# ANALYSIS OF KEY FINANCIAL RATIOS ON PERFORMANCE OF GENERAL INSURANCE BUSINESS IN KENYA

 $\mathbf{BY}$ 

KINYANJUI PAULINE WANGUI

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF COMMERCE OF GRETSA UNIVERSITY

**NOVEMBER 2020** 

## DECLARATION

This research project is my original work and has not been submitted for award of a degree at Greens
University or any other institution of higher learning.
Signed. Parks Date: 11.112.120.20.:
KINYANJUI PAULINE WANGUI
BUS-G-4-0148-16
This Research project has been submitted for examination with my approval as the University supervisor.
Signed: Date: III Iz   Date:
MR GEORGE MUGWE
Lecturer, School of Business,
Gretsa University

#### **ABSTRACT**

Insurance companies contribute extensively to economic growth of a nation. Insurance performance is a subjective degree on how fit insurance can use properties from its primary style of business and make incomes. It plays a pivotal role in the growth of the whole industry, which eventually contributes to the realization of economic growth. The purpose of this study was to analyze key financial ratios on performance of general insurance business in Kenya. The specific objectives of this study is to establish how incurred claim ratio affect performance of general insurance business, to examine how management expense ratio affect performance of general insurance business, to identify the impact of combined ratio on performance of general insurance business, and to establish operating ratio affect profitability of general insurance business. The study used longitudinal research design. A sample size of 10 was used in the study. The study used secondary data available in the Insurance Regulatory Authority in Kenya website. Descriptive and inferential statistic method was used to analyze the data that was presented using table and graphs. The results of the study revealed incurred claim ratio had inverse and significant effect on financial performance of general insurance business. Secondly the management expense ratio had inverse and significant effect on financial performance of general insurance business. The combined ratio had inverse and significant effect on financial performance of general insurance business. The expense ratio had inverse and significant effect on financial performance of general insurance business. The study concluded that insurance business should improve on investigation and management in claims verification processes and work on modality to reduce management expense fee so as to increase profit. More so, focus on reduction of combined ratio to lowest percentage to ascertain improved efficiency cost and put controls to ensure marginal improvement in case it operating increases over time.

## **ACKNOWLEDGEMENT**

First and foremost I thank the Almighty God for giving me resources, good health and patience throughout the entire course.

Secondly, wish to express my sincere gratitude and appreciation to all those who in one way or another contributed to the successful preparation of this research Project.

## **DEDICATION**

To my Parents, brothers and sisters for your material and moral support and making my academic dream a reality. You all inspired me to work hard. God bless you all.

# TABLE OF CONTENTS

DECLARATION	Error! Bookmark not defined.
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
DEDICATION	
TABLE OF CONTENTS	••••••
vi LIST OF TABLES	ixx
LIST OF ABBREVIATIONS	
LIST OF GRAPHS	xii
CHAPTER ONE:	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.2 Financial Performance	3
1.1.3 Insurance Companies in Kenya	6
1.2 Statement of the Problem	7
1.3 Research Objective	8
1.3.1 General Objective	8
1.3.2 Specific Objectives	8
1.4 Research questions	8
1.5 Significant of the Study	9
1.6 Limitation of the study	9
1.7 Conceptual Framework	
CHAPTER TWO	11
RETERATURE REVIEW	11
2.1.1 Introduction	11
2.1.2 Theoretical Framework	11

	2.1.3 Portfolio Theory	13
	2.2.0 Empirical Literature	14
	2.2.1 Liquidity Ratio and Financial Performance	14
	2.2.2 Retention Policy and Financial Performance	16
	2.2.3 Insurance Claims and Financial Performance	16
C	CHAPTER THREE	17
R	ESEARCH METHODOLOGY	17
	3.1 Introduction	
	3.2 Research Design	17
	3.3 Target population	17
	3.4 Sample size	18
	3.5 Data Collection	18
	3.6 Data Analysis	18
(	CHAPTER FOUR	19
	HAPTER FOURATA ANALYSIS, INTERPRETATION AND PRESENTATION	
		19
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION	<b> 19</b> 19
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION	<b>19</b> 19 19
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION	<b>19</b> 19 19
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION.  4.1 Introduction  Table 4.1 Descriptive statistic of the data.  4.2 Descriptive statistical results.	19 19 19 20
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION  4.1 Introduction  Table 4.1 Descriptive statistic of the data  4.2 Descriptive statistical results  4.2.1 Incurred Claim Ratio	19 19 20 20 22
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION  4.1 Introduction  Table 4.1 Descriptive statistic of the data  4.2 Descriptive statistical results  4.2.1 Incurred Claim Ratio  4.2.2 Management of Expenses Ratio	19 19 20 20 22
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION  4.1 Introduction  Table 4.1 Descriptive statistic of the data  4.2 Descriptive statistical results  4.2.1 Incurred Claim Ratio  4.2.2 Management of Expenses Ratio  4.2.3 Combined Ratio	19 19 20 20 22 23
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION  4.1 Introduction  Table 4.1 Descriptive statistic of the data  4.2 Descriptive statistical results  4.2.1 Incurred Claim Ratio.  4.2.2 Management of Expenses Ratio  4.2.3 Combined Ratio.  4.2.4 Operating expenses	19 19 20 22 23 25 27
	ATA ANALYSIS, INTERPRETATION AND PRESENTATION  4.1 Introduction  Table 4.1 Descriptive statistic of the data  4.2 Descriptive statistical results  4.2.1 Incurred Claim Ratio  4.2.2 Management of Expenses Ratio  4.2.3 Combined Ratio  4.2.4 Operating expenses  4.3 Inferential statistic	19 19 20 22 23 25 27

Table 4.5 ANOVA	29
CHAPTER FIVE	31
SUMMARY, CONCLUSION AND RECOMMENDATIONS	31
5.1 Introduction	31
5.2 Summary	31
5.3 Recommendations	
5.4 Conclusion	35
5.5 Suggestions for further study	35
REFERENCES	
APPENDIX	38

## LIST OF TABLES

Model Summary	27
Regression Statistics	27
Correlation Statistic	28
ANOVA	29
APPENDIX	32

## LIST OF ABBREVIATIONS

AKI Association of Kenya Insurers

IIK Insurance Institute of Kenya

IRA Insurance Regulatory Authority

NSE Nairobi Securities Exchange

ROA Return on Assets

ROE Return on Equity

ROI Return on Investment Ratio

# LIST OF GRAPHS

Figure 4.1	20
Figure 4.2	21
Figure 4.3	23
Figure 4.4.	25

#### **CHAPTER ONE:**

#### INTRODUCTION

This chapter focuses on existing and associated background information carried out on financial performance of Insurance business in Kenya. It also contain the problem statement, research objectives and questions, significance of the study, limitations, delimitations and conceptual framework.

#### 1.1 Background of the Study

Insurance performance is a subjective degree of how fit insurance firm can use properties from its primary style of business and make incomes. The word is also used as a general degree of a firm's overall financial well-being over a given time. Experts and stakeholders use financial performance to relate similar businesses transversely the same business or to relate industries or sectors collectively. The financial insurance performance plays a pivotal role in the growth of the whole industry, which eventually contributes to the realization of economic growth. Insurance businesses risk their monetary performance by presuming different types of risks (Wani & Showket, 2015).

The statute regulating the industry is the Insurance Act; Laws of Kenya, Chapter 487 that was enacted in 1985. The office of the Commissioner of insurance was established under these provisions to strengthen the government regulation on insurance. The Commissioner of insurance was created as a department under the ministry of finance. In order to enhance the supervisory capacity of the regulator, the government delinked the department from the ministry to give it some autonomy. The insurance (amendment) Act number 11 of 2006 established the Insurance Regulatory Authority (IRA) with the commissioner of insurance as the managing director and the chief executive officer to take the role of regulating, supervising, and developing the insurance industry. This body replaced the functions of the commissioner of insurance. The role of the

authority is to ensure effective administration, supervision, regulation and control of insurance and reinsurance business in Kenya (Insurance amendment Act, 2006).

Insurance companies has contributed widely to the development of economy of countries where insurance safeguards purchases which are related with insurance coverage. Globally, insurance is a means of ensuring that businesses are safe, purchasing insurance premium make firms aware of various risks that it poses. Insurance may be termed as the protection against unforeseen perils, whose purposes are to provide appropriate coverage at equitable rate of premium and pay losses at the appointed time and equitably hence, it does not halt the event from occurring. More so, it acts as a protection against the financial costs of such risks (Barnett, 2012). Insurance companies such as banks offer financial intermediation by aiding the flow of monies from surplus expenditure units to a reduction on spending units by the process of giving insurance policy to policyholders and indeed investing the premium generated in productive areas (Gatsi & Gadzo, 2013). The performance of insurance companies financial can be analyzed by determined both internal and external factors represented by particular characteristics of an insurance firm, (Burca & Batrinca, 2014).

Insurance industry is of great importance to the economy, and flourishing performance of this industry helps in providing necessary power for other industries and also leads to the growth of the economy of the country. On the other hand, insurance companies are constantly subject to a decrease in value of assets and savings when the investing state is varying; this kind of state tends to affect greatly the welfare of the investors and in return the insurance companies may find it difficult to meet their own debts (Nyamu, 2006). The main characters in the Kenyan insurance

business includes insurance companies, reinsurance businesses, intermediaries such as insurance brokers as well as insurance agents, risk managers or loss adjusters and other service providers (Kiragu, 2014). Insurance business has qualified financial improvement whereby a wide range of products and services have been formed, ranging from savings products to life insurance (Ndalu, 2016). Lack of commitment by the insurance companies can have a permanent effect to the economy and community at large; hence, in order for insurance to grant stability to the economy as well as community, it ought to have a decent financial performance. From this point of view, it is therefore of great importance to study the effects of minor factors on the financial performance of insurance companies in Kenya.

#### 1.1.2 Financial Performance

Financial performance is simply how a business tend to use its resources in order to make profit, which is calculated based on return on assets(ROA), return on sales and sales growth (Wei, 2012). According to Jim (2007) the performance of any monetary entities can be measured in various ways which include profit growth, employee growth, asset growth or any additional type of variable saver which management may think that it is a key producer of likely success of a business. According to Chen and Wong, (2004), Financial Performance is the capability of a business to increase and manage resources in numerous ways in order to gain a competitive advantage. There are two types of performance and that is: financial performance and non-financial one. Financial performance tends to give exhaustive information on variables interconnected directly to financial report. Business's performance is been evaluated in three different ways. The first aspect is based on how productive a business is and how efficiently it is in processing inputs into outputs. The second dimension is the profitability of a business or the

intensity at which the earnings of a business exceeds its costs. The last aspect is the market premium, or the level at which business market value is more than its book value (Walker, 2001).

Financial performance is more often than not calculated by the use of traditional accounting Key Performance Indicators and that includes Return on Assets(ROA), Operating Profit margin, Earnings before Interest and Tax(EBIT), Economic Value Added(EVA) or Sales growth (Crabtree & DeBusk, 2008). According to Chenhall & Langfield-Smith, 2007, the benefit of using these dimensions is their availability because most of the profit oriented businesses uses these numbers for annual financial reporting. Nevertheless, the employment of the balance sheet changes the choices of accounting methods to be applied which lead to restriction of values which solitary allow comparability of the monetary strength of businesses. Financial performance is the assessment of how fit a business is able to make use of its resources from the primary mode of business and be able to make profit. It can be used also as a universal measure of a business's total financial performance in a given period of time. Return on Assets (ROA) may be used to measure the company's financial performance. ROA is a good pointer of a business profit in comparison to its total assets. It shows how efficiency management is and also how it uses its assets to generate income. The assets of the business comprises of both debt and equity whereby they are some of the methods used in funding the operations of the business. Investors use the ROA numerals to gain an idea of how efficient a business is able to convert the money it has to invest into net profits. The larger in the ROA numbers the better, because this simply means that the business is earning more money from less investment. For example, if a business has a net income of Kshs.5 million, its ROA is 30%; on the other hand, if another business earns the same amount but has total assets of Kshs.10 million, it has a ROA of 15%. Considering the two above examples, the first business is in

a better position to convert its investment into profit. Performance is considered as a difficult concept, in both its definition and measurement. It mostly refers to as the result of action, and the suitable measure chosen to evaluate on performance of a business which depends on the form of the business been evaluated, and the objectives to be gained through that evaluation.

The insurance companies determine their performance in conformity with their net premium written, incurred claims, management expenses, combined ratios, and operating ratios. Financial performance of any business is got from the outcome established from financial examination of a business. The term financial analysis refers to the assortment, assessment, and interpretation of financial information, besides other relevant information, to aid in investment and in making financial decision. Referring to Drake, (2006) financial analysis is frequently used internally to assess issues like performance of the employees, effectiveness of operations, and credit policies, and externally it evaluates on possible investments and credit-worthiness of debtors. A welldesigned and implemented financial administration is anticipated to contribute optimistically to the creation of a business value (Padachi, 2006). There is occurrence of a dilemma in financial management which is to achieve desired balance between liquidity, solvency, and profitability (Lazaridis, et al., 2007). Additionally analysis of financial performance has used various methods like financial ratio analysis, benchmarking, measuring performance alongside budget or combination of these (Barnetet et al., 2006). The main aim of profitability is in order to gain efficient use of assets. It is mainly concerned with employment of shareholders wealth (Panwala, 2009). Profit can be attained through analyzing financial performance of a business whereas financial performance is the business overall financial wellbeing over a given period of time.

## 1.1.3 Insurance Companies in Kenya

Insurance companies contribute extensively to economic growth of a nation. This is because they offer financial services that are specific, they include underwriting of risks and gathering together large amount of finances, which are mainly meant for long-term investments. Association of Kenya Insurers (AKI) under which the insurance business operates, is a body in Kenya which was established back in the year 1987. The insurance regulatory authority (IRA) is a legal government agency which was recognized under the insurance act (adjustment) 2006, CAP 487 of the laws of Kenya in order to control, manage, and to develop the insurance business. The certified body of the insurance industry is the Insurance Institute of Kenya (IIK), which mostly deals with formulation, establishment and maintenance of high standards of insurance understanding, training and practice as well as conduct so as to enhance practice of insurance and public confidence in insurance profession. According to the (AKI) insurance industry report for the year 2010, there were 44 licensed insurance companies at the end of that particular year. IRA 2014 annual's report, indicated that the Insurance business witnessed increased behavior in mergers, acquisitions and other restructuring such as Britam acquired Real Insurance, Metropolitan Group acquired Cannon Assurance, Old Mutual Group acquired UAP Holdings whereas Pan Africa Holdings acquired Gateway Insurance. According to IRA yearly report that was freed in the year (2014), Kenya's insurance business has been announced as the highest growing industry. This growth has led to an increase in the number of foreign and local investors who seek to invest in the domestic market and their entrance is predictable to enhance the business stability because there is the likelihood of core capital being injected, technical know-how as well as product development improvement, supply and worldwide networking.

#### **1.2 Statement of the Problem**

It has been realized that in absence of the insurance sector, the economy and the wealth formation associated with it can be negatively affected (International Accounting Standards Board, 2007). The insurance business in particular is part of resistant and repair structure of an economy and thriving operation of the business can set force for other businesses and growth of an economy (Sambasivam & Ayele, 2013). Conversely, insurance businesses are constantly caught in a predicament of crunching profit that comes from underwriting and investment when the investment surroundings is ever changing and unfavorably pressing the welfare of shareholders and may have trouble in off-setting their debts (Datu, 2016).

According to insurance regulatory authority 2015, Kenya's insurance business is one of the greatest growing industries in Africa. Nonetheless, the business is facing a number of challenges that ought to be addressed in cooperation with its stakeholders because the business is subjected to convenient factors such as the interest rate, competition, profitability, and liquidity. Number of studies have been conducted on a variety aspects of micro factors in insurance business. For example, Hrechaniuk et al. (2007) examined the financial performance of insurance businesses in Spain, Lithuania and Ukraine. The outcome showed that there is a strong relationship between insurers' financial performance and the enlargement of the written insurance premiums. However, there is less that have been done to uncover the key financial ratio that affects performance of insurance business especially in Kenya. In light of the same the researcher conducted the research to narrow the gap. The researcher did research on the analysis of key financial ratios on the performance of general insurance business in Kenya.

## 1.3 Research Objective

## 1.3.1 General Objective

The purpose for carrying out the study was to analyze key financial ratios on the performance of general insurance business in Kenya.

#### 1.3.2 Specific Objectives

- i. To establish how incurred claim ratio affect performance of general insurance business.
- ii. To examine how management expense ratio affect performance of general insurance business.
- iii. To identify the impact of combined ratio on performance of general insurance business.
- iv. To establish operating ratio affect profitability of general insurance business.

#### 1.4 Research questions

- i. How does incurred claim ratio affect performance of general insurance business?
- ii. How does management expense ratio affect performance of general insurance business?
- iii. What is the impact of combined ratio on performance of general insurance business?
- iv. How does operating ratio affect profitability of general insurance business?

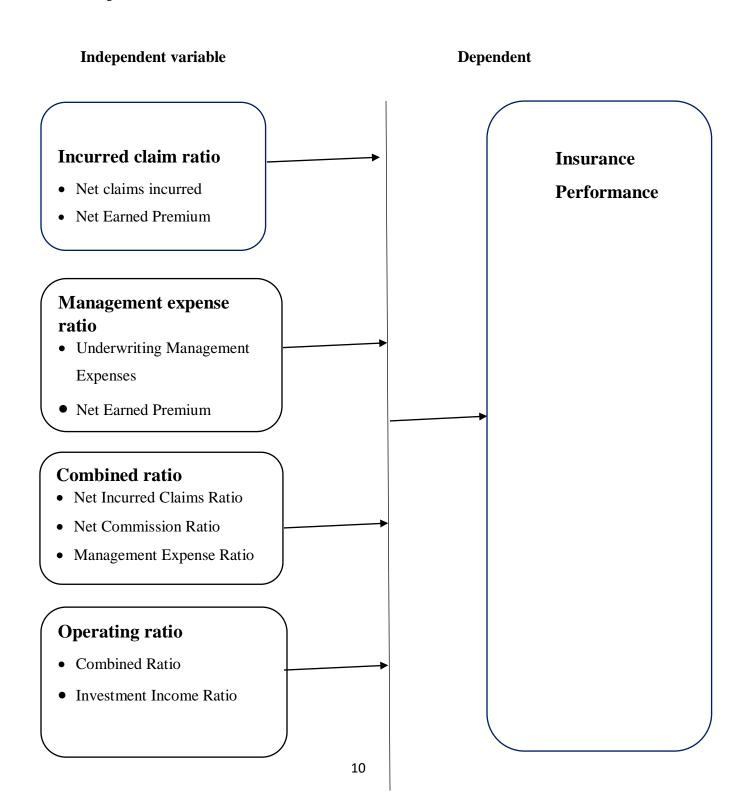
#### 1.5 Significant of the Study

- This research will be of great help to campus students undertaking business courses, finance managers to understand key financial performance ratios for general insurance business.
- ii. The research will contribute further to the theory of finance by providing practical evidence on the relationship between key ratios that affect performance of general insurance business.
- iii. It will also provide vision to various experts in finance to be able to determine when to apply various ratios to measure performance of insurance business. This study will also improve on the understanding on how to exercise and improve performance of insurance firms by the finance managers.
- iv. The study would be of great help to the management of insurance companies especially by availing information on key financial performance ratios for general insurance business in Kenya.

#### **1.6 Limitation of the study**

- Limitation simply means putting a boundary. The study was restricted to analysis of some key financial ratio on the performance of general insurance business in Kenya.
- ii. Financial constraint proved a challenge to the research.
- iii. Similarly, since the study concentrated on the analysis of some of key financial ratio on performance of general insurance business in Kenya the outcome may not certainly reveal true position of all performance insurance business in Kenya.

# 1.7 Conceptual Framework



Source: Self Conceptualization Year [2020]

**CHAPTER TWO** 

LITERATURE REVIEW

2.1.1 Introduction

Literature review denotes a comprehensive study and analysis of literature that addresses a

particular topic (Aveyard, 2010). This chapter focuses on existing and associated literature

carried out on financial performance ratios for Insurance business in Kenya. The chapter

broadly examines insurance claims, retention ratio, company size, pricing policy, and how

these factors affect the financial performance of insurance in Kenya.

2.1.2 Theoretical Framework

These refers to gathering of inter-related concepts based on theories. It is a well-structured set of

ideas derived from and reinforced by data or evidence (Macharia, 2012). The concept of finance

theories involves studying the several ways by which industries and individuals generate revenue,

and how cash is allocated to Projects while putting into consideration on the risk factors related

with them. It also comprises of the study of revenue and other assets management and describing

Project risks, control and administration of assets, as well as the science of managing money

(Eckardt, 2007). The study was steered by Rational Choice Theory. The theory is used to

comprehend the social and economic behaviors of individuals. The use of the term rationality

differs with the subject. Many of other theories are mindful about the contrivance of the market

that permits the production and spreading of goods. However, Rational Choice Theory is broadly

11

used in put on the same principles used by other theories thus understand interactions that contain resources i.e. prestige, time and among others.

According to the Theory, human beings are provoked by their individual goals and preferences (Eckardt, 2007). Human behaviors are regulated largely by the information concerning the conditions in which a specific individual has worked for and would try to accomplish his or her goal. It is next to impossible for the human beings to achieve whatever they craving for. Choice of goals alongside with the choice of a proper process to reach the previously set target is very important in the domain of Rational Choice Theory. According to the Rational Choice Theory, an individual should have a proper thoughtful of his or her own choice of goals and the magnitudes of that choice.

Rational people constantly choose particularly those choices that can finding the middle ground for good results. According to the Theory, every kind of social interaction or social contact is treated as a method of social altercation. It considers punishment and reward as benefit and cost in turn and the theory embraces that the human behavior is dominated by their cravings of getting decent rewards (Organisation for Economic Co-operation and Development, 2003).

The Rational Choice Theory can be functional in the insurance industry. Individuals take policies in order to be protected in case of risks. However, in order to get assistances from insurance, they must have the right policies with the right companies. The rational choice for insurance businesses is pegged on numerous factors like the financial performance of the insurance company. Most people would not buy policies if they knew that their forthcoming company is going bankrupt because in event of a risk, they would not get the rewards out of the policies. They would therefore

choose an insurance business which is carrying out well financially since only then do they view an opportunity of being rewarded for their losses.

### 2.1.3 Portfolio Theory

A portfolio is a collection of financial assets containing of investment tools such as frameworks, foreign exchange gold asset- backed securities bonds, real estate, and bank deposit held by a gathering or parties. Portfolio structure is a problem in financial economics, and plays an important and significant role in equally theory and practice.it was established by Harry Markowitz and published under the title "Portfolio Selection" in the 1952 where a quantitative method for portfolio selection was first presented. Harry came up with mathematical framework for the problem and obtained a feasible solution to the problem that was simple and intuitively appealing.

He maintained a single-period economy and expressed the portfolio selection problem as a static mean-variance optimization problem, where the variance or the standard deviation was used as a measure of risk and mean as a measure of portfolio return. The streamlined framework of the Markowitz model is acceptable when the spreading of profit is normal, or when the stakeholder has a quadratic value function. In the Markowitz mean-variance portfolio choice, the optimal portfolio choice is done by minimizing the variance of the portfolio's return for a given level of expected portfolio return, or make best use of the Projected portfolio return for a given level of variance of the portfolio profit. The mean-variance paradigm likewise provides a simple geometric demonstration for portfolio selection including investment opportunities, portfolio diversification, and efficient frontier. Portfolio theory is a theory of finance that attempts to maximize portfolio Projected return for a given

amount of portfolio risk, or equally minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. Although it is extensively used in exercise in, the insurance industry and several of its creators won a Nobel memorial prize for the theory. The theory calculates the benefits of diversification in business in regards to line of revenues (Koivu, 2012).

#### 2.2.0 Empirical Literature

#### 2.2.1 Liquidity Ratio and Financial Performance

Liquidity is the capability of a business to meet its short term obligations Bhunia (2010). Mainelli (2007) defines liquidity as the likelihood that an asset can be altered in to an anticipated amount of value within a predictable amount of time. It is the capacity to realize financial value; the most liquid of assets. The main liquid asset is said to be money. Liquidity in an accounting term is the ability of current assets to meet current liabilities. In investment, Liquidity is the capacity to quickly translate an investment portfolio to cash with small or no loss in value. Business is said to be liquid when it keeps enough liquid assets and cash collectively with the ability to raise funds quickly from other source in order to enable it meet its debts concerning to its payments and financial devotion in a timely manner.

According to Mahavidyalaya et al., (2010) the word liquidity refers to the capacity of a business to meet short term financial debts by converting the short term resources into cash without affliction of any kind of loss. There are different ratios which are used to measure liquidity, they include: the current ratio, which is the easiest measure and is calculated by dividing total current assets by total current liabilities; and the quick ratio, calculated by minimizing inventories from liquid assets and then dividing by current liabilities. The current ratio and the quick ratio are nearly alike. The quick ratio gives a more precise evaluation of a business's ability to pay its current liabilities. The quick ratio on the other hand cut out all but the most liquid of current assets. The quick ratio is a measurement used to assess the business's short term liquidity.

It is used to measure the company's ability to meet its short term debts with its most liquid assets. The higher the quick ratio the better the business position, Bolek et al., (2012) suggested that liquidity can be defined in three contexts; where they distinguish the asset, asset-equity, and cash aspects of financial liquidity. The financial liquidity of a business assets – is the capacity to convert assets into cash in the shortest time possible, at the lowest cost possible and exclusive of losing their value. The liquid elements of the assets, including cash, are the business protection against the loss of financial liquidity. Price is one of the stretchiest elements of the marketing mix, which interferes directly and in a short term over the profitability and cost effectiveness of a business (Simon, Bilstein, &Luby, 2008). Pricing policy is an approach which is used to control and standardize the pricing decisions of a business.

According to Monroe (2003), price decisions are one of the most significant decisions of management since it affects profitability and the business return along with their market competitiveness. A business survival and profitability highly depends on its pricing decisions, hence price is the only element in the marketing mix that produces income and hence ensures profitability (Kotler & Keller, 2006). According to Hinterhuber (2004), the influence of price levels on profitability is high, that means that even the influence of small rise in price on profits and business profitability by far exceeds the influence of other leverages in managing best outcome. In other words, of all the essentials available to managers, price is the one which has the largest impact on business results, reflecting on representative gains (Kohlia&Surib,2011).

Most insurance companies face challenges in pricing due to insufficient data on micro insurance. The group is much less standardized and also there is less data to be reliable on the low-income target market. It is very difficult for insurance business to precisely establish what price they should charge for the cover. The target market of low-income population has much less disposable income, and a little increase in price will make it much less affordable thus reducing the demand (Adriaan, 2014). Price is stretchy element of marketing strategy, while pricing decisions can be implemented comparatively more quickly than other elements of marketing strategy (Avlonitis&Indounas, 2005). Adjusting prices can be called pricing strategy.

The purpose of pricing strategy is stability of maximum price along maximizing current profit and quantity of sale (Dolgui&Proth, 2010). The small insurance product risks are also unknown; hence, insurers would like to charge an extra margin in the premium to protect them against likely unpredicted related losses. Cost of distribution is much higher as a percentage of the premium for low-premium policies. In order for the business to be profitable, insurers rely on achieving large amounts of sales.

#### 2.2.2 Retention Policy and Financial Performance

The retention policy is as well-known as the retention rate of a business (Orwel, 2010). Retentions refer to the part of trading proceeds which is not disseminated in the form of dividends but is retained by directors for future development of the business (Dinayak, 2014). Retention ratio is the proportion of the underwritten business that is not transferred to reinsurers. High retention ratio with less claims ratio have a affirmative impact on the performance of insurance business. An efficient insurance business should have growth in profits because it is able to maximize on its net premiums and net underwriting incomes (Charumathi, 2012).

Campbell (2012) observed that the main idea behind earnings retention is that the more the business retains the faster it has chances for it to grow. According to Chasan (2012) there is always an argument in determining the ratio or earning to be retained. Managers in any firm desires for higher earnings retention ratio whereas the shareholders of the firm would like higher plowback ratio because they would have more control over their shares and finances within the organization.

#### 2.2.3 Insurance Claims and Financial Performance

An insurance claim is a demand by an individual or an organization seeking to recover from an insurer for a loss that an insurance policy might cover (Brooks, Popow, &Hoopes, 2005). A claim is the instant which shows relationship between insurance business and its customer as it creates the chance to show that the years spend paying premiums were worth the expense (Butler & Francis, 2010). These Insurance claims can

vary from simple domestic building and contents claims that are completed within days of announcement to complex bodily injury claims that remain open for many years (Michael, 2008

#### CHAPTER THREE

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

The chapter focus on the research design adopted for the study. It also outlines on the target and sample population used to in order to achieve objectives of this research. Additionally, it illustrates on the data collection methods, instruments and steps followed during the study. Also there is the mention on method used to analyze on data.

## 3.2 Research Design

The research design used to study was longitudinal research design. This is because, in longitudinal study, researchers repeatedly examine the same data to detect any changes that might occur over a period of time. More so, in Longitudinal studies the researchers observe and collect data on a number of variables without trying to influence those variables. These is because the research concerned the time series data available for a period of time. Hence the research design enabled the researcher to analyze the relationship existing between the two variables.

#### 3.3 Target population

Population refers to the summative observations of subjects grouped together by a common feature. A target population is the whole collection of components around what one desires to make some influence (Mugenda and Mugenda, 2003). However, the study didn't have target population mainly because it used time series secondary data that is available in Insurance Regulatory Authority website.

## 3.4 Sample size

The research used a sample size of 10 years showing different trend of performance within the time period.

A sample size of 10 years was a precise time period that allowed the researcher to come up with enough data for the research.

#### 3.5 Data Collection

The researcher used secondary data. The secondary data revealed how the firm has been performing in regards to the relationship between the determinants for previous years. These made it easy to determine how variables relates with each other in the general insurance business.

#### 3.6 Data Analysis

The study used descriptive and inferential statistics suitable for determining the strength of the relationships between the independent and dependent variables (Hopkins, 2000), to measure the relationship between financial ratios variables that affect performance of general insurance business in Kenya.

#### **CHAPTER FOUR**

#### DATA ANALYSIS, INTERPRETATION AND PRESENTATION

#### 4.1 Introduction

This chapter presents data analysis, interpretation and presentation. The objective of the study was to analyze how key financial ratios affects the performance of general insurance business in Kenya for the period of 10 years. The data sources is from Insurance Regulatory Authority (IRA) annual reports published from 2009 to 2018. Variables of the study was the bases for data collection, that is, incurred claims ratio, management expense ratio, combined ratio, and operating ratio.

**Table 4.1 Descriptive statistic of the data** 

	Incurred	Management	Combined	Operating
	Claim Ratio	Expense Ratio	Ratio	Ratio
Mean	61.02	29.40	98.21	92.95
Median	61.60	29.65	98.15	93.40
Standard Deviation	1.95	2.58	3.83	4.23
Sample Variance	3.79	6.63	14.64	17.93

According to the statistical data above, average claim ratio for the 10 years was 61.02% of the premium collected. This is below 75% of the ratio required for a healthy insurance industry. The management expense ratio is 29.65, this is far above the recommended maximum ration of 0.75%. The combined ratio is 98.21, this implies that the insurance business in Kenya spend 98% of the premium on settling claims. This is below a 100% breakeven point implying an underwriting profit. The average operating ratio is 92.95 implying that the efficient level of the management is low.

Incurred claim ratio has a median of 61.60, this implying that 61.60 was used to settle insurance claims. In addition to that, management expense ratio median was 29.65 meaning that the management expenses was so high denoting inefficient in management in the median year. The combine ratio was 98.15 meaning that is below the mean for 10 years implying that insurance business was performing better for most of the years. The operating ratio was 93.40 meaning that is above the mean for 10 years implying that insurance business was performing better for most of the years.

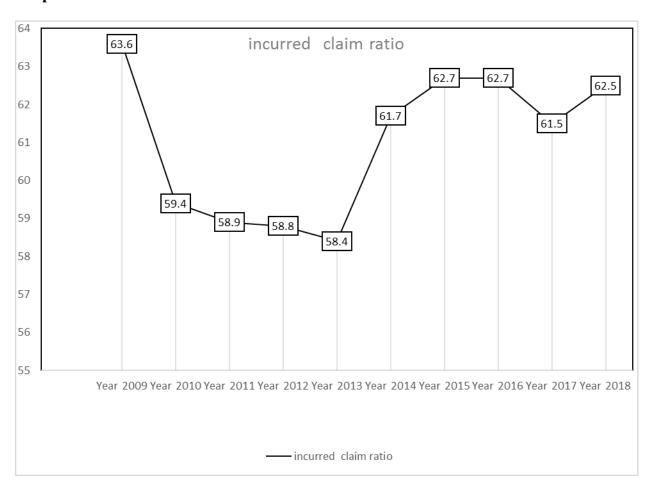
#### **4.2 Descriptive statistical results**

The study plotted the data on line graph for the individual ratios. The graph was used to study the trend of specific ratios to determine the performance of insurance business for with respect to individual ratio under study.

#### 4.2.1 Incurred Claim Ratio

This is used to gauge the performance of insurance business by evaluating the proportion of premium used to settle claims. The study plotted the line graph below for the claim ratio for the period of 2009 - 2018.

Graph 4.1



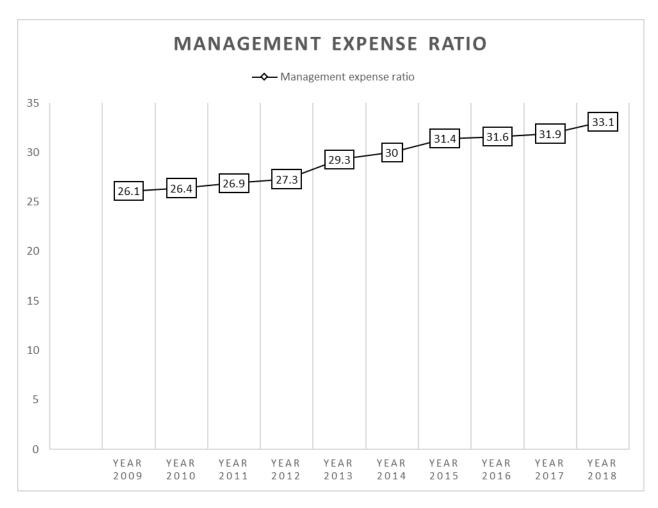
According to the plot above, incurred claim ratio changed from 63.6% in 2009 to 59.4 in the year 2010 indicating significant change of 4.2%. 2009 was the best performing year with 63.6% used to settle claims while year 2013 was the worst year with 58.4% used to settle claims. The insurance industries was not doing well between year 2010 and 2013 but indicates an improved performance in the year 2014, 2015and 2016, and a decline in the year 2017 followed by a slight improved

performance in the year 2018. Generally the incurred claim ratio indicates that insurance business has been underperforming in paying out claims within the 10 years period.

#### **4.2.2** Management of Expenses Ratio

Notably, it is the cost of trading any security for the fund that is not included in the management fee, rather, they are business transaction costs expressed as the trading expense ratio in the prospectus. The operating fees and management fees added together make up the Management expense ratio. The study plotted the line graph below for the management expense ratio for the period of 2009 - 2018.

Graph 4.2

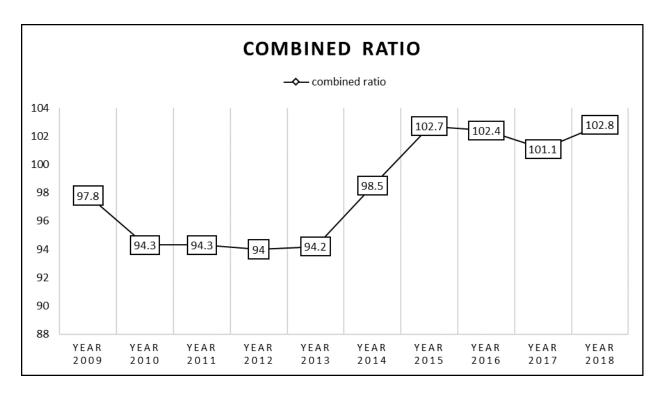


According to the plot above, management expense ratio show a steady increase all through from 2009 to 2018, signifying an increase in management expenditures. The ratio has raised form 26.1% in the year 2009 to 31.1 in the year 2018. Since the operating fees and management fees added together make up the Management expense ratio. This denotes that a gradual increase in management expense is a clear indication that the general insurance business cost of trading securities have been increasing over the ten year. Consequently, this might have resulted to a decline in profitability of the general insurance business in Kenya. Therefore, increased management expense ratio signifies general insurance business inefficiency.

#### 4.2.3 Combined Ratio

This is the total of estimated insurance claims expenses for a particular period of plus overhead expense expressed as a percentage of premiums earned. It is used to determine the profitability of insurance business by evaluating the proportion of premium used to settle claims. The study plotted the line graph below for the combined ratio for the period of 2009 - 2018.

#### Graph 4.3

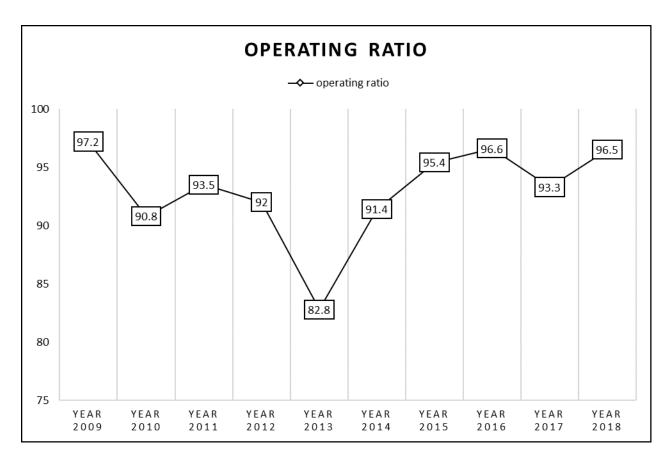


According to the plot above, combined ratio declined sharply between year 2009 and 2010. It decreased from 97.8% in year the 2009 to 94.3% in the 2010. These is a clear indication of improved efficiency in performance of General insurance business. More so, from year 2010 year 2013, there was a slight decline of combined ratio of general insurance business denoting a continues improvement insurance efficiency. However, from the year 2013 to year 2015, it indicates a sharp increase in combined ratio denoting inefficient performance of general insurance business within the specified time period. Subsequently, from the year 2015 to 2017, there was a slight improvement in efficiency that was thwart by an increase in combined ratio between year 2017 and 2018. Since the combined ratio includes the total of estimated claims expenses for a particular time period plus overhead presented as a percentage of earned premiums, a ratio below 100% denotes a measure of the efficiency and profitability of the general insurance business underwriting efficiency. However Ratios exceeding 100% denote a failure to gain sufficient premiums that cover expected claims.

# **4.2.4 Operating expenses**

This is used to determine the efficiency management of a general insurance company. These is by comparing the total insurance operating expense of an insurance firm to net sales. It reveals how efficient management is at minimizing costs while generating income. The study plotted the line graph below for the operating expense for the period of 2009 - 2018.

# Graph 4.4



According to the plot above, the operating ratio declined sharply from 97.2% in 2009 to 90.8% in 2010, showing 6.4% decline then a slight raised in the year 2011 followed by a slight decline in the year 2012. Between the year 2012 and year 2013 there was a sharp decline of operating ratio, which was followed by sharp increase of operating ratio from the year 2013 to 2016. In the year 2016 to 2017 there was a slight decline of operating expense that was followed by a slight increase in the year 2017 to 2018. The operating ratio decline is a clear indication of management efficiency of the general insurance business while an increase reveal management inefficiency of general insurance business. The smaller the operating ratio, the greater the company efficient at generating revenue verse total expenses. More so, an operating ratio that is moving upward is viewed to indicate a negative sign, hence revealing that, operating expenses are on increase in relation to revenue and vise-versa.

### 4.3 Inferential statistic confident level

# **Table 4.2 Model Summary**

	Current Values:	Current Values:		
Changing Cells:				
\$A\$3	Regression Statistics	S	Regression Statistic	S
\$A\$4	Multiple R	0.70	Multiple R	0.70
\$A\$5	R Square	0.49	R Square	0.49
\$A\$6	Adjusted R Square	-0.02	Adjusted R Square	-0.02
\$A\$7	Standard Error	0.22	Standard Error	0.22
\$A\$8	Observations	9	Observations	9
Result Cells:				
\$B\$6	-0.02		-0.02	

### **Table 4.3 Regression Statistics**

# Regression Statistics

Multiple R 0.70
R Square 0.49
Adjusted R Square -0.02
Standard Error 0.22
Observations 9
ANOVA

				Significance
	df	SS	MS $F$	F
Regression	4	0.18	0.05 0.96	0.52
Residual	4	0.19	0.05	
Total	8	0.37		

Standara	l P-		Upper	Lower Upper
Coefficients Error	t Stat value	Lower 95%	95%	95.0% 95.0%

Intercep	ot	3.37	3.80	0.89 0.43	-7.18	13.92	-7.18	13.92
ICR:	63.6	0.13	0.22	0.60 0.58	-0.48	0.74	-0.48	0.74
MER:	26.1	0.02	0.15	0.10 0.92	-0.40	0.43	-0.40	0.43
CR:	97.8	-0.02	0.17	-0.10 0.93	-0.50	0.47	-0.50	0.47
OR:	97.2	-0.04	0.04	-0.90 0.42	-0.14	0.07	-0.14	0.07

According to the table above, R-Square shows that 49% of variance in performance is attributable to key financial ratios. More so, significance F is usually set at 0.05 threshold is much less to 0.52 as indicated in the table. Therefore, the relationship is highly statistically significant. The coefficient means that for this data: (0.13, 0.12, -0.02, and -0.04) for each 1% increase in financial ratios (incurred claim ratio, management expense ratio, combined ratio, and operating ratio) the performance moves up by 0.13, 0.12, -0.02, and -0.04 respectively. The R-Square value/ coefficient of determination measures the proportion of variation in the dependent variable explained by the independent variable or how well the regression model fits the data. The R-Square value range -0.04 to 0.13 and a higher value indicates a better fit. The P-Value ranges from 0.42 to 0.93 indicating the test is significant. In contrast to R-Square value, a smaller P-value is favorable as it indicates correlation between the dependent and independent variables.

**Table 4.4 Correlation Statistic** 

CODDEL ATION

CR	MER	CR	OR
1			
0.50	1		
0.84	0.84	1	
0.76	0.20	0.63	1
	1 0.50 0.84	1 0.50 1 0.84 0.84	1 0.50 1 0.84 0.84 1

The study conducted correlation analysis to determine whether the variables are correlated.

The table above shows that MER is positively correlated with ICR at 0.50. More so, CR is strongly positive correlated with ICR at 0.84, and with MER at 0.84 respectively. In addition, the study shows that OR is strongly positively correlated with ICR at 0.76, weak positive correlated with MER at 0.20, and strong positive correlated with CR at 0.63 respectively.

**Table 4.5 ANOVA** 

**ANOVA** 

Anova: Single

Factor

**SUMMARY** 

Groups	Count	Sum	Average	Variance
ICR	10	610.2	61.02	3.788444
MER	10	294	29.4	6.633333
CR	10	982.1	98.21	14.641
OR	10	929.5	92.95	17.92944

ANOVA

Source of

Variation	SS	df	MS	F	P-value	F crit
Between Groups	30508.829	3	10169.61	946.1813	2.79E-34	2.866266
Within Groups	386.93	36	10.748056			

Total 30895.759 39

Using the table above to drive a conclusion whether the means for the four ratios are equal, otherwise different such that;

$$H_1$$
;  $\mu_1 = \mu_2 = \mu_3 = \mu_4$ 

$$H_2$$
;  $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$ 

The research established that F = 946.18, F-crit =2.86, and P-value =2.79E-34. This implies that F is greater than F-crit, therefore we reject the null hypothesis. The study concluded that mean for the four ratios are not equal

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents summary of data analysis, conclusion and recommendations in line with the objective of the study.

#### **5.2 Summary**

According to the study, it is evidence that the general business insurance industry has not been performing well. Notably, the proportion of premiums used to settle claims is far much higher than the maximum recommended in the industry. The study showed that the average claim ratio for the period 2009 – 2018 is 61.2% which is below the 75% required for a healthy insurance equipment. This implies that the insurance business only settled 61.2% of the all the claims that was filed for the period 2009 to 2018. These significantly affects the confidence in the insurance business consequently affect the uptake of insurance policies that has led to the poor performance of general insurance business in Kenya.

The study reveals a gradual increase of management expense ratio all through from 2009 to 2018, signifying an increase in management expenditures. The ratio has raised form 26.1% in the year 2009 to 31.1 in the year 2018. Since the operating fees and management fees added together make up the Management expense ratio. This denotes that a gradual increase in management expense is a clear indication that the general insurance business cost of trading securities have been increasing over the ten year. Consequently, this might have resulted to a decline in profitability of the general

insurance business in Kenya. Therefore, increased management expense ratio signifies general insurance business inefficiency.

The study reveals that, combined ratio declined sharply between year 2009 and 2010. These is a clear indication of improved efficiency in performance of General insurance business. More so, from year 2010 year 2013, and from the year 2015 to 2017, there was a slight decline of combined ratio of general insurance business denoting a continues improvement insurance efficiency. However, from the year 2013 to year 2015, it indicates a sharp increase, and a slight increase in combined ratio between year 2017 and 2018, denoting inefficient performance of general insurance business within the specified time period. Since the combined ratio includes the total of estimated claims expenses for a particular time period plus overhead presented as a percentage of earned premiums, a ratio below 100% denotes a measure of the efficiency and profitability of the general insurance business underwriting efficiency. However Ratios exceeding 100% denote a failure to gain sufficient premiums that cover expected claims.

The study reveals, a sharp decline of operating ratio from 97.2% in 2009 to 90.8% in 2010, showing 6.4%. These was clear indication of management efficiency of the general insurance business during the period. The same was indicated in the year 2012, between the year 2012 and year 2013, and from year 2016 to 2017, denoting that the management of general insurance business was up to the task in ensuring efficiency of the insurance. However, from year 2010 to year 2011, year 2013 to year 2016, and year 2017 to year 2018, it reveals an increase in operating ratio of general insurance business in Kenya. These denotes operating ratio that is moving upward indicate a negative sign, hence revealing that, operating expenses are on increase in relation to revenue thus inefficiency of general insurance business in Kenya.

The study found that, R-Square shows that 49% of variance in performance is attributable to key financial ratios. More so, significance F set at 0.05 threshold is much less to 0.52 indicating that the relationship between dependent variable and independent variables is highly statistically significant. The coefficient reveals that each 1% increase in financial ratios affect the performance upward by 0.13, 0.12, -0.02, and -0.04 respectively. The R-Square value range -0.04 to 0.13 and a higher value indicates a better fit. The P-Value ranges from 0.42 to 0.93 indicating the test is significant. In contrast to R-Square value, a smaller P-value is favorable as it indicates correlation between the dependent and independent variables. In addition, the study revealed that,

MER is positively correlated with ICR at 0.50. More so, CR is strongly positive correlated with ICR at 0.84, and with MER at 0.84 respectively. More so, the study shows that OR is strongly positively correlated with ICR at 0.76, weak positive correlated with MER at 0.20, and strong positive correlated with CR at 0.63 respectively.

#### **5.3 Recommendations**

For the insurance business to perform well, they require the confidence of the policy taker that the claims will be settled. In this regards, the business insurance in Kenya need to increase the claim settlement ratio to the recommended 75% of the claim ratio to achieve this among many things, the industry should improve on investigation and management in claims verification processes.

The gradual increase of management expense ratio signifying an increase in management expenditures. Since the operating fees and management fees added together make up the Management expense ratio. This denotes that a gradual increase in management expense is a clear indication that the general insurance business cost of trading securities have been increasing over the ten year. Consequently, this might have resulted to a decline in profitability of the general

insurance business in Kenya. Therefore, increased management expense ratio signifies general insurance business inefficiency. In regards to this the general insurance business management should work on modality to reduce management expense fee so as to increase profit.

Since the combined ratio includes the total of estimated claims expenses for a particular time period plus overhead presented as a percentage of earned premiums, a ratio below 100% denotes a measure of the efficiency and profitability of the general insurance business underwriting efficiency. However Ratios exceeding 100% denote a failure to gain sufficient premiums that cover expected claims. Therefore general insurance business should focus on ensuring that the combined ratio does is at the lowest percentage to ascertain improved efficiency

The operating ratio decline is a clear indication of management efficiency of the general insurance business while an increase reveal management inefficiency of general insurance business. The smaller the operating ratio, the greater the company efficient at generating revenue verse total expenses. More so, an operating ratio that is moving upward is viewed to indicate a negative sign, hence revealing that, operating expenses are on increase in relation to revenue and vise-versa. Therefore general insurance business should work out for an operating ratio that is falling, expenses are decreasing, or revenues are increasing, or a combination of both. This will ensure efficiency of the insurance. More so, insurance may require implementation of cost controls to ensure marginal improvement in case it operating ratio keep on increases over time.

### **5.4 Conclusion**

The study concluded that insurance business should improve on investigation and management in claims verification processes and work on modality to reduce management expense fee so as to increase profit. More so, focus on reduction of combined ratio to lowest percentage to ascertain improved efficiency cost and put controls to ensure marginal improvement in case of its operating expense increases over time.

### **5.5** Suggestions for further study

- 1. The management of general insurance business should focus on the way to ensure that the operation cost are minimal so as to increase profit.
- 2. There is need for a further research on other ratios that affect the performance of general insurance business in Kenya.
- 3. Further research need to be done after in the next five years on the same variables to ascertain the improvement of performance of general insurance business

#### **REFERENCES**

- Abreu, M., & Mendes, V. (2001). Commercial Bank Interest Margins and Profitability: and Ownership Structure. *Journal of Financial Economics*, *3*(4), 305–360.
- Avlonitis, G., & Indounas, K. A., (2006). Pricing Practices of Service Organizations. *Journal of Service Marketing*, 20(5), 346–356.
- Avlonitis, G., Indounas, K. A., & Gounaris, S. P., (2005). Pricing Objectives Over The Service Life Cycle: Some Empirical evidence. *European Journal of Marketing*, 39(6), 696–714.
- Burca, A. & Batrinca, G., (2014). The Determinants of Financial Performance in the Romanian Insurance Market, International. *Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 299–308.
- Charumathi, B., (2012). On the Determinants of Profitability of Indian Life Insurers An empirical study, proceedings of the world congress on Engineering, 16(4), 558-581.
- Chen, M., & Hambrick, D., (1995). How Small Firms Differ from Large Firms in Competitive Behavior. *Academy of Management Journal*, 38(2), 453-482.
- Collins, N.R., & L.E. Preston, (1969). Price-Cost margins and industry structure. *Review of Economics and Statistics*, 51(3), 71-86
- Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods* (12<sup>th</sup> ed.). New York: McGraw-Hill/Irwin
- Dean, D., Koneru, S., Lee, J., Kamath, J., & Goldberg, J. (1998). Modeling the Effects of Health on Economic Growth. *Journal of Japanese and International Economies*, 8(4), 235-271.
- Gatsi, J. G. & Gadzo, S. G. (2013). Firm Level and Macroeconomic Effects on Financial Performance of Insurance Companies in Ghana. *International Journal of Business Administration and Management*, 3(1), 1-9
- Hafiz Malik, (2011) Determinants of Insurance Companies Profitability: An Analysis of Insurance Sector of Pakistan. *Academic Research International*, 1(3), 56-64.
- Hardwick, P. (1997). Measuring Cost Inefficiency in the UK Life Insurance Industry. *Applied Financial Economics*, 7(4), 37-44
- Hinterhuber, A. (2004). Towards Value-Based Pricing an integrative framework for decision making. *Industrial Marketing Management*, 33(8), 765–778.
- Hinterhuber, A. (2008). Customer Value-Based Pricing Strategies: Why companies resist.
- Journal of Business Strategy, 29(4), 41–50
- Hinterhuber, A., & Liozu. (2013). Innovation in pricing: Contemporary theories and best practices. New York: Routledg

- Hinterhuber, A., &Liozu. (2013). Innovation in pricing: Contemporary theories and best.
- International Journal of Entrepreneurial Behavior and Research, 4(5), 18-27.
- Kalantari, H. (2013). Evaluating the Impact of Socioeconomic Factors on Individuals' Tendency for Life Insurance Demand in Iran, M.A. Thesis in Business Management (Insurance), IslamicAzad University, Rasht Branch.
- Kiriba, W. M. (2015). The Relationship Between Lagging Macroeconomic Indicators and Stock Market Return of Insurance Companies Listed in the Nairobi Securities Exchange. Masters of Science in Commerce, Unpublished Thesis. KCA University.
- Kohlia, C., & Surib, R. (2011). The price is right? Guidelines for pricing to enhance profitability. Business Horizons, 54(6), 563–573.
- Kothari, C. R. (2011). Research Methodology. Methods and Techniques. New Age International Publishers. New Delhi. India.
- Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure: Journal 3(4), 305-309
- Mintzberg, H. (1997). The Structuring Organizations: A Synthesis of the Research, Faculty of, 2, 38-57.
- Monroe, K. B., (2003). Pricing Making Profitable Decisions (3rd ed.). New York: McGraw.
- Nagle, T., & Holden, R. K., (2003). Strategy and Tactics of Pricing, Prentice Hall, Upper S a d d l e River, N
- Nyamu, F. (2016). The Effect of Macroeconomic Factors on Financial Performance of Insurance Organizations, Theory and Practice, London: Oxford University Press.
- Performance of Insurance Companies in Ghana, *International Journal of Business Administration and Management*, 3(1), 1-9.
- Performance: An Insight of Indian Insurance Industry, International Journal of Science and Research, 4(11), pp.1424-1433.practices. New York: Routledge.
- Sekaran, U. & Bougie, R., (2013). *Research Methods for Business* (6<sup>th</sup> ed,). John Wiley & Sons Ltd.
- Simon, H., Bilstein, F. R., & Luby, Frank. (2008). *Gerenciar para o lucro, não para a participa cão de mercado*. Porto Alegre: Bookman.
- Sox, H. C., & Greenfield, S. (2009). Comparative Effectiveness Research: a report from the institute of medicine. *Annals of internal medicine*, 151(3), 203-205.
- Tybout, J. R., (1992). Linking Trade And Productivity: New research directions. *The World Bank Economic Review* 6(2)189-211.
- Wani, A. A. &Showket, A. D., (2015). Relationship between Financial Risk and Financial York: McGraw-Hill.

# **APPENDIX**

Ratios	Year	Year	Year	Year						
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Profit/Loss	6.57	6.63	6.88	6.92	7.12	7.31	7.24	7.15	7.13	6.86
Incurred Claim Ratio	63.6	59.4	58.9	58.8	58.4	61.7	62.7	62.7	61.5	62.5
Management Expense ratio	26.1	26.4	26.9	27.3	29.3	30	31.4	31.6	31.9	33.1
Combined Ratio	97.8	94.3	94.3	94	94.2	98.5	102.7	102.4	101.1	102.8
Operating Ratio	97.2	90.8	93.5	92	82.8	91.4	95.4	96.6	93.3	96.5