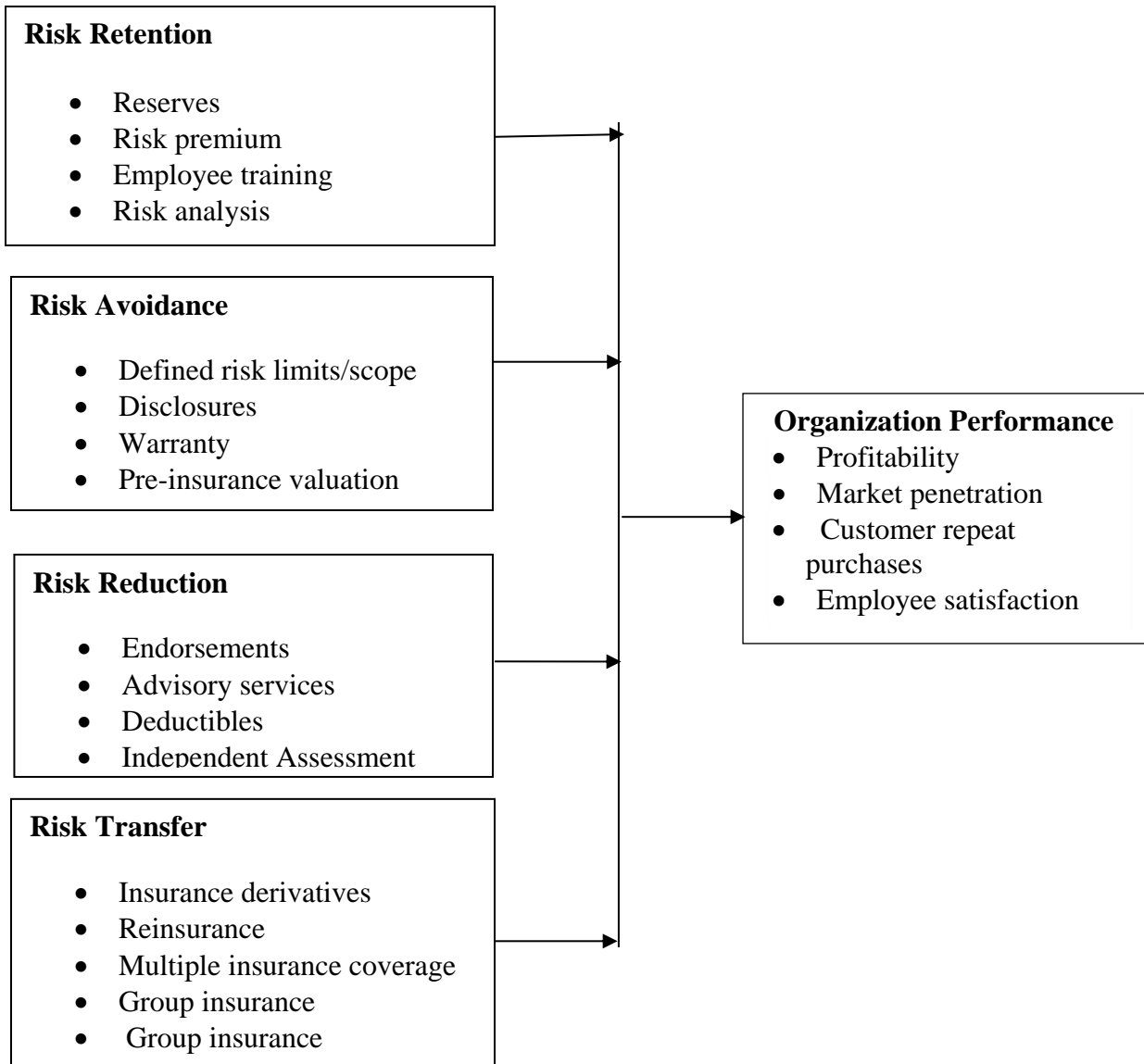
Source: Researcher, 2021

## 2.5 Conceptual Framework

Based on the foregoing theoretical and empirical review, a conceptual framework was developed to address the gaps identified. The conceptual framework presents the relationships of the variables as shown in Figure 2.1 below.

### Independent Variables

### Dependent Variable



**Figure 2. 1 Conceptual Framework**

**Source: Researcher (2021)**

The study proposed a conceptual model where it was hypothesized that risk management strategies affected performance of insurance companies in Nyeri County. Risk management strategies, the independent variable, was categorized into four, namely; risk retention, risk avoidance, risk reduction and risk transfer. Risk retention was operationalized in terms of reserves, risk premium, employee training and risk analysis. Risk avoidance was operationalized in terms of defined limits, disclosures, warranty, and pre-insurance valuation. Risk reduction was operationalized in terms of endorsements, advisory services, deductibles and independent assessments. Risk transfer was operationalized in terms of insurance derivatives, reinsurance, multiple insurance coverage and group insurance.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter focused on the steps the researcher followed to gather relevant information useful in bridging the identified gap. It outlines the research design, study population, research instruments, procedures for data collection, validity and reliability of the research instrument, pilot study, data analysis and presentation and finally ethical consideration.

#### **3.2 Research Design**

A research design is termed as a defined plan and structure on the execution of a research study (Creswell,2014). A research design provides the procedure of required data, methods to gather and analyze the data to address the research questions (Grey,2014). A descriptive study facilitates a researcher find out about individual's perceptions, attitudes, values or behaviors which enables to draw existing relationships (Cooper & Schindler,2008). An explanatory research design seeks to identify causal links by means of causes and reasons to either support or refute a research problem (Saunders, 2009).

A descriptive and explanatory research design was adopted to enable obtain characteristics of population as well as nature of relationships. The design addresses the how and why aspects of the research questions and allows survey as a deductive approach to collect qualitative data to be analyzed descriptively and inferentially. The design was therefore adopted to show how the risk mitigation strategies affect performance of insurance companies.

### 3.3 Target Population

A group of people that have something in common that is observable are identified as a population (Mugenda & Mugenda, 2003). The study population was sixty-six (66) respondents who consisted of branch managers, unit managers and underwriters of 22 insurance companies with branches within Nyeri County who are knowledgeable and involved on risk management strategies formulation and monitoring. Since there are only 22 insurance companies in Nyeri (Appendix III), the study population was reasonably small and therefore a census study was carried out.

**Table 3. 1: Target Population**

Classification	Total respondents
Branch managers	22
Unit supervisors	22
Underwriter managers	22
TOTAL	66

**Source: Researcher,2021**

### 3.4 Sampling Techniques and Sample size

Census sampling was used given that the study universe was small. Saunders (2007) contends that a census incorporates data from all group members in the population. According to Sekeran and Bougie (2010), purposive sampling involves the selection of respondents who possess the vital information of the study being conducted. Therefore, the study adopted purposive sampling in selecting respondents who included three respondents (branch managers, unit managers and underwriter managers) from each insurance company who are actively involved in risk management process and the operations of insurance companies.

### **3.5 Data Collection Instrument and Procedures**

Collection of data refers to a specific way a researcher uses to obtain data which is required to meet the research purposes (Lawal, 2013). The study adopted a semi-structured questionnaire to obtain primary data given the technical nature information and need to ensure reliability of responses from the target respondents within a reasonable time and financial framework. According to Saris and Gallhofer (2014), a questionnaire refers to a set of preformulated questions on a specific phenomenon. The respondents were required to express how much they concur with specific statements regarding the phenomenon under study through ticking their preferred choice on a Likert scale.

### **3.6 Pilot Study**

The researcher pre-tested the instrument on a selected sample of study population to guarantee that the questionnaire was free of errors and ambiguity. Mugenda and Mugenda (2003) recommend that an ideal sample for piloting purposes be one to ten percent of the target population. to three selected from the respondents. The research instrument was administered to three different managerial staff of Real Insurance Company Limited with who are directly involved in risk management strategies. Respondents involved in the pilot study were left out in the actual research. The questionnaire was self-administered where they dropped and picked later upon completion. Secondary data was obtained from various sources including AKI, IRA, companies' annual financial statements and periodicals.

### **3.7 Validity and Reliability of Research Instrument**

Validity of the research instrument was measured construct validity, content validity and face validity. Reliability of the research instrument was analyzed using Cronbach alpha.

### **3.7.1 Validity of Research Instrument**

Validity is described as the level to which the findings from an analysis represents the phenomenon that is under investigation (Mugenda & Mugenda, 2003; Sekaran and Bougie, 2010). Validity measures how accurate and meaningful a study's implications are on the basis of the research findings. Three forms of validity that included construct, content and face validity were considered.

Construct validity gauges whether test scores generated from the research tool can draw inferences according to study's questions (Mugenda & Mugenda, 2003). Construct validity was ensured by operationalization of the study's variables. Content validity gauges the completeness of a research instrument to ensure it adequately captures all aspects of a variable that should be measured. Content validity was ensured in two ways. First, through expert judgment by asking similar questions to a target group and based on their views, unclear statements were be amended. Second, through empirical literature review to ensure all the four main areas of study were captured. Face validity is the level to which a test is suitable for what it intends to achieve thus ensuring a respondent may not misunderstand or misinterpret a question (Kiiru, 2015). The researcher ensured face validity by relying on instruments used in related studies and concepts deduced from appropriate literature.

### **3.7.2 Reliability of the Research Instrument**

The measure to which the instrument of collecting data produces constant results when trials are repeated is known as reliability (Ngechu, 2004). Cronbach alpha is used to test the degree of consistency of instrument (Eisinga et al., 2013). This study ensured reliability using Cronbach alpha test for all items in the questionnaire. Cooper and Shindler (2003) suggests



that a Cronbach alpha value of 0.50 and above as an indicator of reliability. For this study, 0.70 alpha value and above was used as the acceptable limit to test reliability. Table 3.1 below indicates the Cronbach alpha values for all study variables:

**Table 3. 2: Cronbach Alpha Value**

<b>Variables</b>	<b>Cronbach's Alpha if Item Deleted</b>	<b>Remark</b>
Retention	0.788	Reliable
Avoidance	0.752	Reliable
Reduction	0.813	Reliable
Transfer	0.817	Reliable
Performance	0.800	Reliable

As depicted in Table 3.2, each of the variables had met the minimum acceptable alpha value of 0.7 and hence concluded that the research questionnaire used was reliable. Table 3.3 below indicates the aggregate Cronbach alpha value of the research:

**Table 3. 3:Aggregate Cronbach Alpha Value**

<b>Reliability Statistics</b>		
<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha Based on Standardized Items</b>	<b>N of Items</b>
.830	.828	5

From the computed aggregate Cronbach alpha value of 0.828 in Table 3.3 above, this further confirmed that the research instrument used was reliable.

### **3.8 Data Analysis and Presentation**

Qualitative and quantitative data was collected, coded and finally analyzed using the Special Package for Statistical Science (SPSS) to yield inferential and descriptive statistics. Inferential statistics included correlation analysis to ascertain the interaction between the variables and multiple regression model that tested to describe the association between variables under study.

Descriptive statistics used were frequencies and measures of central tendencies which were presented using tables while inferential statistics was analyzed using regression analysis and presented using narratives and themes. The regression model adopted was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_i$$

Where

$Y$  = Performance of Insurance Companies

$\beta_0$  = Constant Term

$\beta_1$  = Coefficient for risk retention strategy

$\beta_2$  = Coefficient for risk avoidance strategy

$\beta_3$  = Coefficient for risk reduction strategy

$\beta_4$  = Coefficient for risk Transfer strategy

$X_1$  = Risk Retention Strategies

$X_2$  = Risk Avoidance Strategies

$X_3$  = Risk Reduction Strategies

$X_4$  = Risk Transfer Strategies

$\epsilon_i$  = error term

The coefficients measured the effect of the independent variables ( $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$ ) on the dependent variable  $Y$ . The various hypotheses of this study were investigated at 95% level of confidence. The significance of  $\beta$ 's was used to test the corresponding hypotheses  $H_01$ ,  $H_02$ ,  $H_03$  and  $H_04$  in chapter one.

### **3.9 Ethical Consideration**

A data collection authorization letter from Kenyatta University and a research permit from National Council of Science Technology and Innovation (NACOSTI) were obtained prior to

undertaking the actual research. The respondent's participation was voluntary and anonymous. The research utilized incitation and APA 6<sup>th</sup> edition for referencing to ensure that the research was void of plagiarism and any other form of academic dishonesty.

## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the findings and provide the interpretation thereof. Results of the analysis form the basis for which each variable affect the independent variable.

#### 4.1 Response Rate

Out of 63 questionnaires, the response was 60 translating to a response rate of 95%. Three questionnaires that were not received at all. Mugenda (2011) suggests that a response level of 60% and above is acceptable whereas Winner and Dominick (2006) indicated that a 21-70% response rate of self- administered questionnaire is acceptable since it guarantees accuracy and minimizes bias and hence the response rate was deemed as adequate for analysis. Table 4.1 depicts the results.

**Table 4. 1: Rate of Response**

<b>Category</b>	<b>Targeted Sample Size</b>	<b>Response Rate</b>	<b>% Response Rate</b>
Respondents	63	60	95
<b>Total</b>	<b>63</b>	<b>60</b>	<b>95</b>

**Source: Field Data (2021)**

#### 4.2 Demographic Characteristics of the Respondents

This section offers research findings as well as the interpretation of the findings on the demographic information. The results were presented through the use of tables and figures.

#### 4.2.1 Gender Composition

The information on gender amongst the respondents was summarized. Analysis revealed that of the 60 respondents, 44 were male representing 73.33% whereas 16 were female representing 26.67% as is shown in Table 4.2 below:

**Table 4. 2: Gender Composition**

	<b>Frequency</b>	<b>Percentage</b>
Male	44	73.33%
Female	16	26.67%
<b>Total</b>	<b>60</b>	<b>100</b>

**Source: Field Data (2021)**

The findings demonstrate that the study sample was representative in terms of gender. Men held majority of management positions in the insurance companies. According to a 2019 survey report by Kenya National Bureau of Statistics, the percentage population of male was 49.5% to 50.49% that of female in Kenya. The findings indicate there was gender disparity among managerial staff working in the insurance companies in Nyeri. This disparity is supported by KNBS report that indicated that majority of the sectors employed more male than female (KNBS, 2017).

#### 4.2.2 The Respondents Age Bracket

**Table 4. 3: Age Group of Respondents**

<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 35 years	9	15.00%
35 - 40 years	20	33.33%
41 - 45 years	19	31.67%
Over 45 years	12	20.00%
<b>Total</b>	<b>60</b>	<b>100</b>

**Source: Field Data (2021)**

Of the 60 respondents, 9 respondents were 35 years and below accounting for 15% whereas 20 respondents were aged between 35 to 40 years representing 33.3%. Additionally, 19 respondents representing 31.67% of the total respondents ranged between 41-45 years while 12 respondents aged above 45 years representing 20%. This indicated that the insurance companies in Nyeri County more middle-aged employees than employees within the youth bracket. This is supported by World Bank 2015 report that 95% of 10.862M workforce labour in Kenya are aged 35 and above.

#### 4.2.3 Position held by Respondents

Table 4.4 below summarizes areas of specialization at work by respondents.

**Table 4. 4: Position Held by Respondents**

<b>Position Held</b>	<b>Frequency</b>	<b>Percentage</b>
Branch Manager	19	31.67%
Unit Manager	21	35.00%
Underwriting Manager	20	33.33%
<b>TOTAL</b>	<b>60</b>	<b>100</b>

**Source: Field Data (2021)**

Table 4.4 above indicated that of the 60 respondents, 19 were branch managers constituting 31.67%, 21 were unit managers which constituted 35% and 20 were underwriting managers which constituted 33.33%. This points to a balanced representation of the respondents in the various insurance companies that were targeted therefore the respondents had a greater understanding of the insurance company in various sections to provide reliable data relevant for the information sought.

#### 4.2.4 Education Level

The educational level of the respondents was analyzed and provided in the Table 4.5 below:

**Table 4. 5: Education Level**

<b>Education level</b>	<b>Frequency</b>	<b>Percentage</b>
Certificate of insurance	0	0.00%
Diploma	0	0.00%
Bachelor’s Degree	41	68.33%
Post Graduate Degree	19	31.67%
<b>TOTAL</b>	<b>60</b>	<b>100</b>

**Source: Field Data (2021)**

The analysis illustrates that there were 68.33% marginally more respondents with an undergraduate degree than 31.67% who possessed post graduate qualification. This analysis implies that, all insurance companies under the study hire highly qualified personnel due to competitive market forces who have the prerequisite knowledge in management positions. This is crucial to the study as the results can be reliable given that the managers are more knowledgeable in insurance industry.

#### 4.2.5 Work Experience

This researcher wanted to determine the period the respondents had worked with the insurance company. Tabulation of work experience gained is presented in the Table 4.6 below:

**Table 4. 6: Years worked**

<b>Years Worked</b>	<b>Frequency</b>	<b>Percent</b>
1-5 years	7	11.67%
6 -10 years	30	50.00%
Above 10 years	23	38.33%
<b>TOTAL</b>	<b>60</b>	<b>100</b>

**Source: Field Data (2021)**

The study observed that, notably, majority (50 %) respondents had industry experience for a period of between 6 to 10 years while 38.33% respondents had worked for over 10 years while 11.67% had experience ranging 1-5 years. Majority of the respondents had over 5 years' experience hence they were familiar with the operations of the insurance companies they worked for. The results therefore could be relied upon given they were conversant with companies' policies and strategies.

### 4.3 Descriptive Analysis

#### 4.3.1 Risk Retention Strategies and Organizational Performance

The research aimed at establishing the effects of risk retention strategies on the organizational performance of insurance companies in Nyeri County and Table 4.7 below summarizes the responses:

**Table 4. 7: Risk Retention Strategies**

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Charging Risk Premiums	60	3	5	277	4.6167	0.52373
Maintaining Claims Reserve	60	2	5	250	4.1667	0.76284
Risk Analysis	60	1	5	233	3.8833	0.76117
Continuous Employees Training	60	1	5	212	3.5333	0.85304
Aggregate score					4.0500	0.7252
Valid N (listwise)	60					

**Source: Field Data (2021)**

Aggregate mean score of this section was found to be 4.05 with a standard deviation of 0.7252 signifying that on average, managers confirmed that risk retention strategies affected performance. The results indicate that insurance companies' performance is highly dependent



on charging risk premiums (Mean =4.6167: SD=0.52373) and maintaining claims reserve (Mean =4.1667: SD=0.76284). This signifies that insurance companies are required to maintain substantial amounts of cash so that when claims arise, they can have sufficient cash flow to settle the claims. Risk premiums cushion insurance companies from high risk covers that although risky, promise high revenue streams. If the insurance companies are unable to raise sufficient cash reserves, it means that the sustainability of the company is at risk and hence the management need to ensure that the stability of the company is guaranteed.

The findings further indicate that risk analysis (Mean=3.8833:SD=0.76117) and continuous employees training (Mean =3.5333: SD=0.85304) have the least effect on performance. This is a clear indication that in the Kenyan context and specifically in the insurance companies, risk analysis and continuous employees training have a minimal effect on organizational performance of insurance companies.

#### 4.3.2 Risk Avoidance Strategies and Organizational Performance

Respondents rated effects of risk avoidance strategies on their organizations. Table 4.8 below presents results

**Table 4. 8:Risk Avoidance Strategies**

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Risk Limits	60	2	5	271	4.5167	0.72467
Insured Disclosures	60	2	5	259	4.3167	0.74769
Insured Requirements	60	1	5	244	4.0667	0.73338
Pre-insurance Inspection	60	1	5	234	3.9	0.68147
Aggregate score					4.2000	0.7218
Valid N (listwise)	60					

**Source: Field Data (2021)**

The total aggregate mean score of this section was found to be 4.2 with a standard deviation of 0.7218 signifying that on average, managers confirmed that risk avoidance strategies affected organizational performance. The results indicate that organizational performance is highly dependent on risk limits (Mean=4.5167: SD=0.72467) and insured disclosures (Mean =4.3167:SD=0.74769). This is an indicator that insurance companies require the insured to provide full disclosures on the subject matter to be insured. Such disclosures ensure that the insurance company covering the risk is aware of the exact amount of risk in the contract. This in turn helps the management during the approval of the contract determine the premiums that are acceptable. Risk limits ensures that the insurance company undertakes the amounts of risk that the company is able to cover should the risk actually materialize.

The findings further indicate that the insured requirements (Mean =4.0667:SD=0.73338) and pre-insurance inspection (Mean =3.9:SD=0.68147) least affected performance. This implies that in the Kenyan context and specifically in the insurance companies, the insured requirements and pre-insurance inspection have a minimal effect on organizational performance of insurance companies. However, since the insured requirements have a mean score of 4.0667, the insurance managers have to enforce various minimum requirements that the insured has to meet for their cover to be approved. The findings are consistent with the assertion of Okumu (2014) that clarifying requirements, obtaining prior information enhanced performance of motor insurance companies in Kenya.

### 4.3.3 Risk Reduction Strategies and Organizational Performance

The respondents rated statements on risk reduction strategies on the performance. Table 4.9. below summarizes the responses.

**Table 4. 9: Risk Reduction Strategies**

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pre - independent Risk Assessment	60	1	5	253	4.2167	0.71525
Clients Advisory	60	2	5	251	4.1833	0.70089
Policy Scope Alterations	60	1	5	251	4.1833	0.87317
Policy Scope Changes	60	2	5	216	3.6000	0.6938
Aggregate score					4.0458	0.7458
Valid N (listwise)	60					

**Source: Field Data (2021)**

The total aggregate mean score of this section was found to be 4.0458 with a standard deviation of 0.7458 signifying that on average, managers confirmed that risk retention strategies affected organizational performance. The results indicate that organizational performance is highly dependent on pre -independent risk assessment (Mean =4.2167: SD=0.71525) and clients advisory (Mean =4.1833:SD=0.70089). This implies that insurance companies require pre-independent risk assessment to provide additional evidence that will be used to ascertain the extent of risk as well as the status of the insured. Pre – independent risk assessment is usually done by third parties who are well known to provide unbiased inspection reports who include valuers, hospitals and government agencies.

The findings further indicate that policy scope alterations (Mean =4.1833:SD=0.87317) and policy scope changes (Mean =3.6:SD=0.6938) have the lowest impact on the performance. This indicates that in the Kenyan context and specifically in the insurance companies, policy scope alterations and policy scope changes is of little significance on performance. This could

imply that by the time the insured undertakes the cover, they are willing to adhere to the conditions of the contract. The insured compliance to policy scope changes is not likely to be affected as long as the matters in questions are justifiable such as scope changes arising from macro – economic variables such as interest rate, inflation, taxation among others. The findings support those of Njeri (2014) who determined that organizations can enhance performance through use of reduction strategy.

#### 4.3.4 Risk Transfer Strategies and Organizational Performance

The study assessed how risk transfer strategies effected performance of insurance companies in Nyeri County. Table 4.10 shows various aspects of risk transfer

**Table 4. 10: Risk Transfer Strategies**

<b>Descriptive Statistics</b>						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Risk Reinsurance	60	1	5	262	4.3667	0.73569
Partnerships on High Risks	60	1	5	257	4.2833	0.76117
Group Insurance Products	60	2	5	231	3.85	0.7089
Insurance derivatives	60	1	5	199	3.3167	0.79173
Aggregate score					3.9542	0.7494
Valid N (listwise)	60					

**Source: Field Data (2021)**

The total aggregate mean score of this section was found to be 3.9542 with a standard deviation of 0.7494 signifying that on average, managers confirmed that risk retention strategies affected organizational performance. The results indicate that organizational performance is highly dependent on risk reinsurance (Mean score=4.3667:SD=0.73569) and partnerships on high risks (Mean =4.2833:SD=0.76117). This depicts that insurance companies are expected to

spread risks with other companies to minimize incidences of great losses and enhance their sustainability. Reinsurance is a requirement by the IRA and prudent managers in the insurance industry have to comply with this (IRA,2013). Spreading of risks in the insurance industry is key to ensure that should the number of claims increase substantially, the insurance company remains a going concern. Findings are consistent with Wabomba (2015) who established that outsourcing and contractual agreements had a positive effect on performance.

The findings further indicate that group insurance products (Mean=3.85:SD=0.7089) and insurance derivatives (Mean=3.3167:SD=0.79173) have the lowest impact on the organizational performance. This signifies that Kenyan context and specifically in the insurance companies, group insurance products and insurance derivatives have a minimal effect on organizational performance. This can be attributed to the fact that derivatives market in Kenya is still at its infant stage and hence majority of insurance managers are yet to take up insurance derivatives. Group insurance product are yet to be adopted by a majority of Kenyans except for medical insurance products which are widely taken up by organizations for their employees covering 24.5% of the total Kenyan population (IRA,2019).

#### **4.4 Inferential Analysis**

Various diagnostics tests employed on the four hypotheses. Before conducting the analysis however, the researcher undertook diagnostic tests to study the multiple linear regressions' simple expectations. The results of the diagnostic tests were as follows:

##### **4.4.1 Test of Normality**

A number of statistical procedures employed in data analysis have underlying assumptions that the data follows a normal distribution (Ghesami & Zahediasi, 2012). The most common

normality test is Shapiro-Wilk which was used to ascertain the extent of departure from the standard. The outcomes are contained in Table 4.11 below:

**Table 4. 11: Tests of Normality**

Tests of Normality						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Risk Retention	.169	60	.000	.941	60	.006
Risk Avoidance	.217	60	.000	.720	60	.000
Risk Reduction	.196	60	.000	.870	60	.000
Risk Transfer	.167	60	.000	.938	60	.004
Performance	.177	60	.000	.898	60	.000

a. Lilliefors Significance Correction

**Source: Field Data (2021)**

Based on the outcomes, if p-value is below 0.05 the null hypothesis will be accepted. For all the variables,  $p > 0.05$ , hence the data was considered normally distributed.

#### 4.4.2 Test of Linearity

**Table 4. 12: Tests of Normality on Risk Retention**

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Performance * Risk Retention	Between Groups	(Combined)	7.470	10	.747	4.300	.000
		Linearity	2.826	1	2.826	16.263	.000
		Deviation from Linearity	4.645	9	.516	2.970	0.7
	Within Groups		8.513	49	.174		
	Total		15.983	59			

**Source: Field Data (2021)**

From the analysis of Table 4.12 above, value sig deviation from linearity of 0.7 is greater than 0.05, thus there is a linear relationship between risk retention and organizational performance of insurance companies.

**Table 4. 13: Tests of Normality on Risk Avoidance**

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Performance * Risk Avoidance	Between Groups	(Combined)	8.213	8	1.027	6.739	.000
		Linearity	4.097	1	4.097	26.893	.000
		Deviation from Linearity	4.116	7	.588	3.859	0.2
	Within Groups		7.770	51	.152		
	Total		15.983	59			

Source: Field Data (2021)

Table 4.13 above shows value sig deviation from linearity of  $0.2 > 0.05$ , thus reject the second null hypothesis relationship.

**Table 4. 14: Tests of Normality on Risk Reduction**

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Performance * Risk Reduction	Between Groups	(Combined)	7.500	9	.833	4.912	.000
		Linearity	3.530	1	3.530	20.809	.000
		Deviation from Linearity	3.970	8	.496	2.925	0.9
	Within Groups		8.483	50	.170		
	Total		15.983	59			

Source: Field Data (2021)

From the results of Table 4.14, value sig deviation from linearity of  $0.9 > 0.05$ , this indicates that a linear relationship exists between risk reduction strategy and organizational performance of insurance companies.

**Table 4. 15: Tests of Normality on Risk Transfer**

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Performance * Risk Transfer	Between Groups	(Combined)	7.292	9	.810	4.661	.000
		Linearity	5.054	1	5.054	29.072	.000
		Deviation from Linearity	2.238	8	.280	1.609	.146
	Within Groups		8.692	50	.174		
	Total		15.983	59			

**Source: Field Data (2021)**

Table 4.15 shows value sig deviation from linearity of 0.146>0.05, suggesting that risk transfer and organizational performance of insurance companies have a linear relationship.

#### 4.4.3 Multi - Collinearity Test

Multi - collinearity occurs when variables in a regression model are highly intercorrelated. Multi-collinearity results to skewed results hence affects the determination of effect of individual variable on the dependent variable (Kleinbaum et., 2007). Multi - collinearity was measured by computing Variance Inflation Factors (VIF). Neter et al. (1985) proposed that VIF values greater than 10 signifies multi - collinearity. The VIF values for the study are between 2.9 to 1.478, which was within the recommended limit indicating that there was no evidence of multi-collinearity in the data used for this study. The outcomes are shown below.

**Table 4. 16: Multi – Collinearity Test**

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.078	.606		.129	.898		



	Risk Retention	-.025	.146	-.025	-.174	.863	.484	2.068
	Risk Avoidance	.075	.151	.084	.494	.623	.345	2.900
	Risk Reduction	.353	.145	.331	2.425	.019	.535	1.868
	Risk Transfer	.573	.147	.472	3.887	.000	.676	1.478
a. Dependent Variable: Performance								

Source: Field Data (2021)

#### 4.5 Multiple Regression Analysis amount of disparity

Table 4.17, and 4.18 below present regression model:

**Table 4. 17: Model Summary**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.673 <sup>a</sup>	0.453	0.413	0.39884	0.453	11.369	4	55	0.000	2.036
a. Predictors: (Constant), Transfer, Reduction, Retention, Avoidance										
b. Dependent Variable: Performance										

Source: Field Data (2021)

Table 4.17 above shows the R – Squared and also the significance level of the model. The model is significant at a confidence level of 95% since the P – Value is 0.00 and hence >0.05. Based on the R – Squared, the model is able to explain 45.3% of the changes in the dependent variable. The other 54.7% of changes in organizational performance of maybe clarified by other independent variables that were not used in the current study model.

**Table 4. 18: Coefficient of the Model**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B

	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	0.078	0.606		0.129	0.898	-1.136	1.292
Risk Retention	-0.03	0.146	-0.025	-0.17	0.863	-0.318	0.267
Risk Avoidance	0.075	0.151	0.084	0.494	0.623	-0.229	0.378
Risk Reduction	0.353	0.145	0.331	2.425	0.019	0.061	0.644
Risk Transfer	0.573	0.147	0.472	3.887	0.000	0.278	0.869
a. Dependent Variable: Performance							

**Source: Field Data (2021)**

The findings in Table 4.18 above shows the model coefficients as well as the significance of each coefficient. The coefficients are used in 4.9.1 in the specification of the model as well as in 4.10 in interpretation of the research findings for each research objective.

#### 4.5.1 Model Specification

The results of the study were summarized using the following regression model below;

$$Y = 0.078 - 0.03X_1 + 0.075X_2 + 0.353X_3 + 0.573X_4 + \varepsilon_i$$

Where

**Y** = Organizational Performance of Insurance Companies

$\beta_0$  = Constant Term

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  = Beta coefficients

**X<sub>1</sub>** = Risk Retention Strategies

**X<sub>2</sub>** = Risk Avoidance Strategies

**X<sub>3</sub>** = Risk Reduction Strategies

**X<sub>4</sub>** = Risk Transfer Strategies

$\varepsilon_i$  = Error term - refers to any changes in the dependent variable that are not considered in the model utilized.

The model shows that there is a positive effect between risk avoidance, risk reduction and risk transfer strategies and performance of insurance companies in Nyeri County. However, risk retention strategies and performance relationship was negative.

#### 4.5.2 Analysis of Variance

Analysis of variance on the four predictor variables was undertaken and the outcomes are presented in Table 4.19.

**Table 4. 19: ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.234	4	1.809	11.37	.000 <sup>b</sup>
	Residual	8.749	55	0.159		
	Total	15.983	59			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Risk Transfer, Risk Reduction, Risk Retention, Risk Avoidance						

Table 4.19 above shows the analysis of variance as well as the significance of the model. A confidence level of 95% is fit for this data since the P – Value is 0.000<sup>b</sup> and hence >0.05.

#### 4.6 Test of Hypothesis

Following regression analysis of the four predictor variables, various interpretations were drawn. T-test was utilized to verify the importance of each regression coefficients in the multiple linear regression model. Addition of a significant variable to a model of regression results to the model being extra efficient, whilst addition of a less important variable might result to the model becoming inferior. The statements of hypothesis utilized to test the importance of a given regression coefficient  $\beta_j$  are:

$$H_0 : \beta_j = 0 \quad \text{versus} \\ H_1 : \beta_j \neq 0 \quad , \text{ where } j=1, 2, 3, 4, 5, 6.$$

The null hypothesis will be rejected if the p-value is <0.05. Analysis and interpretation of regression results on the four research objectives is discussed below:

#### **4.6.1 H<sub>01</sub>: Risk Retention Strategy versus Organizational Performance**

From the output in Table 4.17, it was established that the P – value of 0.863 for risk retention, implies that this predictor variable is not statistically significant at a confidence level of 95%. The null hypothesis was therefore accepted that risk retention strategy is statistically insignificant in influencing organizational performance of insurance companies in the Nyeri County. The coefficient for risk retention was - 0.03. This signals a negative relationship between performance of insurance companies and risk retention, hence increase in risk retention will result to decrease in the organizational performance of insurance companies. The finding collaborates with a study by Kokobe and Gemechu (2016) who found out that risk retention as a loss financing technique had a low moderate negative relationship with financial performance. The study concurs with Berger et. al, (2018) that risk retention strategies negatively affected the performance of Chinese Commercial banks. The results support Ochieng (2017) findings that risk retention strategy was the least used as it negatively affected performance.

#### **4.6.2 H<sub>02</sub>: Risk Avoidance Strategy versus on Organizational Performance**

From the output in Table 4.17, it was established that the P – value of 0.623 for risk avoidance, implies that this predictor variable is not statistically significant. We therefore accept the null hypothesis that risk avoidance is not statistically significant on organizational performance of

insurance companies in the Nyeri County. The coefficient for risk avoidance was + 0.075. This implies a positive but insignificant relationship between organizational performance and risk avoidance exist and hence increase in risk avoidance will not lead significant performance of insurance companies. Supporting these findings is a study by Karanja (2017) who established that risk avoidance strategies had an insignificant relationship with sustainable competitive advantage of commercial banks in Kenya. Similarly, Olweny (2018) observed that risk avoidance strategies positively but insignificantly affected corporate governance of insurance companies in Kenya. The research findings further concur with Kinyua et al., (2015) that risk avoidance positively affects performance of SME ICT firms in Nairobi.

#### **4.6.3 H<sub>03</sub>: Risk Reduction Strategy versus Organizational Performance**

From the output in Table 4.17, it was established that the P – value of 0.019 for risk reduction, implies that risk reduction is statistically significant at a confidence level of 95% hence rejecting the null hypothesis. The coefficient for risk reduction was + 0.353. This implies the effect of risk reduction was positive and hence a change in risk reduction will result to increase in the performance. The findings support those of Njeri (2014) who determined that organizations can enhance performance through use of reduction strategy. Similarly, Lambiano (2016) concluded that risk reduction strategies positive statistically significant influence on supply chain resilience. The findings are in agreement with Gweyu (2013) that risk reduction strategies positively affected performance of commercial banks in Kenya.

#### **4.6.4 H<sub>04</sub>: Risk Transfer Strategy versus Organizational Performance**

From the output in Table 4.17, it was established that the P – value of risk transfer 0.000, implies that this predictor variable is statistically significant at a confidence level of 95 percent

and therefore the null hypothesis was rejected. The coefficient for risk transfer was + 0.573. This means that unit increase in risk transfer will subsequently cause an increase in the organizational performance. The findings support those of Aduloju and Ajemunigbohun (2017) who concluded that the risk transfer greatly reduced insolvency faced by insurance firms in Nigeria. Findings are also consistent with Wabomba (2015) who established that outsourcing and contractual agreements had a positive effect on international developmental organizations. This concurs with Wabomba (2015) findings that risk transfer strategies had the greatest impact on performance of international developmental organizations in Nairobi.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter covers the summary of findings, conclusions and recommendations for policy and areas of future interest.

#### **5.2 Summary of the Findings**

The study adopted descriptive and explanatory research design using census survey. Purposive sampling in selecting respondents who included three categories of respondents (branch managers, unit managers and underwriter managers) from each insurance company who are actively involved in risk management process and the operations of insurance companies. Out of 66 issued, 60 questionnaires duly filled and collected translating to a response rate of 95%. Descriptive statistics were used to describe summarize data. Inferential statistics was used to established the nature and magnitude of the relationships hypothesized between the variables.

The first objective of the study was to determine the effect of risk retention strategies on performance of insurance companies in Nyeri County. The results indicate that the companies' performance was positively and but insignificantly affected by charging risk premiums and maintaining claims reserve. This means that insurance companies require to maintain substantial amounts of cash so that when claims arise, they have sufficient cash flow to settle the claims. Risk premiums cushion insurance companies from high risk covers that although risky promise high revenue streams. If the insurance companies are unable to raise sufficient

cash reserves, it means that the sustainability of the company is at risk and hence the management must always ensure that the stability of the company is guaranteed. Conversely, risk analysis and employee training were counterproductive in the performance of insurance companies in Kenya.

The second objective of the study was to determine the effect of risk avoidance strategies on performance of insurance companies in Nyeri County. Managers confirmed that risk avoidance strategies contributed to enhancing performance. Results indicate that performance of insurance companies is highly dependent on risk limits and insured disclosures. It is therefore prudent for insurance companies to require the insured to provide full disclosures on the subject matter to be insured. Such disclosures ensure that the insurance company covering the risk is aware of the exact amount of risk in the contract. This in turn helps the management during the approval of the contract as well as determining the premiums that are acceptable. Risk limits ensures that the insurance company undertakes the amounts of risk that the company is able to cover should the risk actually materialize.

The third objective of the study was to determine the effect of risk reduction strategies on performance of insurance companies in Nyeri County. The findings showed managers confirmed that risk reduction strategies enhanced performance of the insurance companies. This points that performance is highly dependent on pre - independent risk assessment and clients advisory. This asserts the fact that insurance companies require pre-independent risk assessment to provide additional evidence that will be used to ascertain the extent of risk as well as the status of the insured. Pre – independent risk assessment is usually done by third parties who are well known to provide unbiased inspection reports. These include valuers,



hospitals, government agencies among other institutions that hold relevant information on the insured.

The fourth objective of the study was to determine the effect of risk transfer strategies on performance of insurance companies in Nyeri County. The findings indicated that on average, managers confirmed that risk retention strategies affected organizational performance of insurance companies. The results indicate that insurance performance is highly dependent on risk reinsurance and partnerships on high risks. This means that insurance companies are expected to spread risks with other companies to minimize incidences of great losses and enhance the sustainability of their business. Re-insurance is a requirement by the Insurance Regulatory Authority and prudent managers in the insurance industry have to comply with this. Spreading of risks in the insurance industry is key to ensure that should the number of claims increase substantially, the insurance company remains a going concern.

### **5.3 Conclusions of the Study**

Several conclusions on the effects of risk retention strategies, risk avoidance strategies, risk reduction strategies and risk transfer strategies on the organizational performance of insurance companies in Nyeri County can be made. Regression analysis was carried tested on the four predictor variables. Table 4.18 shows that the summary of the model is significant at a confidence level of 95% since the P – Value is 0.00 and hence  $>0.05$ . Based on the R – Squared, the model explains 45.3% of the changes in the dependent variable while the other 54.7% of changes in organizational performance is described by other factors not considered in the study model. The general conclusions made on the four objectives are as follows:

### **5.3.1 Risk Retention Strategies and Performance**

The total aggregate mean score of risk retention strategies is 4.05 with a standard deviation of 0.7252 signifying that on average, managers confirmed that risk retention strategies affected organizational performance of insurance companies. The study established that the P – value of 0.863 for risk retention, implies that this risk retention is statistically insignificant. The coefficient for risk retention was - 0.03. This signals that risk retention strategies do not bear any significance to insurance companies hence increase in risk retention will result to a decline in the organizational performance of insurance companies. Performance. The study therefore concluded that adequate reserves, risk premium, employee training and risk analysis strategies had an insignificant effect on performance of insurance companies in Nyeri.

### **5.3.2 Risk Avoidance Strategies and Performance**

The total aggregate mean score of risk avoidance strategies is 4.2 with a standard deviation of 0.7218 signifying that on average, managers confirmed that risk avoidance strategies affected organizational performance of insurance companies. The study established that the P – value of 0.623 for risk avoidance, implies that this predictor variable is not statistically significant at a confidence level of 95%. We therefore accept the null hypothesis that risk avoidance is not statistically significant in affecting organizational performance of insurance companies in the Nyeri County. The coefficient for risk avoidance was + 0.075. Therefore, a positive relationship exists between organizational performance of insurance companies and risk avoidance and hence an increase in risk avoidance culminate to enhanced performance of insurance companies. The study therefore concluded that defined risk limits, disclosures, warranty and pre-insurance valuation strategies had a significant effect on performance of insurance companies in Nyeri.

### **5.3.3 Risk Reduction Strategies and Performance**

The total aggregate mean score of risk reduction strategies was found to be 4.0458 with a standard deviation of 0.7458 signifying that on average, managers confirmed that risk reduction strategies affected organizational performance of insurance companies. The study established that the P – value of 0.019 for risk reduction, implies that this predictor variable is statistically significant at a confidence level of 95%. The coefficient for risk reduction was + 0.353 thus signifying that a positive effect between performance of insurance companies and risk reduction and hence increase in risk reduction will cause an increase in the organizational performance of insurance companies. The study therefore concluded that endorsements, advisory services, deductibles and independent assessments strategies had positive and significant effect on performance of insurance companies in Nyeri.

### **5.3.4 Risk Transfer Strategies and Performance**

The total aggregate mean score of risk transfer was found to be 3.9542 with a standard deviation of 0.7494 signifying that on average, managers confirmed that risk retention strategies affected organizational performance of insurance companies. The study established that the P – value of 0.000 for risk transfer, indicates that this predictor variable is statistically significant at 5 percent level of significance. Therefore, conclude that risk transfer is statistically significant in affecting organizational performance of insurance businesses within Nyeri County. The coefficient for risk transfer was + 0.573. This implies that risk transfer strategies positively affect the performance of insurance companies hence a unit increase in risk transfer will result to increase in the organizational performance of insurance companies. The study therefore concluded that insurance derivatives, reinsurance, multiple insurance

coverage and risk group insurance strategies had an positive and significant effect on performance of insurance companies in Nyeri.

#### **5.4 Recommendations**

From the summary of the findings, several recommendations can be made: with reference to the first objective, risk retention strategy is counterproductive to insurance companies. Therefore, rather than merely retaining the risks, the insurance companies should focus on the level of risk exposure they decide to bear. While the use of claims reserves and risk premiums is commendable, there is need to come up with better risk profiling techniques and mitigation plans to better address the retained risks regardless of how low they perceive of the consequences.

Secondly, with reference to the second objective, insurance companies should be careful on the risk's avoidance strategies used as there is a fine line between avoiding a risk and a missed business opportunity. Insurance companies should therefore focus on other risk management strategies that are not geared to avoiding risks as opportunities which are beneficial to the insurance industry.

Finally, with reference to the third and fourth objective, the study recommends insurance companies to capitalize on the use of risk reduction and risk transfer strategies since they have a strong and positive influence on performance. Since risk transfer had the highest effect on performance of insurance companies in Nyeri County, the study recommends the enhancement of cooperation of insurance companies in undertaking risky insurance contracts as well as broadening scope of reinsurance portfolio undertaken with reinsurance companies. The

government should strengthen the derivatives market and IRA through training and sensitization on use derivatives as an avenue of risk transfer to enhance performance of the industry.

## **5.5 Suggestions for Further Research**

The study was confined to risk mitigation strategies namely; risk retention, risk reduction, risk avoidance and risk transfer that affect performance of insurance companies in Nyeri County. Future studies could therefore focus on other risk management strategies not studied and how they affect performance. In addition, researchers could also study challenges faced in the implementations of risk management strategies by other industries within the financial sector.

## REFERENCES

- Acharyya, M. (2009). The influence of enterprise risk management on insurers' stock market performance: An event analysis. *International Journal of Business and Management Invention*, 44(3), 121-136
- Aduloju, S. A., & Ajemunigbohun, S. S (2017). Reinsurance and performance of the ceding companies: The Nigerian insurance industry experience. *Journal of Economics and Business*, 31,19-29.
- Aduma, L. K., & Kimutai, G. (2018). Project risk management strategies and project performance at the National Hospital Insurance Fund in Kenya. *International Academic Journal of Information Sciences and Project Management*, 3(2), 80-110.
- Agustina, L., & Baroroh, N. (2016). The relationship between Enterprise Risk Management (ERM) and firm value mediated through the financial performance. *Review of Integrative Business and Economics Research*, 5(1),128-138.
- Altman, D.G., & Bland, J.M. (2015). Statistics notes: The normal distribution. *BMJ*, Vol 310.
- Association of Kenya Insurance (2019). 2019 Annual industry report
- Amaya, P. A., & Memba, F. (2015). Influence of risk management practices on financial performance of life assurance firms in Kenya: A survey study of Kisii County. *International Journal of Economics, Commerce and Management*, 3 (5), 978-996.
- Amemba, C.S. (2013). The effect of implementing risk management strategies on supply chain performance: A case of Kenya Medical Supplies Agency. *European Journal of Business and Management*, 5(14), 1-15.

- Babbel, D.F., & Santomero, A.M. (1996). Risk management by insurers: An analysis of the process, working paper,96-16, Wharton financial Institutions Center.
- Berger, A., Hasan, I., & Zhou, M. (2010). The effects of focus versus diversification on bank performance: Evidence of Chinese Banks. *Journal of Banking and Finance*, 31, 1472-1287.
- Bernley, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management* (1(17)), 99-120.
- Brickley, J. S., & Zimmerman, J. (1994). Ethics, incentives and organizational design. *Journal of Applied Corporate Finance*, 7(2), 20-30.
- Cheluguet, K. J. (2014). Determinants of financial distress in insurance companies in Kenya: Unpublished PhD thesis, Jomo Kenyatta University of Technology, Kenya.
- Chepkoech, F., & Rotich, G. (2017). Effect of risk management process on motor insurance fraud in Kenya. *International Journal of Social Sciences and Information Technology*, 3(3), 1934-1951
- Chien, M. H. (2004). A study to improve organizational performance, View from SHRM. *The Journal of American Academy of Business*, 3, 289-291.
- Cooper, D.R., & Schindler, P.S. (2006). Business research methods (8<sup>th</sup> ed.): USA: McGraw-Hill.
- COSO (2004). Enterprise risk management – integrated framework. Committee of Sponsoring Organizations of the Tread way Commission.
- Daft, R. L. (2000). Organizational theory and design. (7, Ed.) USA: South- Western College Publishing.
- Deloach, J. (2000). Enterprise-wide Risk Management: Strategies for linking risk and opportunity. FT Prentice Hall.
- Delloite. (2015). Strategic risk management in insurance. Navigating the rough waters ahead, Global risk management survey. Delloite University Press.

- Ernst, N., & Young, Y.C. (2019). 2020 Global insurance outlook: The drive for transformation and growth. Ernst & Young Global Limited.
- Ernst & Young, (2016). Africa's Insurance Potential: Trends, Drivers, Opportunities and Strategies Research Paper 20/16, 13-15.
- Gakure, R.W., Ngugi, J.K., Ndwiga, P.M., & Waithaka, S.M (2012). The effect of credit risk retention strategies on performance of unsecured bank loans by commercial banks in Kenya. *International Journal of Business and Social Research*, 2 (4).
- Ghasami, A., & Zehedial, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology Metabolism*, 10(2), 486-489
- Gall, M.D., Gall, J.P., & Borg, W.R. (2017). Educational research: An introduction (8<sup>th</sup> ed). Needdham Heights MA: Allyn & Bacon
- Girangwa, K. G., Rono, L., & Mose, J. (2019). The Influence of Enterprise Risk Management Practices on Organizational Performance: Evidence from Kenyan State Corporations. *Journal of Accounting, Business and Finance Research*, 8(1), 11-20.
- Gitau, B.N. (2013). Strategies adopted by Kenyan Insurance companies to Alleviate low Insurance penetration. Unpublished MBA Project, University of Nairobi, Kenya
- Gweyu, M. O. (2012). An investigation of credit risk mitigation strategies adopted by commercial banks in Kenya. An unpublished MBA, Kenyatta University, Kenya.
- Hair, J.F., Sarstedt, M., Ringle, M., & Mena, J.A. (2011). An assessment of the use partial least square structural equation modeling in marketing research. *Journal of Academic Marketing Science*, 40(3), 413-433.
- Hansen, G. S., & Wernefelt. (1989). Determinants of firm performance: Relative importance of economic and organizational factors. *Strategic Management Journal*, 10(5), 399-411.



- Henri, J-F. (2004). Performance measurement and organizational effectiveness. Bridging the gap. *Managerial Finance*, (6),93-123
- Hobbs, J., Legraw, C. & Veit, B. (2010). Insurance Investment strategies for an Inflationary Environment. *Insurance and management annual review*, 12(9), 104-127.
- Horvey, S.S., & Ankamah, J. (2020). Enterprise risk management and firm performance: Empirical evidence from Ghana equity market. *Cogent Economics & Finance*, 8.
- Insurance Regulatory Authority. (2017). 2016 Annual report of Insurance Regulatory Authority.
- Insurance Regulatory Authority. (2019). 2018 Annual report of Insurance Regulatory Authority.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 4(3), 305-360.
- Jensen, D. R., & Remirez, D. E. (2013). Revision: Variance inflation in regression, *Advances in Decision Sciences*,3.
- Jemutai, E.K. (2019). Strategies adopted to achieve Competitive Advantage in an Organization: A case of Doinyo Lessos Creameries Ltd in Eldoret, Kenya. Unpublished MBA Project, Kenyatta University, Kenya
- Johnson, G., & Scholes, K. (2005). *Exploring corporate strategy* (7<sup>th</sup> ed.) Pearson Educational Publisher, England
- Kairu, E. W., Wafula, M.O., Okaka, O., Odera, O., & Akerele, E.K. (2013). Effects of balanced scorecard on performance of firms in the service sector. *European Journal of Business Management*, 5(9),81-88.
- Kaplan, R. and Norton, D. (1992) The balanced scorecard – measures that drive performance. *Harvard Business Review* January – February: 71-79.

- Kaplan, R.S., & Norton, D.P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press.
- Karanja, M.M. (2017). Effect of risk management strategies on the sustainable competitive advantage of commercial banks in Kenya. An unpublished project, University of Nairobi, Kenya.
- Kassahun, T. (2010) Rethinking institutional excellence in Ethiopia: adapting and adopting the balanced scorecard (BSC) model *JBAS*, 2(1), 22-53
- Kinyua, E., Ogollah, K., & Mburu, D. (2015). Effects of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi. *International Journal of Economics, Commerce and Management*, 3 (2).
- Kleinbaum, D.G., Kupper, L.L. & Nizam, A. (2007). *Applied regression analysis and other multivariable methods: student solution manual* (4<sup>th</sup> ed). Belmont: Duxbury.
- Kokobe, S., & Gemechu, D. (2016). Risk management techniques and financial performance of insurance companies. *International Journal of Accounting and Research*, 4(1).
- Klynveld Peat Marwick Goerdeler (KPMG) 2020. Kenya's insurers between a rock and a covid-19 hard place. Nairobi.
- KPMG Kenya Limited, (2020). Kenya's insurers between a rock and a covid-19 hard place. Nairobi.
- Kumari, N. (2011) Balanced Scorecard for Superior Organizational Performance. *European Journal of Business and Management*, 3(5),73-86
- Lambaino, N.K (2019). Influence of Risk Mitigation Strategies on Supply Chain Resilience in the Petroleum industry in Kenya. Unpublished Ph.D. Thesis, Jomo Kenyatta University of Technology, Kenya.
- Lienbenberg, A. P., & Hoyt, R. E. (2003). The determinants of enterprise risk management: Evidence from the appointment of risk officers. *Risk Management and Insurance Review*,6(1), 37-52.

- Lipe, M.G. & Salterio, S.E. (2000). The Balanced Scorecard: Judgmental Effects of Common and Unique Performance Measures, *The Accounting Review*, 75(3), 283-298
- Macharia, K.P. (2015). Risk management strategies and performance of construction projects in public secondary schools in Murang'a County, Kenya. Unpublished MBA, Kenyatta University, Kenya.
- Macharia, P.K., & Kirui, C. (2018). Risk transfer strategy and performance of construction projects in public secondary schools in Murang'a County. *International Journal of Management and Commerce Innovations*, 6(1), 1815-1820.
- Mayers, D., & Smith, C. (1987). Corporate insurance and the under-investment problem. *Journal of Risk and Insurance*, 54(1), 45-54.
- Moriasi, J. (2007). An assessment of risk management strategies adopted by Kenyan insurers in enhancing organizational effectiveness. Unpublished MBA, Kenyatta University, Kenya.
- Muawya A. H., & Shabbir, A. (2019). The Role of Insurance Sector in the Development of the Economy of Oman. *Global Journal of Economics and Business*, 6 (2), 356-364.
- Mucheru, M. N. (2016). Effect of risk management strategies on financial performance of insurance companies in Kenya: Unpublished MBA project University of Nairobi, Kenya.
- Mugenda, O., & Mugenda, A. (2003). Research Methods, Quantitative & Qualitative Approaches, Nairobi: Acts Press
- Muia, J. S. (2016). Effects of operational risk management practices on financial performance in insurance companies in Kenya: Unpublished MBA project, University of Nairobi, Kenya.
- Murungi, H.K., & Omwenga, J. (2017). Effect of risk mitigating strategy on performance of women funded projects in Meru County, Kenya. *International Journal of Interdisciplinary Research and Innovations*, 3(2).

- Muslih, M. (2018). The benefit of enterprise risk management (ERM) on firm performance. *Indonesian Management and Accounting Research*, 17(2), 172-188.
- Ndambiri, J.N., & Kimutai, G. (2018). Risk management and performance of health systems digitization projects in public hospitals in Nyeri County, Kenya. *The Strategic Journal of Business & Change Management*, 5(2), 2533-2549.
- Neter, J., Wasserman, W. & Kutner, M.H. (1985). Applied linear statistical models. Richard D Irwin, Inc, Homewood, IL.
- Ngechu, M. (2004). Understanding the Research Process and Methods: An Introduction to Research Methods, Nairobi. Acts Press.
- Njeri, C.M. (2014). Effects of risk mitigation strategies on the financial performance of manufacturing firms in Kenya. Unpublished MBA Project, University of Nairobi, Kenya.
- Ntaranu, J.N., & Mundia, M. (2019). Effect of risk avoidance strategy on success of construction projects in the judiciary at Narok County Courts. *The Strategic Journal of Business & Change Management*, 6 (2), 2138-2147.
- Nyakundi, J. B. (2011). The effect of risk management strategies on performance of youth projects in Nyamira County. Unpublished MBA, Kenyatta University. Kenya.
- Nyongesa, M.N. (2017). Effect of financial management practices on and financial performance of insurance companies in Kenya. Unpublished PhD Thesis, JKUAT, Kenya.
- Ochieng, C.H.O. (2017). Influence of project risk management strategies on performance of organizations in motor industry: A case of Isuzu East Africa Limited, Kenya. *International Journal of Novel Research in Engineering and Science*, 4, (2), 28-41.
- Okumu, J.M (2017). Risk Mitigation strategies and performance of insurance industry: A case of motor insurance companies. Unpublished MBA Project, Kenyatta University, Kenya.

- Olweny, L.B.A. (2018). Risk management strategies and corporate governance in insurance companies in Kenya. Unpublished MBA Project, University of Nairobi, Kenya.
- Osiemo, M. J. (2016). Effects of risk management practices on financial performance of non-life insurance firms operating in Kisii County, Kenya: Unpublished MBA project, Jomo Kenyatta University of Technology, Kenya.
- Ouma, M.O (2016). Competitive Strategies and Performance of Insurance companies in Kenya. Unpublished MBA, University of Nairobi, Kenya.
- Pallant, J. (2007). SPSS survival manual-A step by step guide to data analysis using SPSS for windows (3<sup>rd</sup> ed). Mainhead Open University Press.
- Pignanelli, A. & Csillag, J. M. (2008). The impact of Risk Management on Profitability: An empirical study, *Journal of operations and supply chain management*, 1(1), 66-77.
- Pricewater housecoopers (PwC) consortium (2018). Ready and willing: African insurance industry poised for growth, Nairobi: Pricewater housecoopers limited
- Rejda, G. E. (2001). Principles of Risk Management and Insurance (7th ed.). Reading: MA: Addison Wesley.
- Rejda, G.E. (2003). Principles of risk management and insurance (8th ed.) Pearson education publishers Inc, New York.
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), 718-80.
- Robinson, S. M. (2008, April). Understanding the resource-based view: Implications of methodological choice and a new creative context. Unpublished PhD Thesis, Queensland University of Technology, Australia.

- Sekeran, U., & Bougie, R. (2010). *Research Methods for Business. A Skill Building Approach*. (5<sup>th</sup> Edition). New Jersey: John Wiley and Sons.
- Shad, M. K., & Lai, F. (2015). A conceptual framework for enterprise risk management performance measure through economic value added. *Global Business and Management Research; An International Journal*, 7(2), 1–11.
- Shapiro, S.S., & Wilk, M.B. (1965). An analysis of variance test for normality. *JSTOR*, 52 (3/4),591-611.
- Sibomana, A. (2015). Effects of risk management methods on project performance in Rwandan construction industry: A case study of multi-storey building construction project of RSSB. Unpublished MBA project, Jomo Kenyatta University of Technology, Kenya.
- Sing'ombe, N.O. (2016). Effect of reinsurance programmes on financial performance of general insurance companies in Kenya. Unpublished MBA Project, University of Nairobi, Kenya.
- Stulz, R. (1984). Optimal Hedging Policies. *Journal of Financial and Quantitative Analysis*, 19(2), 127-140.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business economic performance: An examination of method convergence. *Journal of management development*, 13(1), 109-122.
- Wabomba, K.W. (2015). Influence of Risk Management Strategies on Project Performance: A Survey of Selected International Development Organizations Based in Nairobi City, Kenya, Unpublished MBA, University of Nairobi.
- Wairegi, B.I. (2004). The strategic response by life insurance companies in Kenya to changes in their environment. Unpublished PhD thesis, University of Nairobi, Kenya.

Waweru, M. N. (2014). Determinants of insolvency in selected insurance companies in Kenya:  
Unpublished MBA, University of Nairobi, Kenya.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.

Yegon, C. K. (2015). Effect of enterprise risk management determinants on financial performance of listed firms in Kenya: Unpublished PhD Thesis, Jomo Kenyatta University of Technology, Kenya.

## APPENDICES

### Appendix I: Research Approval



KENYATTA UNIVERSITY  
GRADUATE SCHOOL

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Internal Memo

FROM: Dean, Graduate School

DATE: 29<sup>th</sup> September, 2020

TO: Cecilia W. Thuku  
C/o Business Administration Dept.

REF: D53/ NYI/PT/22323/2012

**SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL**

This is to inform you that Graduate School Board at its meeting of 11<sup>th</sup> September, 2020 approved your Research Project Proposal for the MBA Degree Entitled, "Effect of Risk Management Strategies on the Performance of Insurance Companies in Nyeri County, Kenya".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

  
JACKSON LUVUSI  
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Business Administration Department.

Supervisors:

1. Dr. Anne Muchemi  
C/o Department of Business Administration  
Kenyatta University

JL/nn





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Our Ref: D53/NYI/PT/22323/2012

DATE: 29<sup>th</sup> September, 2020

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR CECILIA WANGARI THUKU – REG. NO. D53/NYI/PT/22323/2012**

I write to introduce Ms. Cecilia Wangari Thuku who is a Postgraduate Student of this University. She is registered for MBA degree programme in the Department of Business Administration.

Ms. Thuku intends to conduct research for a MBA Project Proposal entitled, "Effect of Risk Management Strategies on the Performance of Insurance Companies in Nyeri County, Kenya".

Any assistance given will be highly appreciated.

Yours faithfully,

**PROF. ELISHIBA KIMANI  
DEAN, GRADUATE SCHOOL**

EK/nn

## **Appendix II: Introductory Letter**

Dear Participant,

### **RE: REQUEST TO COLLECT DATA**

I am a Masters of Business Administration student at Kenyatta University specializing in Strategic Management currently undertaking research on the effects of risk management strategies on the performance of insurance companies in Nyeri County as part of requirements for MBA award. This is to kindly seek your assistance in filling the attached questionnaire to facilitate me gather data to meet the objectives of the research. Information provided and identity will be accorded the utmost confidentiality purely for academic purposes.

Your cooperation will be highly appreciated.

Yours Faithfully,

Cecilia Wangari Thuku  
D53/NYI/PT/22323/2012

### Appendix III: Questionnaire

Kindly provide your responses in the spaces provided by ticking the box that matches your response.

**SECTION A: DEMOGRAPHIC INFORMATION**

**1. Kindly indicate your gender**

Male  Female

**2. Age of respondents**

Under 35 years

35-40 years

41-45 years

Over 45 years

**3. Indicate your management level in the Company.**

Branch Manager

Unit Manager

Underwriting Manager

**4. Highest level of education of the respondent:**

Certificate  Diploma  Undergraduate Degree  Post graduate  Others

**5. Kindly Indicate the number of years you have worked with the organization**

0-5 years  6-10 years  Over 10 years

**SECTION B: RISK MANAGEMENT STRATEGIES AND PERFORMANCE**

**6. Risk Retention Strategies**

Please indicate with a tick (√) your level of agreement with the following statements on influence of risk retention strategies on performance of insurance companies in Nyeri County.

**1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree.**

Questions	1	2	3	4	5
A claims reserve is maintained by the company					
The company charges risk premiums for high-risk insurance covers and insurance holders					

The company offers continuous training to employees					
The company has in place sound mechanisms of risk analysis					

### 7. Risk Avoidance Strategies

Please indicate with a tick (√) the extent to which you agree with the following statements on influence of risk avoidance strategies on performance of insurance companies in Nyeri County.

**1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree.**

Questions	1	2	3	4	5
The company has put in place clearly defined risk limits for different products					
The company always requests and get all necessary disclosures from insured before insuring them					
The company requires the insured to fulfill certain requirements of a contract for payment of certain claims					
The company conducts a comprehensive Pre-insurance Inspection					

### 8. Risk Reduction Strategies

Please indicate with a tick (√) the extent to which you agree with the following statements on influence of risk reduction strategies on performance of insurance companies in Nyeri County.

**1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree.**

Questions	1	2	3	4	5
Any deletions, additions or modifications made by the company to the original contract changes either the terms or the scope of the policy					
The company provides advisory services to clients on additional measures to take to reduce severity of loss					
The company subtracts certain amounts of money of loss when the risks actualize for certain risks					
The company conducts pre- independent assessment of risks and losses					

### 9. Risk Transfer Strategies

Please indicate with a tick (√) the extent to which you agree with the following statements on influence of risk transfer strategies on Performance of Insurance Companies in Nyeri County.

Questions	1	2	3	4	5
Insurance derivatives are used to transfer risks to capital market investors					
The company insures its risks with reinsurance company					
For very high risks, the company partners with other insurance companies to cover the risk under one contract					
The company uses group insurance products to transfer risks between individuals belonging to a homogenous group under one contract					

**10. SECTION C: PERFORMANCE OF INSURANCE COMPANIES**

Please indicate with a tick (√) the extent to which you agree with the following statements on the performance of insurance companies in Kenya.

Indicate your answer on a point 5 scale mark √ on the applicable box. **1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree.**

Financial measures	1	2	3	4	5
The use of risk management strategies has boosted profitability of the company					
Risk management strategies employed have led to increased market penetration					
Risk management strategies results in repeat purchases by the customers					
The application of risk management strategies has enhanced employee satisfaction					

Please provide in the space below, any more information you deem relevant to the study but which may have been missed.

.....

.....

.....

**Thank you for your time. God bless you.**

#### **Appendix IV: List of Insurance Companies in Nyeri County**

1. British-American Insurance Company (Kenya) Limited
2. African Merchant Assurance Company Limited
3. APA Insurance Limited
4. UAP Old Mutual Insurance Company Limited
5. Madison Insurance Company Kenya Limited
6. Kenya Orient Insurance Limited
7. ICEA Lion Insurance Company Limited
8. Direct Line Assurance Company Limited
9. Resolution Insurance Company Limited
10. Sanlam Kenya
11. Jubilee Insurance Company of Kenya Limited
12. Xplico Insurance Company Limited
13. Kenindia Assurance Company Limited
14. Liberty Life Assurance Kenya
15. Corporate Insurance Company Limited
16. The Monarch Insurance Company Limited
17. Pioneer Assurance Company Limited
18. Real Insurance Company Limited
19. AAR Insurance Kenya Limited
20. Invesco Assurance Company Limited
21. Trident Insurance Company
22. Pacis Insurance Company Limited

**Source: IRA (2019)**