

**EFFECT OF REINSURANCE PRACTICES ON PROFITABILITY OF  
GENERAL INSURANCE COMPANIES IN KENYA**

**BY**


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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT  
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE  
OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF  
BUSINESS, UNIVERSITY OF NAIROBI.**

**2020**

## DECLARATION

This research project, being my original work, has not at all been presented for a degree in any other university or college for examination or academic purposes.

Signature 

Date...29/11/2020.....

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

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## **DEDICATION**

I dedicate this research project to my dear parents, Joseph Apela and my mother Anna Apela who unfortunately is recuperating at home after hospitalisation in Kisumu, Kenya. I would also like to dedicate the work to my supportive, loving and inspirational wife, children; Mitchell, Tracy, Phill and Brooklyne as well as the entire Apella family. They have consistently motivated and encouraged me in my entire academic journey up to this juncture. May Almighty God bless them abundantly.

## **ACKNOWLEDMENT**

I am grateful to all those who made this study a success. I thank the Almighty God for the gift of life and good health. I highly appreciate the University of Nairobi for the opportunity to study and carry out this research. I am also extremely grateful to my supervisor, Dr. Caren Angima for tireless guidance and support, without which it would have been difficult completing this research project successfully. I also acknowledge Dr. Victor Ndambuki for swift and efficient moderation.

My appreciation also goes to my family, friends and insurance colleagues who encouraged me and gave me moral support to carry on, and my mother in particular who continued to encourage me. Further, I appreciate the reinsurance and underwriting managers of the general insurance companies in Kenya for the timely response to the questionnaires. All those who assisted me in one way or another, may God bless you abundantly.

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## **ABBREVIATIONS AND ACRONYMS**

<b>AKI:</b>	Association of Kenya Insurers
<b>CC:</b>	Ceded Commission
<b>CRR:</b>	Ceded Reinsurance Recoverable
<b>CUP:</b>	Ceded Unearned Premium
<b>DT:</b>	Demand Theory
<b>IRA:</b>	Insurance Regulatory Authority
<b>KES:</b>	Kenya Shillings
<b>NPW:</b>	Net Premium Written
<b>PHS:</b>	Policyholders' Surplus
<b>RCR:</b>	Ratio of ceded reinsurance
<b>ROA:</b>	Return on Assets
<b>ROE:</b>	Return on Equity
<b>ROI:</b>	Return on Investment
<b>RRPHS:</b>	Reinsurance Recoverable to Policyholders' Surplus
<b>WIBA:</b>	Workmen's Injury Benefits Act
<b>VRIN:</b>	Valuable, Rare, In-imitable and Non substitutable

## **ABSTRACT**

General insurance companies in Kenya are linked with several reinsurance practices, including reinsurance capacity, underwriting capacity, risk management, and re-insurance pools. The assessment focused on effect of reinsurance practices on profitability of general insurance companies. Descriptive cross sectional research design was adopted. All the 29 general insurance companies in Kenya were targeted. Primary data were gathered from the insurance companies using questionnaires. The 29 reinsurance managers and underwriting managers of these firms were the target respondents. Twenty-two (22) questionnaires (75.9%) were successfully completed and returned. Data were analysed using descriptive analysis. The findings showed that reinsurance practices, involving reinsurance capacity, underwriting capacity, risk management, and reinsurance pools have significant effect on profitability of general insurers. Based on the study findings, the implication is that general insurers should engage in reinsurance practices which are closely related to the firms' business underwriting approaches for better profitability results. The assessment recommends that for general insurers to improve their overall profitability, they should participate in reinsurance practices as a priority, bearing in mind their status in previous loss experience, loss frequency, as well as risk size. It is imperative for general insurers to have optimal risk management measures. It further recommends that general insurers should incorporate more branches across the country. In order to increase penetration which is still low in Kenya hence capturing a wider market, especially by reaching out to the many potential customers staying away from major town centres who may demand general insurance products to tap more revenue and increase profitability.

# **CHAPTER ONE**

## **INTRODUCTION**

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

Insurance primary functions comprise risk pooling, spreading and loss compensation. It is also a stimulus for economic growth through capital accumulation, promotion of long-term savings as well as investing in financially feasible activities (Oluoma, 2014). Insurance is broadly categorised into two, including general insurance (short term, usually one year with a renewal provision) and life insurance (long term). General insurance business in Kenya includes marine, engineering, medical, theft, public liability, motor (commercial and private), fire (domestic and industrial), aviation, personal accident, Work Injury Benefits (WIBA), micro insurance as well as miscellaneous insurances (AKI, 2018). The non-life insurance trade in Kenya experiences two major challenges such as the inability to find solution to insurers who are not capable of settling policyholders' claims. Further, the sector experiences the challenge of how to stimulate growth for a sector that has more potential to expand the country's GDP, yet has remained stagnant over the years (Kiragu, 2014).

General insurance firms should be prudent in the nature of their operations to improve their performance and sustain growth (Almajali, Alamro & Al-Soub, 2012). Insurance companies eliminate or minimise risk of other companies or businesses however, the insurance firms themselves also need to consider the risk reduction by engaging in re-insurance (Iqbal & Rehman, 2014). The natures as well as magnitude of such risk are high to the extent that

individual insurance firms find it difficult to handle them on their own (Domenichini & Crugnola, 2007).

Insurers mainly utilise re-insurance as a way of risk diversification as well as reduction (Iqbal et al., 2014). It involves business expansion as well as minimising chances of loss occurrences since the tool enables the main insurers to scale up their underwriting capacity and is also considered as an effective method for facilitating insurance operations (Mayers & Smith, 1981). The tool is beneficial to policyholders as it minimizes the magnitude of high premiums whose claims may drive the insurer into a state of bankruptcy. Re-insurance application is effectively linked to several factors impacting the performance of insurers. The latter continuously manage risks by engaging into re-insurance deals to minimize risk of bankruptcy, grow capacity, and minimise losses as they mitigate catastrophes (Calandro & Scott, 2001). Conversely, re-insurance deals may raise costs, stimulate higher prices, and consequently lower profits.

This study is anchored on Demand Theory (DT) propounded by Mayers and Smith (1990). DT proposes that utilisation of reinsurance is beneficial on the short run while its overdependence means that the risk covered by an insurer is low and may be at huge cost (Lee & Lee, 2012). Therefore, the theory forms the foundation for the study to explore the concept of reinsurance. Transaction Cost Economics (TCE) Theory as well, is applicable in expounding demand for reinsurance. Williamson (1979) descriptions on the TCE is that it attempts in recognizing different organization's complex economics through becoming members of other professional bodies like Law societies and theoretical frameworks adopted by other organizations.

The current state of insurance in Kenya is a matter of concern, with the sector growing progressively at 20.3% annually between 2010 and 2014 (IRA, 2014). Nonetheless, during the same period the profitability of these firms reduced at an average rate of 13.1% annually. The development has led to apprehension regarding profitability as well as general shape of financial health of this sector. In Kenya, the state of profitability of general insurance is a matter of distress. A scrutiny of the insurance regulatory reports shows that the general insurance business has been making underwriting losses. In 2018, the sector made underwriting loss of Ksh 2.59 billion while Ksh 1.03 billion underwriting loss was made in 2017 (IRA, 2018). This showed a more than double loss reported during this period. In 2016, the general insurance business made Ksh 2.13 billion underwriting loss. Such trends draw attention to the area, especially to find out what affects insurers' profitability.

### **1.1.1 Concept of Reinsurance**

Evidence show that reinsurance is insurance for primary insurers whereby the primary insurers purchase risks that they cannot or do not intend to keep entirely by themselves (Swiss Re, 2004). Reinsurers benefit the insurance field by providing shield to a wide range of risks comprising the largest and most intricate risks underwritten by the insurers hence reducing volatility of underwriting results (Soye & Adeyemo, 2017). Insurance underwriters additionally benefit from the capital relief and flexible financing that reinsurance advances. Insurers enjoy the benefits of acquiring expertise services in underwriting, product design, product pricing, and claims settlement (Rejda, 2013). This makes reinsurance a vital part of the insurance technique and therefore additionally secure and inexpensive. This eventually benefits the policyholders who get extra insurance at a reduced cost.

Reinsurance is both beneficial and limiting at the same time. Baur and Donoghue (2004) posit that reinsurance is advantageous since it reduces regulatory costs as well as financial statements' volatility as a way of stabilizing the business income. Nonetheless, Plantin (2006) holds a contrary viewpoint in that re-insurance is an expensive undertaking that may result in insolvency of the primary insurers. It occurs in the event that reinsurance is insolvent as well as when the primary insurer begins to underwrite business, the losses rise rapidly and erode the injected capital.

Primary insurer and reinsurer often split up the premiums plus losses amongst themselves within the contractually determined ratio whereby the reinsurer's premiums percentage is directly proportional to its obligation in reimbursement of claims (Pitselis, 2008). Malgwi and Dahiru (2014) confirm that non-proportional reinsurance is designed in a manner similar to the conventional policy of insurance that the insurer indemnifies the already arranged claim portion which lies between the upper and lower cover limits. Direct insurers are the losers or bearers of limits that fall above or below. The original document shows a fixed premium, specifically in the situation of non-proportional contracts.

The obstacles facing the insurance and reinsurance sectors are profound and are both internal and external. They include; lack of skilled manpower who are better trained and of better quality to maintain the pace of growth so far realized, slowing and stunted economic growth (Zep-Re., 2012). They also involve environment changes which have prompted the emergence and escalation in occurrences of natural catastrophes (Lebans & Euske, 2006). Other obstacles are unhealthy competition amongst reinsurers involving rate cutting and providing soft and un-

economical terms, lack of proper understanding of risks and lack of reliable data to develop rating guidelines and claims models and political instability in some states.

### **1.1.2 Reinsurance Practices**

Insurers transfer some portion of their portfolios to the respective reinsurer for a premium exchange. Insurers have successfully utilised reinsurance so as to leverage their outlay guarantee capacity as they work towards managing risk profile (Sing'ombe, 2016). For the business to succeed, reinsurers engage in a number of practices such as underwriting, risk estimation, assessment, pooling, and management, as well as practices that result in customer satisfaction, among others (Garven, Hilliard & Grace, 2014).

Reinsurance practices that induce customer satisfaction comprise time lag for claims processing and payment as well as faster response to claims notification (Abass & Obalola, 2018). The level of expertise advice regarding technical claims is also another indicator for customer satisfaction. Further, this is complemented by the quality of service delivery.

### **1.1.3 Firm Profitability**

Profitability of a firm is a financial performance measure which considers its ability to make profit from its operations as well as to receive a return on their investment. The profitability also indicates how the management can efficiently generate profits from the resources within their reach. Profitability of a business entity is very important because it leads to its survival (Ricardo & Wade, 2001). It is probably the most significant indicator of organisational success (Gavrea & Stegorean, 2011).

Performance of general insurance is measured in terms of Gross Direct Premium Income, Net Earned Premium, Net incurred claims, underwriting profits (Malgwi & Dahiru, 2014). The main indicators of financial performance measurements of a firm comprise the Return on assets (ROA), that is, net income over total assets as well as Return on equity (ROE) which is the ratio of net income over equity (Tulsian, 2014). Financial performance measurements for re-insurance comprise reinsurance used which is computed as the ratio for re-insurance share of technical provisions (the sum of money set to fulfil policyholders' obligations) divided by total assets (Lin, Yu & Peterson, 2015).

Ratio of ceded re-insurance (RCR) and ratio of reinsurance recoverable to policyholders' surplus (RRPHS), constitute conventional measures of reinsurance (Cummins *et al.*, 2008). RCR gives more direct information regarding the quantity or volume of reinsurance transactions which are effected between the reinsurer and insurer. It is the ratio of reinsurance ceded (RC) divided by net premium written (NPW) (Iqbal & Rehman, 2014).

RRPHS on the other hand is a dependence measure of insurance firms on their reinsurers and depicts the probability of exposure to reinsurance collectability problems (Smith, 2011). The RRPHS ratio is calculated as ceded reinsurance recoverable (CRR) plus ceded unearned premium (CUP) plus ceded commission (CC) divided by policyholders' surplus (PHS) (Iqbal & Rehman, 2014). Further, underwriting profit ratio is computed as net earned premiums minus underwriting expenses plus losses divided by net earned premiums (Lewin & Minton, 1986). In this study, profitability will be measured by underwriting profit ratio. The rationale for the choice



of this ratio is that insurance firms earn revenue through the underwriting of insurance policies. This is besides the generation of income from financial investments.

#### **1.1.4 General Insurance Companies in Kenya**

Insurers, reinsurers, intermediaries, and other service providers are regulated by the Insurance Regulatory Authority (IRA) mandated by the Insurance (Amendment) Act of 2006. The authority regulates supervises, and promotes the development of Kenya's insurance industry. IRA (2018) shows a total of 58 licenced insurance and reinsurers in Kenya. General insurers in the country comprise 28 of the licenced underwriters. Other players in this sector includes 9 composite firms dealing in both general and long-term operations, 14 reinsurance brokers, 2 reinsurers engaged in general insurance business while 3 are composite reinsurers, 215 insurance brokers, 8612 insurance agents, 10 risk managers among others.

There are five local reinsurers in Kenya, including Continental Reinsurance Company Limited, Kenya Reinsurance Corporation Limited, East Africa Reinsurance Company Limited, Waica Reinsurance Kenya as well as Ghana Reinsurance Company Kenya Limited. Two reinsurers in the Kenyan market operating under regional charters are ZEP-RE (PTA Reinsurance Company) and Africa Reinsurance Corporation. Additionally, Scor Global P&C SE and CICA-Re run liaison offices within the country. Kenya Reinsurance Corporation enjoys a 20% mandatory cession of businesses in the country whereas the two regional reinsurers command 10% and 5% mandatory cessions respectively.

Gross written premium at the end of 2018 was Ksh. 216.26 billion, constituting a minimal growth rate of 3.5 percent in comparison to KES 209.00 billion realised in (2017). Non-life

insurance trade provided 59.6% of the overall gross written premium and the premium growth recorded in this sector was 2.2% for the year. This shows a substantially reduced growth compared to the 8.7% growth rate recorded in the sector in the previous four years. Reinsurance ceded amounted to KES. 36.87 billion in 2018 against KES. 37.52 billion (recorded in 2017), showing a marginal decrease of 1.73%. The highest reinsurance ceded was from medical insurance at KES. 12.06 billion, then fire commercial at KES 8.86 billion which is consistent with 2017 (AKI, 2018).

There are guidelines issued by IRA (2013) on reinsurance which has identified reinsurance as a vital segment of an insurer's risk transfer strategy and assigns for the protection against the potential huge accumulations of individual losses which could develop from catastrophic events. It is provided in the guidelines how reinsurance arrangements are carried out by insurance companies and stipulates for minimum elements which must be considered while designing reinsurance programmes. Reinsurance utilization is positively linked to insurer profitability (Iqbal, Rehman & Shahzad, 2014). However, overdependence on reinsurer lowers the profitability, thus the solvency risk may escalate.

## **1.2 Research Problem**

Primary insurers apply re-insurance to manage their capital and risk with the objective of attaining better performance of their firms as they meet the level of capital solvency (Dror & Armstrong, 2006). Insurers often undertake certain risks which in the process lead them to underwriting high risk undertakings. If a certain general insurer fails to succeed, it may be as a result of weak risk management and high underwriting costs. In a bid to survive the competitive

forces in the market, an insurer may succumb to underwriting risky businesses. Most insurers adopt high risk management and underwriting programmes on the basis of retaining their market share, reputation, and brand as a complement to retaining broker and agent allegiance. This practice of misaligned interest might result in insurer bankruptcy in the long-run. Hence, it is imperative to adopt sound reinsurance practices to limit the level of exposure to general insurers' vulnerability to losses related to underwriting to ensure improved performance.

According to IRA (2018), general insurance premium has been steadily growing for the past 5 years from KES 99.2 billion (2014) to KES 127.5 billion (2018). In the general insurance trade, inward reinsurance premium's trend indicates a downward trend from Ksh 1.97 billion (2014) to Ksh 1.34 billion (2018). The negative trend in inward general reinsurance premium vis-a-vis the positive trend in general insurance premium is a matter of concern which therefore warrants investigation to show the effect of re-insurance practices on profitability of general insurers in Kenya.

A review of similar studies in this area has revealed some study gaps. To understand how insurance companies perform under the effects of reinsurance, Lee and Lee (2012) researched the Taiwan property-liability insurance firms and established that purchasing less reinsurance amounted to a higher ROA and insurers that depended more on reinsurance posted a generally lower firm profitability. However, the study was based in Taiwan that has a different insurance regulatory framework, a gap which this study sought to fill.

Soye and Adeyemo (2017) identified that net retention ratio (NRR) exhibited a positive association with ROA of insurance firms in Nigeria. The authors used ROA as a measure of

performance, which is not a specific measure to the insurance sector. This study intended to fill this gap by incorporating underwriting profitability, which is more relevant to the performance of insurance sector.

Sing'ombe (2016) found out that ratios of the retention are negated by the ratios of the profits considered to be underwritten. Nonetheless, the author used only secondary data to determine the study on reinsurance programmes and financial performance. This study fills the gap by using only primary data. Moreover, a study by Angima, Mwangi, Kaijage, and Ogutu (2017) established a statistically significant positive relationship between pricing as well as reinsurance practices and performance. However, these authors based their study on a broader context of East Africa. Uganda, Kenya, and Tanzania have different insurance regulatory frameworks. Though previous studies have explored various areas on insurance as well as reinsurance, scanty evidence show that they specifically gave attention to the influence of re-insurance practices on general insurance firms' profitability. Therefore, the research complemented knowledge by responding to the research question; what is the effect of reinsurance practices on profitability of general insurance companies in Kenya?

### **1.3 Research Objective**

The objective of this study was to establish the effect of reinsurance practices on profitability of general insurance companies in Kenya.

### **1.4 Value of the Study**

Research outcomes intended to benefit insurance managers by establishing the vital connection between reinsurance practices and general insurance profitability. It also provides feedback to

insurers regarding the extent that reinsurance arrangements affect operations of insurance firms and how it is key to general insurance sector's stability in the insurance industry.

This study also enlightens the insurance regulator IRA, on how to improve supervision and regulation of the industry through policy formulations with regard to reinsurance, especially on building financial stability, capacity and prompt settlement of claims in the insurance industry through reinsurance practices.

This research furthermore opens the scope for other researchers in reinsurance field to identify areas for further research. Academicians may gain understanding on how reinsurance practices can be enhanced for better profits by general insurance firms and the entire Kenya's insurance industry. It therefore enhances literature on the effects and benefits of reinsurance practices in general insurance and the insurance industry at large.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The section covered theories which underlie the study as well as reinsurance conceptualization by evaluating diverse literature on how it affects insurance profitability.

#### **2.2 Theoretical Foundation**

Demand theory and Transaction Cost Economics (TCE) theories informed this study.

##### **2.2.1 Demand Theory**

The demand theory was propounded by Mayers and Smith (1990) and later expanded and supported by Adiel (1996) and Plantin (2006). DT explores the need for sound insurance practices in enhancing performance of insurers. The theory proposes that utilisation of reinsurance is beneficial on the short run while its overdependence signifies that the risk shouldered by an insurer is little and may be at huge cost.

Short run benefits of reinsurance include risk sharing, risk hedging, and reduction in loss volatility, increase in underwriting capacity, spread of assumed risks to mitigate agency problems, improved earnings to reduce expected taxes and the offering of real advisory services (Adiel, 1996; Cole & McCullough, 2006; Redja, 2013). However, Cummins *et al.*, (2008) highlight limitations of reinsurance, which include insufficient retained premium, increase in reinsurance premium, low profitability, and lower retention capacity. This is a major indicator to the high cost of reinsurance on the long run. Demand theory therefore guided this study to explore the influence of reinsurance practices on general insurance firms' profitability.

### **2.2.2 Transaction Cost Economics Theory**

Proposed by Williamson (1979), transaction cost economics (TCE) theory is majorly applied in finance and marketing because it is relevant to business transactions. Since reinsurers and general insurers demand effective marketing strategies for their products, TCE is relevant in understanding reinsurance contracts in the financial sector in which the insurer bears profits and losses which are uncertain. Taking into account unforeseen risks, benefits are generally perceived higher when risks happen, however, this is conducted as per the outlined financial policy decision-making.

Management decisions regarding risks are included in the capital structure optimization which enhances debt capacity by utilising risk management strategies to mitigate costs related to financial distress (Grillet, 1992). Transactions linked to reinsurance have capital structures and the management of such firms make decisions which are subjected to the TCE analysis. Reinsurers often monitor different managers of various firms to limit transaction costs which agents incur. TCE was therefore important in this study, specifically in answering the question on the risk management effect through reinsurance on profitability of general insurance.

### **2.3 Empirical Review on Reinsurance Practices and Firm Profitability**

Lee and Lee (2012) posit that reinsurance businesses can escalate costs, leading to higher prices that eventually reduce profits. Reinsurance transactions are therefore linked to risk involved in underwriting as well as the capacity of the firm that ultimately affect the general performance. Cole and McCullough (2006) reaffirmed the finding that insurance firms which minimise or eradicate risks of unexpected losses often contract minimal reinsurance. Reinsurance purchase is

also significantly linked to insurance firms' performance. A sound insurance decision may yield substantial value to the insurance firms in a way that prepares them to combating probable financial risk (Lee & Lee, 2012). Further, the reinsurance purchase may potentially reduce pre-tax income volatility that results in low anticipated tax liability (Iqbal, Rehman & Shahzad, 2014).

The mispricing of accepted risks by direct insurance underwriters according to Sung (1997), triggers a sub-optimally varied risk pool in addition to engendering costs of agents being raised thus contributing to failures in the market such as increased risks associated with hazard morals and bankruptcy. On this note, according to Doherty and Lamm-Tenant (2009), it is prudent for the insurers to directly maintain underwritten risks within the appropriate layers of professionalism despite the tail risks such as concentrations from the products being transferred to the reinsurers. Reinsurance therefore can be a significant mechanism through which risks can be managed when it comes to the enactment of the risk capacity by the direct insurers involved. Furthermore, Mayers and Smith (1990) established that taxes as well as other costs of finances incurred including market fluctuations are significant predictors hence the morale behind the buying of the reinsurance.

Reinsurance practice generally apportions the chief insurer's risk and offer expertise knowledge as well as professional advice on specific field (Iqbal & Rehman, 2014). This results in monetary benefits by optimally sharing risks, minimising bankruptcy costs, limiting cash-flow volatilities, and boosting the underwriting capacity. Froot, Scharfstein, and Stein (1993) noticed that cash-flow stream at times when not forecasted in one way or the other might not be affordable to



majority of the stakeholders. Furthermore, the authors emphasized that with proper mechanism in place for the flow of cash more so after the occurrences of certain events like disasters, the management of risks with the adoption of reinsurance techniques in one way or the other would result in improvement of the insurance firm's value. Thus, management team will automatically obtain projects of NPV which are positive when it comes to the opportunities for investment explored by the firms. Moreover, a researcher (Plantin, 2006) held the opinion that with the personal relations between reinsurers and insurers, there has been consistency in the insurers monitoring more so when it comes to the settlement of claim process as well as writing off some claims.

The reduction in the annual losses including financial claims and expenses can be achieved by the properties of the contingent capital of the reinsurance companies, (Shimpi, 2002). In addition, this mechanism in many cases reduces capital costs while increasing returns to be shared among the shareholders thus signalling the benefit of reinsurance. Reinsurance above the optimal level by the insurer in many ways contributes to the costs of deadweight being realized which occur as a result of the loadings in the profit gained by the reinsurer and that gained by the insurer (Froot, 2008). Even though the costs are outweighed by the risk gains from the reinsurance, buying extra reinsurance is expected to lower equity costs and the other way round. Similarly, according to Purnanandam (2008), leverage tends to increase when the hedges are applied thus this kind of association display a reverse for the leverages with high levels. Thus reinsurance is an essential part of the insurance market and performs a crucial role about the financial stability of the global insurance markets.

The empirical review has established some existing knowledge gap. Reinsurance practices link directly to insurer's capacity and the underlying risk of underwriting, and these ultimately affect profitability. However, past studies portray mixed findings concerning this perceived relationship. Ma and Elango (2008) found that insurers purchasing high amounts of reinsurance experience more stability in terms of performance thus contributing to higher risk-adjusted returns. However, this study focused on international operations instead of reinsurance practices, a gap this current study filled by evaluating how reinsurance practices of underwriting affect the general insurance companies' profitability in Kenya.

Following a research conducted by Cole and McCullough (2006) based on the reinsurance demand in the U.S., it was ascertained that states in the country had profound influence on the reinsurance up-take. Financial capacity and operational aspects of ceding insurer such as size, organisational form, and affiliation also influenced the up-take of some foreign reinsurance. However, this study was based in the US that is more advanced in the performance of insurance business compared to Kenya, whose findings cannot be generalized to the Kenyan situation. The current study filled this gap by generalizing the study in the Kenyan context.

Berger, Cummins, and Tennyson (1992) observed that reinsurance activities greatly impact main market profit. The study depicted that profitability increases significantly with the level of reinsurance ceded. Study by Lee & Lee (2012) showed that ROA and operating ratio of property-liability insurers in Taiwan are positively influenced by operating cost, underwriting-related risk, return on investment (ROI), and reinsurance usage. Soye and Adeyemo (2017) established that insurance ROA (in Nigeria) is linked to administrative costs, reinsurance ceded, net retention, net commission, and net claim ratios. The authors aver that insurance companies should possess

optimal retention proportion in their risk diversification management primarily in ensuring favourable performance. Nonetheless, the study failed to capture the variables of ceded reinsurance recoverable (CRR) and ceded unearned premium (CUP), a gap which the current study filled by exploring the relationship between these variables and general insurance' profitability.

Sing'ombe (2016) identified only a weak positive linkage of reinsurance with performance. Retention ratio showed a negative link with profitability ratio of general insurance firms' underwriting (in Kenya). However, the study analysed the financial performance of general insurers by using underwriting profit, claim ratios and net premiums, a gap that the current study filled by incorporating underwriting profit as the profitability measure.

In an investigation of the adverse selection between general insurers and reinsurers by Garven, Hilliard and Grace (2014), the survey affirmed that the stability of tenure of reinsurance counterparty connections can lower information asymmetry between the ceding companies and the reinsurance companies. The finding reveals that the quantity of reinsurance, credit quality and insurers profitability properly improve with the tenure of reinsurance relationships. However, this study was conducted in the United States whose context is different to Kenya's insurance industry, a gap this study filled.

Blazenko (1986) investigated benefit of risk transfer benefit which reinsurance brings. The author observed that reinsurance demand is aimed to give capacity as well as spread risk. In a study on the corporate reinsurance demand in the Great Britain by Mayers & Smith (1990), it was concluded that reinsurance provides insurers with many benefits. It minimises conflicts,

reduces taxes, aides in reducing agency costs amongst various stakeholders; and helps insurers to provide real services. The authors posit that problems of underinvestment encourage companies to purchase reinsurance. They also observed that since insurance firms are regulated, it lessens the incentives for underwriters to purchase property reinsurance as regulated companies have naturally less risks. The study was based in the Great Britain which has little comparison to the performance of Kenya's insurance industry, a gap that the current study bridged by concentrating in the Kenya's context.

Cummins, Dionne, Gagne, and Nouira (2008) found that reinsurance is critical for the management of risk of financial distress, utility maximisation, and proper handling of claims. Nonetheless, the study was based in the US by covering a period between 1995 and 2003 and a lot of developments might have happened in the insurance industry since that period, the current study focused on Kenya by relying on the current insurance regulatory reports.

Lee & Lee (2012) examined the linkage between reinsurance utilisation decision and insurers' performance based on property-liability insurance firms in Taiwan. Their findings revealed that insurance companies' performance and reinsurance are interdependent. This assertion was derived by proving that insurance companies posting a higher ROA incline towards utilising limited reinsurance. However, the study concentrated on investigating the correlation between utilisation decision and insurers' performance but left out the aspect of reinsurance used (RENS) ratio, a gap that this study filled by incorporating the aspects profitability.

Angima *et al.*, (2017) explored the extent in which pricing as well as reinsurance practices affect non-life insurers' performance within East Africa. Both primary and secondary data were drawn

from 82 non-life insurers from Kenya, Uganda, and Tanzania. The study identified a significantly positive link between pricing as well as reinsurance practices. However, the study covered the entire East Africa in comparison to the current study that has been based only in Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter highlights data collection procedures. Besides, research design and population target group within the study are discussed. The chapter further presents the data collection instruments that were utilised in the survey. It also brings out the data analysis method used.

#### **3.2 Research Design**

The definition of research design considers it as a plan adopted to collect, analyse, and interpret the results so that the solutions towards a given problem can be identified (Kothari, 2004). The survey adopted the descriptive cross sectional research design and the rationale for the choice of this design to be applied is that it can allow for generalisation of the results to another different context (Cooper & Schindler, 2003).

Chandaran (2004) avers that in a descriptive survey, accurate characteristics of the population sampled are displayed that in one way or the other represent current events in the population. The design makes it easy for the quantitative data collection which can be analysed through different statistical types including inferences (Saunders, Lewis, & Thornhill, 2003).

#### **3.3 Population of the Study**

Research shows that population is the full set of individuals and objects/events, with shared characteristics (Mugenda & Mugenda, 2003). The target population is one that the survey researches as well as whose findings are applied in generalization of the whole population. This study target population consisted of all the 32 general insurance firms (listed in appendix I) offering general insurance registered by IRA Kenya in 2019. However, reports could only be

gathered from 29 general insurance companies, which were in operation by 2018 (AKI, 2018). The population was a census because of the small number.

### **3.4 Data Collection**

Primary data on reinsurance practices were gathered by questionnaire (appendix II) which was administered to reinsurance and general insurance underwriting managers. The rationale for the choice of respondents is due to the fact that reinsurance managers are the decision makers regarding reinsurance practices within the general insurance firms and have a comprehensive understanding of the nature of risks and their effects on profitability of the general insurers. Besides, the underwriting managers also understand the nature of the risks and are therefore used in the absence of reinsurance managers. The primary data were collected by using questionnaires, which were delivered in hardcopies to the respondents while some were emailed to the respondents, specifically to those who were working from home.

### **3.5 Data Analysis**

Descriptive statistics were used for the analysis. This was used with the aid of SPSS (version 21). The descriptive statistics involved standard deviations; means as well as percentages are presented by use of charts and tables (Bell, 2007). In most cases these statistics measures the spread like the standard deviations and the measures of the central tendencies. On the other hand, qualitative analysis was conducted through the content approach, which involved coding of information and presenting the findings as per the themes of the study.

# CHAPTER FOUR

## DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

### 4.1 Introduction

The chapter contains the findings obtained from the research data. It has the analyses, presentations, and interpretation of findings on the effect of reinsurance practises on profitability of general insurance companies in Kenya. The analyses of findings were done as per the objectives set for this study. Data were analysed using descriptive statistics, involving standard deviations, means, and percentages. The results were then presented using tables and charts.

### 4.2 Response Rate

Table 4.1 shows a summary of response rate obtained from the research data.

**Table 4.1: Response Rate**

<b>No. of Questionnaires issued</b>	<b>No. of Questionnaires returned</b>	<b>No. of Questionnaires discarded</b>	<b>Response rate</b>
29	22	0	75.9%

As shown in Table 4.1, the study respondents involved the 29 reinsurance and/or underwriting managers of the general insurance companies in Kenya as the participants. Twenty-two (22) questionnaires out of the 29 questionnaires emailed were successfully completed and returned. It therefore gave a response rate of 75.9 percent. In the viewpoint of Mugenda and Mugenda



(2003), the response rate of 50 percent is considered adequate for analysis and data reporting, a 60 percent rate is perceived as good while a 70 percent response rate is considered excellent.

### 4.3 General Information of Respondents

The section presents the descriptive analysis concerning the organisation's years of operation, number of employees, and company ownership. The responses were obtained from the underwriting/reinsurance managers. Table 4.2 presents the findings.

**Table 4.2: Results of General Information**

<b>Variable</b>	<b>Frequency</b>	<b>Percentages (%)</b>
<b>Years of Operation</b>		
Below 10 years	2	9.1
11-25 years	14	63.6
26-50 years	6	27.3
51 years and above	0	0
<b>Total</b>	<b>22</b>	<b>100</b>
<b>Number of Employees</b>		
Less than 100	3	13.6
101-250	10	45.5
251-500	8	36.4
501 and above	1	4.5
<b>Total</b>	<b>22</b>	<b>100</b>

### **Company Ownership**

Fully local	9	41
Local-Foreign	13	59
<b>Total</b>	<b>22</b>	<b>100</b>

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**Source:** Research Data (2020)

The findings in Table 4.2 shows that 14 (63.6 percent) of the general insurance companies in Kenya have been in operation for between 11 and 25 years. The results therefore reveal that majority of these insurance firms have been in operation for more than 10 years, implying that they have been in the business long enough to experience risks associated with the general insurance business that calls for the adoption of reinsurance practices to spread the magnitude of the risks involved.

Moreover, the study established that 10 (45.5 percent) of the general insurance firms had employees of between 101 and 250. Further, it was ascertained that 8 (36.4 percent) had employees of between 251 and 500. It implies that most of these general insurance companies are medium sized.

Concerning the company ownership, the study findings established that 13 (59 percent) of these general insurance companies are local-foreign owned. It can be deduced from these findings that foreigners have a stake in most general insurance companies in Kenya. The partnership between locals and foreigners in the ownership of these companies boosts their financial base to underwrite and reinsure more businesses, manage risks, as well as participate in pools.

### 4.3.1 Adequacy of Reinsurance Programmes

Table 4.3 shows the results of adequacy of reinsurance programmes.

**Table 4.3: Adequacy of Reinsurance Programmes**

<b>Adequacy of Reinsurance Programmes</b>	<b>Frequency</b>	<b>Percentages (%)</b>
Yes	18	81.8
No	4	18.2
<b>Total</b>	<b>22</b>	<b>100.00</b>

**Source:** Research Data (2020)

As shown in Table 4.3, the underwriting and reinsurance managers of the general insurance companies were asked about the adequacy of reinsurance programmes, particularly in terms of ceded reinsurance covers which are tailor-made for their companies. The study ascertained that majority 18 (81.8 percent) of these general insurance companies had adequate reinsurance programmes. The respondents cited that they had all their treaties led by a rated reinsurance as all classes of insurance are protected within the different treaties. They had excess of loss treaty and proportional-treaties surplus. It is therefore important for general insurers to adopt sound reinsurance practices to limit the level of exposure to general insurers' vulnerability to losses related to underwriting to ensure improved performance.

### 4.3.2 Adequacy of Participation in Reinsurance Pools

Table 4.4 shows the results obtained from the underwriting and reinsurance managers concerning their firm's participation in the reinsurance pools.

**Table 4.4: Adequacy of Participation in Reinsurance Pools**

<b>Adequacy of Participation</b>	<b>Frequency</b>	<b>Percentages (%)</b>
<b>Reinsurance Pools</b>		
Yes	15	68.2
No	7	31.8
<b>Total</b>	<b>22</b>	<b>100.00</b>

**Source:** Research Data (2020)

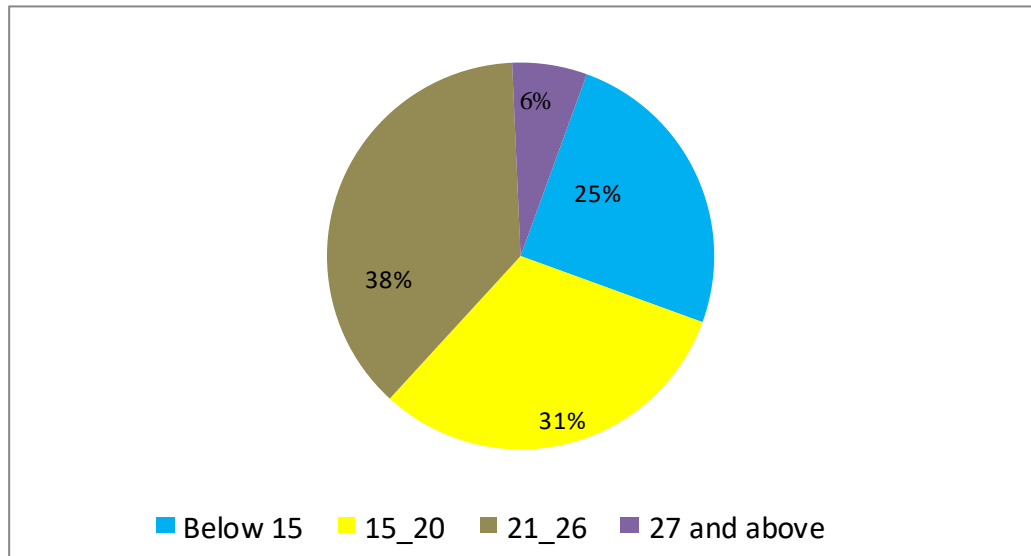
The findings in Table 4.4 indicate that most of the general insurance companies 15 (68.2 percent) adequately participate in the reinsurance pools. It implies that most of these general insurers have the benefit of regulating the market as well as offering the joint solution to risk coverage, which a general insurer may not underwrite alone.

Despite the importance of engaging in reinsurance pools, the study established that 7 (31.8 percent) of these general insurance firms do not adequately participate in the reinsurance pools. The limitation of the participation limits their reinsurance pools capacity, which limits their capacity to spread risks. It also limits their capacity to provide a means to maintain a withdrawn class of insurance by their companies' business, product line, and geographical location. It implies that that the capacity of such general insurers to mitigate accumulation of risk exposures, specifically huge losses related to claims may be limited, which could lead to decreased profitability.

### 4.3.3 Number of Firm Branches

Figure 4.5 shows the findings obtained from the respondents regarding the number of branches of their companies.

**Figure 4.5: Number of Firm Branches**



**Source:** Research Data (2020)

The findings in Figure 4.5 show that majority (38 percent) of these general insurance companies have between 21 and 26 branches. However, those with more than 27 branches were represented by 6 percent. Since Kenya has 47 counties and none of these general insurers has 47 branches spread across the country, it shows that majority of these general insurance companies lack a wide coverage, in terms of the number of branches, implying that they have limited access to economies of scale. Their revenue earning may be curtailed because of the inability to grow and expand their branches to potential markets.

#### 4.3.4 Reinsurance in Enhancing General Insurance Profitability

Table 4.5 shows the results regarding the extent to which reinsurance enhances the profitability of general insurance.

**Table 4.6: Reinsurance in Enhancing General Insurance Profitability**

<b>Reinsurance in Enhancing General Insurance Profitability</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Extremely large	7	31.8
Large	12	54.5
Small	1	4.6
Very small	2	9.1
No extent	0	0
<b>Total</b>	<b>22</b>	<b>100</b>

**Source:** Research Data (2020)

Reinsurance managers were asked to indicate the extent to which reinsurance enhances the profitability of general insurance companies. Table 4.6 shows that majority 54.5 percent (12) of the respondents agreed that reinsurance enhances the profitability of general insurance companies to a large extent. This was followed by 31.8 percent (7) respondents. However, only a smaller percentage 4.6 percent had a divergent viewpoint that reinsurance enhances general insurance profitability. The reason being that reinsurance activities might increase costs, which result in higher prices. Consequently, the profits are lowered.

The respondents cited that reinsurance enhances general insurance profitability by spreading risk through facultative as well as treaty reinsurances, which has largely improved the general insurance profitability. Besides, it allows their companies to pay bigger claims that are higher than their retention. Further, reinsurance programme is profit-driven, thus optimal reinsurance programmes are important to general insurers.

#### 4.4 Reinsurance Capacity

Table 4.7 presents the descriptive results on reinsurance capacity.

**Table 4.7: Descriptive Results on Reinsurance Capacity**

Reinsurance Practice	Mean	Standard deviation
<b>Reinsurance Capacity</b>		
Reinsurance has improved our company's image as broad-based	4.02	0.75
Reinsurance has cushioned our company from big losses which are beyond our capacity	3.94	0.82
Reinsurance has relaxed pressure on our company's surplus in the event of rapid premium growth	4.13	0.54
Reinsurance has enabled our company to smoothen our entire operating results from socio-economic as well as natural forces	3.84	0.81
Reinsurance has widened our company's capacity to distribute risk portfolios	3.75	1.12
Reinsurance has cushioned our company's capital as well as surplus required for growth	3.68	0.88

Reinsurance has offered expertise to price as well as develop new insurance products for our company	3.80	0.72
<b>Overall Mean</b>	<b>3.88</b>	

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**Source:** Research Data (2020)

From the study results in Table 4.7, majority of the respondents were of the opinion that reinsurance has relaxed pressure on their company's surplus in the event of rapid premium growth (at a mean of 4.13). The mean result is higher than the mean of means at 3.88. Further, it was found that reinsurance has improved the companies' image as broad-based (at a mean of 4.02). Besides, significant number of respondents gave their opinion that reinsurance has cushioned their companies from big losses which are beyond their capacity (at a mean of 3.94).

Regarding the issue of the capacity to facilitate operations, the findings show that reinsurance has enabled the insurers to smoothen their entire operating results from socio-economic as well as natural forces (at a mean of 3.84). Moreover, reinsurance has offered expertise to price as well as develop new insurance products for their company (at a mean of 3.80). Reinsurance has widened their company's capacity to distribute risk portfolios (at a mean of 3.75). Further, reinsurance has cushioned their company's capital as well as surplus required for growth (at a mean of 3.68). Overall, the general perspective of the respondents that reinsurance capacity as a reinsurance practice has an effect on profitability of general insurance companies in Kenya and was captured by means of means at 3.88.

#### **4.5 Underwriting Capacity**

Table 4.8 presents the descriptive results on underwriting capacity.



**Table 4.8: Underwriting Capacity**

<b>Reinsurance Practice of Underwriting capacity</b>	<b>Mean</b>	<b>Standard Deviation</b>
Reinsurance has enhanced our firm's capacity to underwrite large insurance risks	4.32	0.24
Reinsurance has provided our company with the capacity to scale up our underwriting, i.e. in terms of numbers	4.11	0.37
<b>Overall Mean</b>	<b>4.22</b>	

**Source:** Research Data (2020)

Table 4.8 show that majority of the respondents agreed that reinsurance has enhanced their firm's capacity to underwrite large insurance risks (at a mean of 4.32). The mean is relatively higher than the mean of means of 4.22. They also perceived that reinsurance has provided their company with the capacity to scale up their underwriting, which is in terms of numbers (at a mean of 4.11). Generally, the perspective of the respondents that underwriting capacity as an insurance practice has an effect on profitability of general insurance companies in Kenya was captured by means of means at 4.22.

#### **4.6 Risk Management**

Table 4.9 shows the descriptive results on the reinsurance practice of risk management.

**Table 4.9: Risk Management**

<b>Reinsurance Practice of Risk Management</b>	<b>Mean</b>	<b>Standard deviation</b>
Reinsurance has cushioned our firm against one catastrophic loss as well as multiple ones	4.21	0.09
Reinsurance has assisted our firm to stabilize and mitigate risk of losses	3.66	1.09
Reinsurance has strengthened our company's ability to take more risks	3.96	0.41
Reinsurance has the capacity to mitigate catastrophic risks for our company	4.02	0.21
Reinsurance arrangement has mitigated the impact of catastrophic risk on portfolios for our company	3.87	0.37
<b>Overall Mean</b>	<b>3.94</b>	

**Source:** Research Data (2020)

The results in Table 4.9 shows that majority of the respondents agreed that reinsurance has cushioned their firm against one catastrophic loss as well as multiple ones (at a mean of 4.21). Besides, reinsurance has the capacity to mitigate catastrophic risks for their company (at a mean of 4.02). The respondents cited that reinsurance has strengthened their company's ability to take more risks (at a mean of 3.96).

Further findings established that reinsurance arrangements have mitigated the impact of catastrophic risk on portfolios for their company (at a mean of 3.87). Reinsurance has assisted their firm to stabilize and mitigate risk of losses (at a mean of 3.66). Overall, the respondents agreed that risk management as an insurance practice has an effect on profitability of general insurance companies in Kenya was captured by means of means at 3.94.

#### 4.7 Reinsurance Pools

Table 4.10 shows the descriptive results on the reinsurance practice of reinsurance pools.

**Table 4.10: Reinsurance Pools**

<b>Reinsurance Practice of Reinsurance Pools</b>	<b>Mean</b>	<b>Standard deviation</b>
Reinsurance pools have enabled our company to spread risks	3.95	0.42
Reinsurance has provided a way for maintaining a withdrawn class of insurance by our company because of product source/business line/geographical location	4.09	0.37
<b>Overall Mean</b>	<b>4.02</b>	

**Source:** Research Data (2020)

The findings on Table 4.10 were gathered from the questions posted to the reinsurance managers regarding their companies' participation in insurance pools. Majority of the respondents declared that reinsurance has provided a way for maintaining a withdrawn class of insurance by their company because of product source, business line, as well as geographical location (at a mean of

4.09). Further, it was held that reinsurance pools have enabled the companies to spread risks (at a mean of 3.95). Overall, the respondents agreed that reinsurance pools as an insurance practice has an effect on profitability of general insurance companies in Kenya and was captured by means of means at 4.02.

#### **4.8 Reinsurance Practices and Profitability**

Table 4.11 provides the results regarding the effect of reinsurance practices on profitability of general insurance firms.

**Table 4.11: Reinsurance Practices and Profitability**

<b>Reinsurance Practices and Profitability</b>	<b>Mean</b>	<b>Standard deviation</b>
Reinsurance capacity has improved the profitability of our company	3.64	1.22
Underwriting capacity has improved the profitability of our firm	3.86	1.08
Risk management has improved the profitability of our company	4.14	0.35
Reinsurance pool has improved the profitability of our company	3.95	0.76
Ceded reinsurance has improved the profitability of our firm	4.03	0.19
<b>Overall Mean</b>	<b>3.92</b>	

**Source:** Research Data (2020)

The findings in Table 4.11 show that majority of the respondents confirmed that risk management through reinsurance has improved the profitability of their company (at a mean of

4.14). It was followed by the finding that ceded reinsurance has improved the profitability of their firm (at a mean of 4.03). Further, the study established that reinsurance pool has improved the profitability of their company (at a mean of 3.95). Underwriting capacity has improved the profitability of their firm (at a mean of 3.86). Finally, reinsurance capacity has improved the profitability of their company (at a mean of 3.64). Overall, reinsurance practices have an effect on profitability of general insurance companies in Kenya was captured by means of means at 3.92.

#### **4.9 Discussion of Findings**

Reinsurance practices affect the profitability of general insurance companies in Kenya. The above findings are pertinent to the observation made by Berger, Cummins, and Tennyson (1992) that reinsurance activities greatly impact main market profit. The study depicted that profitability increases significantly with the level of reinsurance ceded.

The findings are pertinent to the observation made by Cummins, Dionne, Gagne, and Nourira (2008) that reinsurance is critical for the management of risk of financial distress, utility maximisation, and proper handling of claims. On the adequacy of reinsurance programmes, the study confirmed that the general insurers had adequate ceded reinsurance covers, which were tailor-made for their firms. The findings are pertinent to the observation made by Dror and Armstrong (2006) that most insurers adopt high risk management and underwriting programmes on the basis of retaining their market share, reputation, and brand as a complement to retaining broker and agent allegiance.

On the participation on reinsurance pools, most of these general insurers have the benefit of regulating the market as well as offering the joint solution to risk coverage, which a general insurer may not underwrite alone. It confirms the observation made by Garven, Hilliard, and Grace (2014) that for the business to succeed, reinsurers engage in a number of practices such as underwriting, risk estimation, assessment, pooling, and management, as well as practices that result in customer satisfaction, among others.

The study confirmed that reinsurance capacity improves profitability of general insurers. The above findings from table 4.7 confirm the observation made by Blazenko (1986) on benefit of risk transfer which reinsurance brings. The author observed that reinsurance demand is aimed to give capacity as well as spread risks.

The findings showed that underwriting capacity affect the profitability of general insurance companies. The above study findings confirm the observation made by Mayers and Smith (1990) that reinsurance provides insurers with many benefits. It minimises conflicts, reduces taxes, aids in reducing agency costs amongst various stakeholders; and helps insurers to provide real services. The authors ascertained that problems of underinvestment encourage companies to purchase reinsurance. They also observed that since insurance firms are regulated, it lessens the incentives for underwriters to purchase property reinsurance as regulated companies have naturally less risks. The findings further confirm demand theory which posit that short run benefits of reinsurance include risk sharing, risk hedging, and reduction in loss volatility, increase in underwriting capacity, spread of assumed risks to mitigate agency problems,

improved earnings to reduce expected taxes and the offering of real advisory services (Mayers & Smith's, 1990).

The results obtained from the study indicated that risk management affect the profitability of general insurers. The above findings confirm the observations made by Soye and Adeyemo (2017) that reinsurers benefit the insurance field by providing shield to a wide range of risks comprising the largest and most intricate risks underwritten by the insurers hence reducing volatility of underwriting results. Iqbal *et al.*, (2014) established that insurers mainly utilise re-insurance as a way of risk diversification as well as reduction. Calandro and Scott (2001) further assert that insurers continuously manage risks by engaging into re-insurance deals to minimize risk of bankruptcy, grow capacity, and minimise losses as they mitigate catastrophes. Mayers and Smith (1981) further asserted that it entails business expansion as well as minimising chances of loss occurrences since the tool enables the main insurers to scale up their underwriting capacity and is also considered as an effective method for facilitating insurance operations. Contrary to the above observations, Plantin (2006) observed that re-insurance is an expensive undertaking that may result in insolvency of the primary insurers. It occurs in the event that reinsurance is insolvent. This is also evidenced when the primary insurer begins to underwrite business; the losses rise rapidly and erode the injected capital.

Overall, the study findings show that reinsurance practices affect profitability of general insurance companies. Further, they support Williamson's (1979) that management decisions regarding risks are included in the capital structure optimization which enhances debt capacity by utilising risk management strategies to mitigate costs related to financial distress. Moreover, transactions associated with reinsurance have capital structures and the management of such

firms make decisions which are subjected to the TCE analysis. Reinsurers monitor various managers of firms to limit transaction costs which agents bear.

The study findings confirm the observations made by Cole and McCullough (2006) that insurance firms which minimise or eradicate risks of unexpected losses often contract minimal reinsurance. Reinsurance purchase is also significantly linked to insurance firms' performance. Lee and Lee (2012) further confirm that an effective reinsurance decision may yield substantial value to the insurance firms in a way that prepares them to combating probable financial risk. The authors further found that insurance companies' performance and reinsurance are interdependent. This assertion was derived by proving that insurance companies posting a higher ROA incline towards utilising limited reinsurance.

In conformity to the study findings, Angima *et al.*, (2017) found a significantly positive link between pricing as well as reinsurance practices. Ma and Elango (2008) established that insurers purchasing high amounts of reinsurance experience more stability in terms of performance thus contributing to higher risk-adjusted returns. On the contrary, Sing'ombe (2016) found different results. The author's study established a weak positive linkage of reinsurance with performance. Retention ratio showed a negative link with profitability ratio of general insurance firms' underwriting (in Kenya).



## **CHAPTER FIVE**

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

#### **5.1 Introduction**

The chapter has the summary of findings, conclusions as well as recommendations. The purpose of this study was to establish the effects of reinsurance practices on the profitability of general insurance companies in Kenya. The objective was achieved by assessing the reinsurance practices of reinsurance capacity, underwriting capacity, risk management, and reinsurance pools on profitability of general insurance companies in Kenya.

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

The study findings indicated that reinsurance practices affect profitability of general insurance companies. Reinsurance capacity was found to have a significant effect on profitability of the general insurers. It implies that the general insurers find ease in settling huge claims as they arise, without bearing the costs alone since reinsurance comes to their aid. Further, it also prevents them from falling into a state of bankruptcy.

The capacity to underwrite large insurance risks has enabled the general insurers to improve their profitability. The agency costs are minimised through the adoption of reinsurance. Since costs are kept at minimum as the amount of ceded reinsurance rises, the general insurers stand a better chance of improving their profitability.

The study further found that risk management is critical to the realisation of higher profits. General insurers have therefore adopted risk management through reinsurance practice to

cushion themselves from huge losses. It implies that general insurers may realise higher profitability by mitigating catastrophic losses through reinsurance risk management. Further, reinsurance pools were found to have significant effect on profitability of the general reinsurers as the risks are jointly covered. The losses borne by an individual insurer is therefore reduced. Overall, reinsurance practices were found to have significant effect on the profitability of general insurance firms.

### **5.3 Conclusions**

Based on the findings, the study concludes that reinsurance practices enable general insurance companies to improve their profitability. When general insurers pool risks together through reinsurance arrangements, the costs of settling huge claims are spread, thus making it possible to mitigate the probability of bearing huge losses.

A significant effect of underwriting capacity on profitability of general insurers shows that reinsurance ceded contribute significantly to the profitability of general insurance companies. It implies that general insurers should negotiate for more reinsurance contracts which at least cushion them from major catastrophic losses. Further, the assessment concludes that risk management through reinsurance is one of the critical reinsurance practices that help general insurers to mitigate the risk of incurring big losses.

### **5.4 Recommendations**

One of the recommendations of this study is that general insurance firms should prioritize reinsurance practices, bearing in mind their reinsurance status such as previous loss experience, loss frequency, as well as risk size. It is imperative for general insurers to have optimal level of

risk management through reinsurance. For example, where general insurers often face huge losses, they should have more reinsurance ceded to enhance the profitability of their companies.

The study further recommends that general insurers should have more branches. They should do so in order to capture a wider market, especially by reaching out to the many potential customers outside major urban areas who may demand general insurance products. The approach will help them tap the unexploited markets, grow their client base, and realise more revenue.

### **5.5 Limitation of the Study**

The data were gathered from the respondents, but due to the COVID-19 pandemic, some reinsurance and underwriting managers were out of office as they had been forced to work from home. Their e-mail addresses were sought from their companies so that the questionnaires could be emailed to them. It took a bit longer than the anticipated time. Some respondents, despite making several phone call follow-ups, were yet to deliver their completed questionnaires. Hence, a 100 percent response rate was not obtained for data analysis and interpretation.

The study was based only on 29 general insurance companies in Kenya. The small sample size excluded the use of regression analysis in the study. The assessment mainly relied on primary data which might be subjected to bias as personal responses could not be entirely objective. Some of the responses might be based on individual's perspectives, which lack objectivity. Besides, most of the questions were closed-ended and did not give the respondents adequate opportunity for further explanations. Therefore, the study lacked a detailed qualitative analysis. Further, it relied only on descriptive statistical analyses, which could not be used to explain the

cause-effect relationship, nature and strength, as well as the direction of the relationship between the independent and dependent variables.

### **5.6 Implications for Policy and Practice**

The study recommends that the insurance regulator IRA strengthen policy on reinsurance practices by improving its supervision and regulatory framework of the insurance industry. The policy formulation should focus on enhancing reinsurance capacity, underwriting capacity, risk management, and reinsurance pools of general insurers. These practices are important because they improve profitability of general insurance firms.

The assessment further recommends that academicians should seek the understanding of how reinsurance practices can be enhanced for better profitability of the general insurers in Kenya. Since there are limited studies on this area, researchers should use this document as a guide for further studies. The document provides additional literature on effects of reinsurance practices on profitability of general insurers.

### **5.7 Suggestions for Further Research**

The study assessed the effect of reinsurance practices on profitability of general insurance companies in Kenya. A similar study should be conducted that incorporates the non-financial aspects of performance such as client satisfaction, time lag, and claims management procedures of these firms. Besides, a future study in this area should incorporate both primary and secondary data.

A further study should also be conducted to involve other actuarial risk management practices like claims management programme that influences profitability, which have been left out of this study. Future studies should extend to cover life insurers in Kenya as well.

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## **APPENDICES**

### **APPENDIX I:**

#### **GENERAL INSURANCE COMPANIES IN KENYA**

1. AAR Insurance Kenya Ltd
2. Africa Merchant Assurance Company (AMACO) Ltd
3. AIG Kenya Insurance Company Ltd
4. Allianz Insurance Co of Kenya Ltd
5. APA Insurance Company Ltd
6. Britam General Insurance Company Ltd
7. CIC General Insurance Company Ltd
8. Directline Assurance Company Ltd
9. Fidelity Shield Insurance Company Ltd
10. First Assurance Company Ltd
11. General Accident (GA) Insurance Company Ltd
12. Heritage Insurance (K) Company Ltd
13. ICEA Lion General Insurance Company Ltd
14. Intra Africa Insurance Company Ltd
15. Invesco Assurance Company Ltd
16. Kenya Orient Insurance Company Ltd
17. Madison General Insurance Company Ltd
18. Mayfair Insurance Company Ltd

19. Metropolitan Cannon General Insurance Company Ltd
20. Occidental Insurance Company Ltd
21. MUA Insurance (K) Company Ltd
22. Pioneer Insurance Company Ltd
23. Pacis Insurance Company Ltd
24. Resolution Insurance Company Ltd
25. Sanlam Insurance Company Ltd
26. Takaful Insurance of Africa Ltd.
27. Tausi Assurance Company Ltd
28. The Jubilee General Insurance Ltd
29. The Jubilee Health Insurance Ltd
30. Trident Insurance Company Ltd
31. UAP Insurance Company Ltd
32. Xplico Insurance Company Ltd

**Source:** IRA (2019) Annual Report

## APPENDIX II: RESEARCH QUESTIONNAIRE

### Part A: Bio-data

1. Name of Firm (optional)

2. How long has your organisation been in operations?

Less than 10yrs [ ] 11-25yrs [ ] 26-50yrs [ ] 51yrs and above [ ]

3. How many employees does your company have?

Less than 100 [ ] 101- 250 [ ] 251-500[ ] 501 and above [ ]

4. Company Ownership

Fully local [ ] Local / Foreign [ ]

5. Do you have adequate reinsurance programmes.....

Explain.....

6. Do you adequately participate in reinsurance pools?.....

7. Number of firm branches.....

### Part B: Effect of Reinsurance Practices on General Insurance profitability

8. What extent does reinsurance enhance general insurance profitability?

Extremely large { }

Large { }

Small { }

Very small { }

No extent { }

Explain your answer.....

9. Using the scale provided, respond to the following statement on reinsurance practices and the profitability of your firm.

1= strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=strongly agree.

<b>REINSURANCE PRACTICES</b>	1	2	3	4	5
<b>Reinsurance Capacity</b>					
Reinsurance has improved our company's image as broad-based					
Reinsurance has cushioned our company from big losses which are beyond our capacity					
Reinsurance has relaxed pressure on our company's surplus in the event of rapid premium growth					
Reinsurance has enabled our company to smoothen our entire operating results from socio-economic as well as natural forces					
Reinsurance has widened our company's capacity to distribute risk portfolios					
Reinsurance has cushioned our company's capital as well as surplus required for growth					
Reinsurance has offered expertise to price as well as develop new insurance products for our company					
<b>Underwriting capacity</b>					
Reinsurance has enhanced our firm's capacity to underwrite large insurance risks					
Reinsurance has provided our company with the capacity to scale up our underwriting, i.e. in terms of numbers					



<b>Risk Management</b>					
Reinsurance has cushioned our firm against one catastrophic loss as well as multiple ones					
Reinsurance has assisted our firm to stabilize and mitigate risk of losses					
Reinsurance has strengthened our company's ability to take more risks					
Reinsurance has the capacity to mitigate catastrophic risks for our company					
Reinsurance arrangements has mitigated the impact of catastrophic risk on portfolios for our company					
<b>Reinsurance Pools</b>					
Reinsurance pools has enabled our company to spread risks					
Reinsurance has provided a way for maintaining a withdrawn class of insurance by our company because of product source/business line/geographical location					
<b>PROFITABILITY</b>					
Reinsurance capacity has improved the profitability of our company					
Underwriting capacity has improved the profitability of our firm					
Risk management has improved the profitability of our company					
Reinsurance pool has improved the profitability of our company					
Ceded reinsurance has improved the profitability of our firm					