

**RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF  
GENERAL INSURERS IN KENYA**


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## DECLARATION

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

Sign  \_\_\_\_\_ Date 14/09/22

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This project has been presented with my approval as the University supervisor.

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## **DEDICATION**

I dedicate this project to Johnbosco, Victor, Sharlyne and Vincent.

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## **LIST OF ABBREVIATIONS**

<b>AIICO</b>	American International Insurance Company Limited
<b>AKI</b>	Association of Kenya Insurers
<b>ERM</b>	Enterprise Risk Management
<b>IRA</b>	Insurance Regulatory Authority
<b>KES</b>	Kenya Shillings
<b>KTN</b>	Kenya Television Network
<b>M&amp;E</b>	Monitoring and Evaluation
<b>NSE</b>	Nairobi securities Exchange
<b>ROE</b>	Return on equity
<b>ROI</b>	Return on Investment
<b>SPSS</b>	Statistical Package For Social Science

## ABSTRACT

A significant contributor to financial turmoil and collapse in insurers was already identified as poor risk management. The insurance industry is required to follow a risk management framework set by Insurance Regulatory Authority in order to manage and mitigate the risks facing the insurers. The general insurance industry in Kenya is experiencing performance challenges. The objective of this research was to determine the relationship between risk management and the financial performance of general insurers in Kenya. This paper was based on agency and stakeholder theoretical foundations. It assumed a descriptive research design. The researcher involved 37 general insurers that existed between 2016 and 2021. The investigation made use of data from secondary annual panel data collected using data collection schedule. All information was gathered through individual general insurers' public filings sourced from the Insurance Regulatory Authority between 2016 and 2021. Diagnostic tests of normality, model specification test, heteroscedasticity, and Multicollinearity were done. STATA 14 for analysis. Describing, correlation, and regression analyses were used by the scholar through STATA 14. From the descriptive statistics, financial performance had an average return on assets of 1.649% in the period between 2016 and 2021. The general insurers had a mean underwriting loss ratio of 59.329%. From the correlation analysis, the findings exhibited that risk management exhibited a weak negative correlation coefficient with financial performance. Liquidity had a mean current ratio of 9.66 with a significant positive correlation coefficient with financial performance. Firm size had a mean log of 14.794 and had an insignificant positive correlation coefficient with financial performance. From the regression analysis, risk management exhibited a negative significant effect upon financial performance. However, liquidity had positive but not significant influences upon financial performance. Firm size had a positive significant influence upon financial performance. Hence, this paper concludes that the general insurers in Kenya have a low return on assets, performing poorly financially. The researcher concluded that there is effective risk management among general insurers in Kenya with risk management having a negative linkage around financial performance. This study concludes that general insurers in Kenya have high liquidity levels with liquidity having a positive linkage with financial performance of general insurers in Kenya. However, the paper concludes that firm size has no significant linkage with financial performance of general insurers in Kenya. The study recommends that general insurers in Kenya work towards increasing their net income by reducing costs and increasing the level of gross income; reduce the level of insurance claims incurred and adjustment expenses; increase the level of premiums earned; adopt an optimal level of liquidity; and dispose unproductive assets. The study recommends a similar study focusing on long-term insurance and other firms other than to widen the scope. The study also recommends similar research based on other factors influencing financial performance; other measures of risk management and financial performance; monthly, quarterly or semi-annual data; and different period of study.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

The core business of insurers is risk management (Derbali & Jamel, 2018). Both their clients' and their own risks are managed by the organizations. This necessitates risk management being integrated into the company's systems, practices, and traditions. Multiple parties put pressure on their establishments to efficiently control their risks and to report their performance throughout risk management efforts in a transparent manner. Some risks ought to be included in fundamental corporate operations and continuously addressed in order to create benefits for stockholders, according to Andreassen et al (2018), while others must be reassigned somewhere else if it is cost effective.

This research was based on agency and stakeholder theories. The agency theory was first adopted in risk management by Smith and Stulz (1985). According to the hypothesis, disparities in income distributions might cause a mismatch of interests among stockholders, managers, and debtors, which could cause the company to take on excessive risk. Stakeholder theory, first proposed by Freeman (1984), highlights that primary determinant of business policies is the balance of stakeholders' interests. It implies that minor businesses are extra vulnerable to financial difficulties that ought to pique their attention in risk management techniques. In the recent years, the general insurers in Kenya have been facing various risk in their business operations (Kajwang, 2021). They include market risks, credit risks and operational risks. This has called for risk management in order to reduce the risks which increase the costs related to business. The general insurers have also shown reduction in performance metrics (Morara & Sibindi, 2021). This has been shown

by the increased number of general insurers that have exhibited losses in the last five years. This study sought to establish the relationship between risk management and performance of general insurers in Kenya.

### **1.1.1 Risk Management**

According to Hussaini, Bakar and Yusuf (2019), risk management involves compiling very accurate records of past event in order, so that decision making in future is taken on the order, so that decision making in future is taken on basis of a sound statistics. Risk management, for Rejda (2011), is the mechanism via which a company determines the potential losses it faces and chooses the best methods for addressing these exposes. Risk management, as per Aziz, Manab, and Othman (2015), is a value-adding methodology that seeks to generate supplementary profit for an organization by assessing a synopsis of all risky activities, developing contingency plan, and continuously surveilling day-to-day operations.

Risk management is important for any institution, be it private or public (Saeidi et al, 2019). Effective risk management is behaving strategically instead of responsively in effort to influence prospective events to greatest extent feasible. As a result, good risk management has capability to lessen both likelihood of risk happening and associated possible consequences. This equips a company with instruments needed to effectively detect and manage possible hazards (Illangakoon, Azam & Jaharadak, 2021). Additionally, risk management gives a corporation a foundation on which to make wise decisions. Additionally, proactive risk management makes sure that hazards with a great importance are handled as forcefully as feasible (Settembre-Blundo et al, 2021). Additionally, the administration was equipped with data it needed to decide wisely and maintain the

company's profitability. In essence, a sound risk management strategy permits a business to lower its riskiness and plan for survivability in the event of an unanticipated disaster (Kim, Lee & Kang, 2021).

Risk management is generally measured by researchers differently. For example, Obia (2020) measured risk management in terms of interest coverage ratio. Nevertheless, Purwanto and Pardistya (2021) measured risk management using the degree of combined leverage. Samimi (2020) used the debt-to-capital ratio to measure risk management in firms. Another measure of risk management was debt-to-equity ratio as used by Farah and Amin (2021). In the insurance sector risk management is measured in terms of benefits-loss ratio, loss adjustment ratio and the underwriting ratio (Benyoussef & Hemrit, 2019; Noreen, 2020; Oudat & Ali, 2021). This study measured risk management in terms of underwriting loss ratio.

### **1.1.2 Financial Performance**

Financial performance relates to organization's financial capability to effectively leverage accessible resources to attain achievements that are consistent with the firm's stated goals, and also their value and importance to its users (Peterson, Gijsbers, & Wilks, 2003). Financial performance is described by Lebars and Euske (2002) as a collection of financial metrics that provide information on achievements of objectives and outcomes.

Financial performance is very important in an organization. Financial performance aims to measure the manner in which a firm has utilized the available resources in the organization to generate revenue (Almagtome & Abbas, 2020). The ability of a company to attract clients who can produce income is critical to its long-term viability. In that regard, defining

businesses' state and profitability is critical. Financial performance assesses a company's management's capacity to generate profit by putting the working assets to use (Taouab & Issor, 2019). It also demonstrates how effectively a company's assets are being used to generate money. Furthermore, it demonstrates the effectiveness of a top management in generating revenue from its own resources (Khrawish, 2011).

Financial performance is measured via accounting and marketing indicators. Accountant's indicators include profits ratios, liquidity ratios, cash flow ratios, and value-added ratios (Maheshwari & Maheshwari, 2021). Profits ratios include gross profits margins, nets profits margin, returns on assets, returns on investments, and returns on invested capital. Liquidity ratios used to measure performance include debt-equity ratio, workings capitals ratios, currents ratios, quick ratios and leverage ratio. Cash flow ratios include operational cash flow, investment cash flows and financial cash flow ratio. Value added ratios include economic value-added ratio. Market based measures ratios relates to Tobin's q (TBQ), markets to books values, prices earnings ratios, and markets values added (Pham et. al, 2021).

### **1.1.3 Risk Management and Financial Performance**

According to Choi, Wallace and Wang (2018), management of risks reduce the costs associated with the market and operational risks. This in turn enhances the performance of an organization. This is in line with the liquidity preference theory. Risk management reduces the costs of capitals, thus boosts business performances (Yeh et al, 2020). Thus, it is anticipated that good risk administration results in income constancy and a decrease in costs of capitals, these are eventually linked to improved company performances. According to the stakeholder theory, service firms are much more vulnerable to financial

risks and challenges, so risk management is very essential to them. Companies can reduce unprecedented and costly emergency situations and better allocate resources by implementing risk management. By giving a brief synopsis of the risks it may encounter, it aids dialogue and improves organisational performance (Pojasek, 2017).

Empirically, risk management and financial performance show mixed results on their relationship. For instance, Nwude and Okeke (2018) discovered that risk management significantly but favourably affected financial performances. Nevertheless, Alawattagama (2019) found a mixed relationship where there was a direct linkage around embracing risk management and return on equity but negative relationship with ROE. However, Malik, Zaman and Buckby (2020) found that ERM implementation is negatively correlated with firm performance. This creates the need for research on the relationship between risk management and financial performances.

#### **1.1.4 General Insurers in Kenya**

Kenya's insurers are regulated by Insurance Regulatory Authority (IRA). As of December 2020, Kenya had 55 registered general insurers, 36 of which were in the general category. The insurance sector, as among the cornerstones of Kenya's financial sector, is critical to achieving the financial services desired objectives in Kenya's Vision 2030 economic road map. The general insurance industry is critical in developing creative solutions towards the state's major social, economic, and environmental issues. Despite the general insurance sector's contribution to Kenya's economic system, the country's general insurance penetration rate is 2.73% compared to worldwide averages [6.28%] (IRA, 2020).

The general insurers are provided with risk management guidelines by the Insurance Regulatory Authority which insurers should follow to identify and mitigate risks (IRA, 2013). The firms are expected to have risk management policies, systems and internal controls to save themselves from the negative effects of the insurance risks. Despite this, the authority indicates that general insurers have crumbled from the weight of insurance risks due to poor risk management policies and systems (IRA, 2021). The general insurance industry in Kenya has been facing various risks relating to structural flaws, fraudulent activity, large claims, claim payment slowdowns, deferred premium collection, illiquidity which has resulted in the failure of some companies, economic recession, poor governance, reduced penetration, and industrial density (AKI, 2013). At least nine insurers have continued to suffer and crumbled as a result of these risks in the last couple of years (IRA, 2020). A good example is Blue Shield Insurance Company that went into liquidation in 2017 due to poor risk management.

The general insurance sector in Kenya has been performing poorly with the sector experiencing reduction in profitability levels in the last five years (IRA, 2021). Underwriting losses relating to general insurance business, for example amounted 2.1 millions in 2016 and 1.1 millions in 2020. In 2021, general insurance experienced an underwriting loss of Kes 1.4 million. This shows that the firms have been experiencing increased underwriting losses in the last five years. Returns on assets, that was 3.6 percentage points in 2016 but dropped to 1.75 percent by 2020, similarly is declining. Because they had failed to pay out customers obligations, certain general insurers too have gone out of business, whereas others have been placed under mandatory supervision (IRA, 2020).



## 1.2 Research Problem

Ineffective risk detection by insuring businesses results during a buildup of customer demands, which increases expenditures and lowers productivity. To prevent monetary loss including insolvency, appropriate risk management is crucial in day operations of every insurer. Avoiding losses by safety precautions is indeed a fundamental component in decreasing risk while, as little more than a result, a primary contributor of output, according to Yang, Ishtiaq, and Anwar (2018). Major contributors to financial instability and collapse in insurers include higher endurance for risk premium, managerial hiccups, and challenges brought on by exponential rise and/or expansions onto supporting operations (Makau & Okeyo, 2021). Such factors must be controlled effectively by the insurance company in order to avoid financial failure and bankruptcy, which have inversely impactful on performances.

From the numerous risks that Kenyan general insurers face, IRA made its decision to create a thorough risk administration system (IRA, 2013). Despite IRA's efforts, customer complaints about insurers continue. Complaints about unpaid claims, claims being underpaid, claims being turned down, and insurances being missold. The general insurance industry has been experiencing performance challenges in the recent years. Industry gross written premium stood at Kshs 232.9 bn as at end of 2020, representing an increase of 4.4% from Kshs 228.8 bn in Q4'2019. Long term insurance segment grew by 4.5%, while general Insurance declined marginally by 0.2% (IRA, 2020). However, the claims paid by the general insurers declined by 2.6% to KES 54.19 billion compared to KES 55.62 billion paid in 2019 (IRA, 2020). In 2021, the general insurance business underwriters reported an underwriting loss of KES 1.46 billion compared to an underwriting profit of KES 62.45

million reported in 2020. The underwriting claims incurred loss ratio was 63.6% in 2020 compared to 63.5% in 2019.

Empirically, researchers have done various studies. Globally, Alawattagama (2019) did a study on ERM practices and financial performances of Sri-Lankan Insurers. Other studies included Abeyrathna and Lakshan (2020) on ERM and performances of insurers in Sri Lanka; Ganiyu (2019) on the bearing of risk management upon performances of selected insurers in Lagos Metropolis; Ntwali, Kituyi and Kengere (2020) who studied claims administration and performance of insurers in Rwanda. The studies found mixed results.

Local researchers have also done a few studies on risk management and firm performance. For example, Nyanga (2018) did a study on Fraud Risk Management and Performances of Motor Vehicles Underwriting Companies. Nevertheless, Mwangi and Ndegwa (2020) studied the influences of frauds risks managements on frauds occurrence in Kenyan listed companies; Echwa and Atheru (2020) studied risks managements and financial performances of commercials banks, while Sanda (2020) studied ERM and performances of banking companies at NSE.

The global studies despite focusing on the variables of this paper, exhibited assorted findings on risk management and performances. Further, the local studies done in the general insurance industry, the concepts were different. For example, Nyanga (2018) focused on insurance fraud risk management practices and performance other than risk management as a concept. This shows that conceptual gaps exist. For the local studies done on risk management and performance, their focus is on other sectors other than the general insurance sector indicating contextual gap. For example, Echwa and Atheru (2020) focused on commercial banks while Mwangi and Ndegwa (2020); and Sanda (2020) focused on

banking listed at the Nairobi Securities Exchange. The studies also adopted primary data which may give different results where secondary data is used. What is the relationship between risk management and financial performance of general insurers in Kenya?

### **1.3 Research Objective**

To establish the relationship between risk management and financial performance of general insurers in Kenya.

### **1.4 Value of the study**

This research paper may show importance to insurers, the public at large, academics, and insurance regulatory agencies because it will provide beneficial theoretical and empirical implications. The paper theoretically contributes to works of risks managements and its impacts on insurance company performances.

The research paper will assist Kenyan general insurance businesses in improving their risk management systems and implementing effective tactics to enhance firm financial performance via risk management. Insurers would be able to improve their performance, expand their firms, and sustain a competitive advantage as a result of this.

Apart from benefiting general insurers, the research paper will profit the public by improving insurance services and risk management. As an outcome, insurance premiums will be more affordable, and non-payment and corruption will be reduced. The research paper will assist the government in establishing insurance practises regulations. Finally, research project will increase works of awareness on risk management, which may help academics and support future surveyors in their researches.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter gave scholarly works and theories assumed. The determinants relating financial performance of insurers were also indicated in this research. The conceptual framework was also indicated in this chapter.

### **2.2 Theoretical Review**

This scholarly paper was based on agencies and stakeholder theories. These theories formed a basis in order to understand parameters of the paper.

#### **2.2.1 Agency Theory**

Agency hypotheses examination of company takes into account administrative motivations in addition to the division of proprietorship and management. Agency matters were shown to impact manager's perceptions toward taking risks and prevarication in managing business risks (Smith & Stulz, 1985). Because of asymmetric information in earning dispersal, hypothesis describes a plausible discrepancy of interests for stockholders, managerial staff, and debtors that could also lead in company having to take far more risk or not actively participating in positive NPV projects (Mayers & Smith, 1987). As a result, agency theory suggests that clearly delineated hedging policies will have a significant impact on firm valuation (Fite & Pfleiderer, 1995).

Stulz (1984) proposed the first rationale for management staff's interest in risk management. Top management, he claims, are presumed to be in action in best welfares of company stockholders, so they are concerned with both profitability and the spreading of

company yields about their anticipated worth. Managers possess a proclivity to dodge risks to reduce company return variations and thus accomplish the balance. Risk management ends up saving money for business owners because it reduces the variations of their companies' yields, allowing managers to work in consistent with the goals of maximising stockholder wealth (Rhou, Li & Singal, 2019).

Agency theory in risk management has experienced a negative criticism. Saeidi et al (2019) stated that the management factors are controlled by the other factors like Capital adequacy which may influence the management of risk. Notably, positive criticism of the theory in risk management was done by Poletti-Hughes and Briano-Turrent (2019) stipulated corporate risk management is the work of the management and should do it with the stockholder's objectives in mind.

Risk management related to reaction to discrepancy around managerial motivations and stockholder interests is endorsed by agency hypothesis. Whereas stockholders may demand riskier, tall returns decisions, management prefers less risky, greater investments. The agency theory emphasises the importance of risk management in aligning managers' and stockholders' preferences and contributing to the company's financial performance.

### **2.2.2 Stakeholder Theory**

Since its inception by Freeman (1984), stakeholder theory have developed into reliable theory containing both explanation and prediction power. Managers and stockholders within an organisation have varied agendas; therefore each grouping has distinct goals regarding controlling risks. Stakeholders' interests balance is emphasised as main element of organisational policy by stakeholder approach. Most significant addition to managing

risk is indeed expansion of underpinning contractual theory past labor towards other deals, like selling and finance (Cornell & Shapiro, 1987). In some business areas, particularly technological and services, customer trust inside a company's capability to remain providing its services could contribute substantially to business valuation. The consequences of financial difficulty and failure, however, have a significant impact on the worth of such implied claims.

Since company risk management practises minimizes these expected outlays, company worth rises (Klimczak, 2007). Stakeholder approach provides a novel viewpoint just on justification for risks managing as part consequence. It hasn't been tested either, though. Investigations on financially distressed hypothesis (Smith & Stulz, 1995) simply offer partial evidence (Judge, 2006). Risk management research can benefit from this theory. It helps to handle both value of consumer credibility and expenses associated with monetary difficulty for insurance. Last but not least, this idea contends that start-ups seem to be increasingly prone to encounter fiscal troubles, thus ought to spur an increased attention on them part on risks managements strategies.

The hypothesis emphasises relevance of risk management in insurers in terms of increasing firm value. It's doesn't, nevertheless, state impacts of risks managements on financial performances, other than to imply that risk management results in increased firm profitability.

## **2.3 Determinants of Financial Performance of General Insurers**

### **2.3.1 Risk Management**

Risk management is a critical factor that firms have to consider when making decisions relating to performance (Bromiley et al, 2015). Theoretically, risk management improves financial performance through reduced costs. When the risks facing firms are reduced or avoided/mitigated the firms experienced improved financial and non-financial performance. The company's financial performance must be improved through an effective and integrated risk management system. Effective risk management necessitates massive resource mobilization. Risk management contributes to the company's value creation by lowering costs and/or increasing revenues, affecting the company's financial performance (Giambona, Graham, Harvey & Bodnar, 2018).

According to Alawattegama (2019), links around risk managements adoption and financial performances existed. This is because a company anticipates better financial performances resulting from risks managements. A company's ability to identify possible risks is increased by managing risks, which views risks as opportunities instead of a problem (Pagach & Warr 2011). Therefore, it is anticipated that comprehensive and efficient risks managements will enhance wise judgement, eventually enhancing business performances by increasing accuracy in reconciling overall risks-returns trade-offs (Gehner, 2008).

### **2.3.2 Liquidity**

Liquidity risk relates to insurance's failure to obtain adequate funds to cover their obligations whenever these become overdue (Banks, 2005). Insurers are primarily responsible for paying claims and benefits to policyholders (IRA, 2013). An insurance company's liquid assets should be managed in such a way that it has enough moneys to cover its everyday activities, capitalize surpluses, and possess cash on hand in case of unforeseen events (Rashid, 2018).

Firms with more liquid assets are more likely to perform well because they can generate cash at any time to satisfy their obligations and are less vulnerable to liquidity hazards (Taseva, 2020). Investment securities may be sold at a significant loss in resolving claims quickly if firms do not have enough cash or liquid assets. This will have an impact on their financial metrics in the long run (Chen et al., 2018). According to Saleh and Abu Afifa (2020), keeping a large amount of cash reserves, which results in a greater liquidity, somehow doesn't add meaning to business; instead, it raises ongoing expenses and loss of potential investment earnings instead of investing business money. According to Camino-Mogro and Bermdez-Barrezueta (2019), it's indeed essential for enterprises to structure overall liquidity properly in attempt to obtain better earnings because occurrence, intensity, and timeliness of insured payouts or demands are unpredictable.

### **2.3.3 Firm Size**

Firm size is a key element described through economies of scale. Because it produces a huge quantity of items, a big organization has cheaper production costs than a small business. As per Lin et al (2019), financial performance and size relate directly since



operating cost efficiencies can be achieved by increasing output and lowering unit costs. Investors can also spread their risks cause of size of their firms.

Financial performance is positively related with business size. Net assets, net revenue, equity markets values and corresponding natural logs expressions are essentially metrics of company's size (Ozcan, Unal & Yener, 2017). Firm size positively relates to financial performance in that large firms can exploit investment opportunities which increase the revenue which in turn is reflected in increased profits (Pan & Wu, 2022). Earning possessing adjustments related to risks for new enterprises usually higher compared to big enterprises, being a sign of the firm size effects. Xie et. al (2019), however, many firms while increasing in size are having poor financial performance. Wang, Akbar and Akbar (2020) attributed the financial problem of increased size to the attainment of personal interest of firm managers. Gambardella and Von Hippel (2019) also brought up the issue of replacing a firm's profit maximisation motive with a manager's utility maximisation motive. Larger firms, according to Aduralere Opeyemi (2019), require more coordination, making managerial tasks more difficult, resulting in inefficiencies and lower profits.

## **2.4 Empirical Review**

### **2.4.1 International Studies**

Alawattagama (2019) analyses combination secondary and primary information pertaining to insurers registered on Sri Lankan Insurance Business to statistically verify if implementation of ERM seems to have any effects on financial performances. Information is analysed using regression analyses. According to the investigation's

conclusions, there may be a tenuous favourable association connecting overall return on equity with implementation of ERM practises.

The effect of ERM methods on performances of insurers in Sri Lanka was examined by Abeyrathna and Lakshan (2020). Two very different data were employed in the investigation. Utilizing stratification selection methodology, 230 managers from 26 insurers got chosen as report's samples, and primary information got gathered via structured questionnaire. Techniques for information analytics include summary, correlation and linear regressions. Correlational outcomes exhibited a substantial association between ERM and ROA.

Relying upon that COSO (2004) ERM Integrated Framework, Altanashat, Al Dubai, and Alhety (2019) investigated the effect of ERM on organisational performances of traded businesses in Jordan. Investigation approach was survey research, and 313 surveys got satisfactorily gathered. Structural Equation Modeling Software (Smart-PLS) was used to examine the information acquired, and results showed that deployment of ERM had a substantial impact on organizational performances. Examination of data showed that Jordan's extractive businesses performed better because to the use of ERM framework. The investigation further showed that this same performance of extractive businesses improved when the ERM framework was increasingly used. All predictors with the exception of goal design were important predictors as well. Those factors quantitatively and substantially forecasted how well Jordanian mining businesses will do.

### **2.4.2 Regional Studies**

Utilizing five lenders with largest assets bases, Nwude and Okeke (2018) examined how credit risk management affected performances of Nigerian banks. Its database for years 2000 through 2014 were compiled from fiscal statements of chosen lenders, and an ex-post facto survey method being used. A least squares regression framework was used. These results show that credit risk management significantly and directly impacted performances.

Ganiyu (2019) studied the impact of risk management on financial performance: evidence from selected insurers in Lagos Metropolis. The survey research method was employed where 275 respondents from both Lead way Assurance and AIICO Insurance company was selected for the study and the data for the study was gathered with the aid of self-administered questionnaire. Multiple linear regression and Pearson correlation coefficient was employed in analyzing data collected with the aid of statistical package for social science (SPSS) version 23. The findings revealed that there is a statistically significant relationship between risk identification and organizational profitability and productivity. Furthermore, the findings revealed that there is a statistically significant relationship between risk identification and organizational profitability and productivity. Furthermore, the findings revealed that there is statistically significant relationship risk mitigation and organizational profitability and productivity. Lastly, the findings revealed that the risk mitigation have a high impact on organizational profitability and productivity.

Relying on the instance of SONARWA, Ntwali, Kituyi, and Kengere (2020) investigated the claims management and financials performances of insurers in Rwanda. With aid of a survey and interviews guides, descriptive methodologies was employed to gather both statistical and experiential data. In Kigali City, this investigator focused on 205 applicants,

10 contractual dealers, 13 licensed agencies, and 93 full time workers. Results reveal that these procedures were regularly used. As evidenced by 3.6% ROI during 2014 and a similar proportion in 2018, accounting statistics show that financial performances has been stagnant over time. It became discovered that claims management and evaluation and scheduling have a sizable favourable link to ROI. The survey also found that claims preparation, claims supervision, and claims monitoring have a favourable link with ROE. Furthermore, there is a scientifically substantial link around claims monitoring and ROE.

Using a case study of Bank of Africa (U) Ltd, Catherine (2020) investigated credit risk management and financial performances. This investigation used a case studies methodology and combined statistical and experiential methods. The investigation found that Bank had made an effort to diversity regionally, not just throughout the nation but also in neighboring nations like Tanzania, despite the fact that bulk of lending were given to various areas within nation. The banks offer more than 35 locations around the nation, of whom 21 are located in the centre and 14 located rural areas. Solid credit assessment sets the benchmarks for efficient management of credit risk that offers their businesses a competitive edge in markets. Thus, it may be said that credit evaluation determines a lender's viability and profits. At 95% confidence intervals,  $R^2$  was 0.978, indicating the existence of a variability of 97.8% across overall lender's performances due to changes in customer evaluation, credit risk management, and risks diversity.

### **2.4.3 Local Studies**

Nyanga (2018) investigated the effectiveness of Kenyan motor vehicle underwriting firms and their procedures for managing insurer errors and fraud. 35 automobile underwriter businesses were the survey's main target, and a descriptive research design was adopted.

The information was gathered using a questionnaire. Descriptive statistical analysis plus linear regressions were employed in the investigation. According to the survey, it shows a strong correlation across automobile underwriters businesses' performances and response fraud methods. The investigation came to the conclusion that predictor's variables affect how well businesses operate.

Mwangi and Ndegwa (2020) investigated how fraud risk management affected the frequency of fraud in Kenyan quoted businesses. It used a causality study design. A sampling of two seventy-five top management was used to collect data utilizing standardized questions. The results showed that percentage of fraud occurring on traded businesses was significantly negatively impacted just by preventive and corrective procedures. On the other hand, investigative checks didn't significantly lower the incidence of fraud among traded businesses.

Risk management and financial performances of bankers in Kenya were examined by Echwa and Atheru (2020). Under this study, a descriptive approach was used, and the 40 bankers were the primary audience. As this survey included all 40 corporate financial institutions in Kenya, it might be considered a census. The years 2013 through 2017 served as its basis. A secondary set of data was being used. Summary and inference analyses served as main foundation. Relying upon panels logistic method, the survey's premise stated that credit risk did not significantly influence the financial performances of Kenya's bankers. The investigation came to a additional conclusion that liquidity management does not significantly affect financial results of Kenyan bankers. The investigation also came into conclusion that interest rates constituted important variables that affected performances of commercial bankers.

Enterprise risk management and financial performances among financial enterprises registered on NSE were researched by Sanda (2020). The investigation used a descriptive analysis methodology and took into account all 17 financiers that were traded on NSE across 2017 through 2018. This research employed secondary information. Descriptive statistical and correlation analysis were used to analyse the information. Regardless of the fact that almost all companies embraced and declared ERM strategies in public yearly consolidated disclosures, the survey's conclusions showed no conclusive link connecting ERM and financial performances. However, it was generally accepted that ERM is made up of two sets of methodologies: risks administration, that addresses fundamental principal - agent challenge underlying managing risk, and risk aggregating, that addresses the data issue of managing risk.

## **2.5 Conceptual Framework**

The researcher conceptualized parameters via conceptual model. The independent variable was risk management. The dependent variable was financial performance. Control was made by liquidity and firm size.

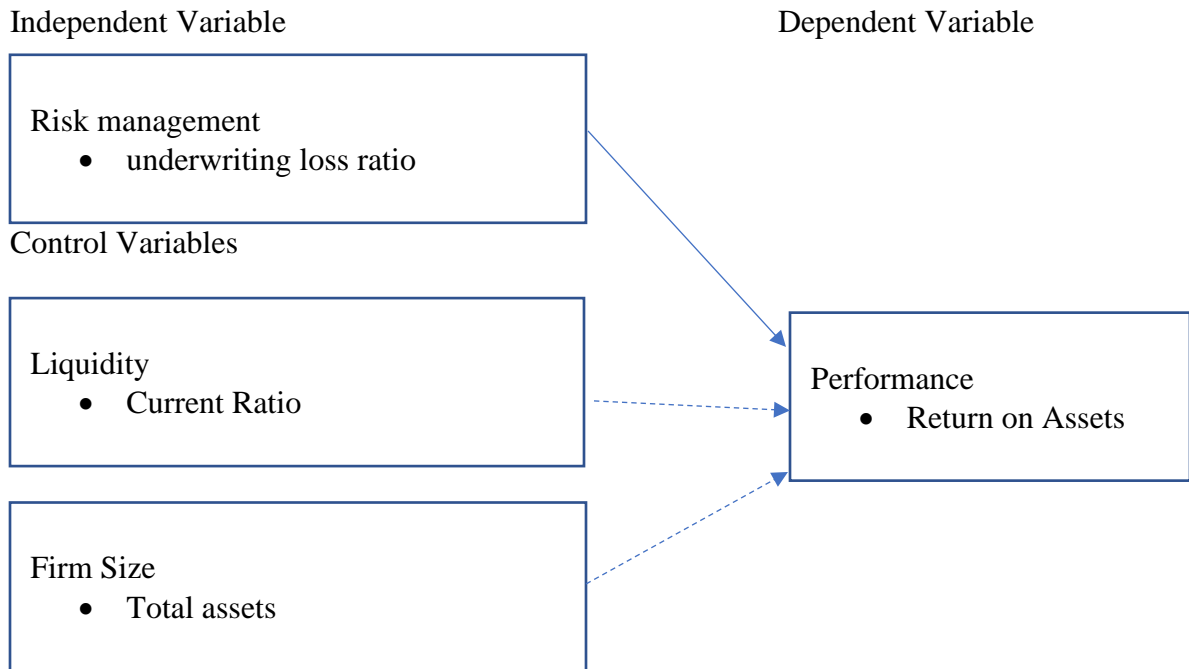


Figure 2.1: Conceptual Framework

Source: Researcher, 2021

## 2.6 Summary of Literature Review

This research sought to determine the relationship between risk management and performance of general insurance firms in Kenya. Both empirical and theoretical literature on risk management and performance has been reviewed in this chapter. The empirical studies displayed conflicting results with some showing positive while others show negative or no relationship. The Kenyan works utilized differing concepts and measures basing their research on other sectors instead of insurers. This created a research gap that this research addressed through establishment of the relationship between risk management and performance of general insurance firms in Kenya.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter sought to establish research approaches that were adopted across this survey. This included researches designs, population, data's collections and data's analyses. The data analysis had subsections that included diagnostic tests, analytical model, significance test and measurement of variables.

### **3.2 Research design**

For present research, the survey adopted descriptive researches designs. Descriptive approach designates the status of the parameters under study without manipulating the outcome (Panke, 2018). The approach enables a scholar to show cause-effect relationship between variables (Atmowardoyo, 2018). This enabled the researcher to describe risk management and performance while establishing the cause-effect relationship between the two.

### **3.3 Population**

The population was general insurers in Kenya. According to IRA (2021), there were 37 general insurers at the end of 2021. To get a deep understanding on risk management and performance of the firms, the researcher targeted general insurers that existed for the six-year period between 2016 and 2021. Between 2016 and 2021, 37 general insurers category were listed.

This study did a census survey where all the 37 general insurance within the period were included. Within this period, general insurers experienced increased business risks with the



firms showing reduced performance levels compared to previous periods. The period also gave the most recent data with data points sufficient enough to bring out credible results.

### **3.4 Data Collection**

This survey utilized data from secondary sources. The data was generated via data collection schedule. The schedule collected risk management data including insurance claims paid, adjustment expenses and total earned premiums. It also collected data relating to performance including net income and total assets. The schedule also collected data relating to liquidity involving current assets and current liabilities; and firm size relating to total assets. All data was mined from yearly reports of individual general insurers. Annual reports were sourced from the IRA between 2016 and 2021. Annual panel data was used for this study. This allowed the study to utilize 222 data points.

### **3.5 Data Analysis**

#### **3.5.1 Diagnostic Tests**

Diagnostic tests involved normality, model specification test, heteroscedasticity, and Multicollinearity. Normality exhibited whether the data points are normally distributed. The researcher used Shapiro Wilk statistics to test normality of the data. The model specification test was done for best panel models for utilization. There are two panel regression models that include the random effect and fixed effect models. The researcher used Hausmann test to do the specification test. Heteroscedasticity was checked to see whether the error term is consistent over time. Heteroscedasticity was tested using Breusch Pagan statistics. Multicollinearity was tested for linearity across the predicting parameters. The researcher adopted variance inflation factor (VIF).

### 3.5.2 Analytical Model

In the analysis, the researcher cleaned, coded and entered the data into STATA 14 for analysis. The researcher utilized descriptive and inferential statistics for analysis. Inference figures adopted included correlation and regression analytics. Correlation statistics was Pearson product moment coefficient. Regression analysis was done utilizing panelised modelling. This research adopted following panel regression model:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \epsilon$$

Where;

$Y_{it}$  – Financial performance measured through return on assets ratio of firm i at time t

$X_{1it}$  – Risk management measured through underwriting loss ratio of firm i at time t

$X_{2it}$  – Liquidity as measured by current ratio of firm i at time t

$X_{3it}$  – Firm size as measured by natural logarithm of total assets of firm i at time t

$\beta_0$  – Constant term

$\beta_1$ - $\beta_3$  – Regression coefficients of the predictor variables

$\epsilon$  – Error term

### 3.6.3 Significance Tests

To test the significance of the model, the researcher made use of F-statistical tests. The significance of the F value was checked using the pvalue. Where the pvalue is below 0.05, significance exists. Nevertheless, where pvalue is greater than 5%, the model is assumed to be insignificant. The fitness of the regression model was checked by checking on the pvalue. Where the pvalue is less than 5% then model significant.

### 3.6.4 Measurement of Variables

Table 2.1: Measurement of Variables

Variable Type	Variable	Indicators	Measurement
Dependent	Performance	Return on assets	Underwriting profits Total assets
Independent	Risk management	Underwriting loss ratio	Insurance claims Incurred + adjustment expenses total earned premiums
Control	Liquidity	Current ratio	Current assets Current liabilities
	Firm Size	Log of total assets	Natural logarithm of total assets

# **CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS**

## **4.1 Introduction**

Fourth part has analyzed data collected and its finding presented below. Discussions on the findings are also included. The paper adopted panel data from 37 general insurers that existed between 2016 and 2021. The study excluded the firms that came to exist past 2016 and those that exited the insurance industry before 2021. This allowed the researcher to use firms that had complete data for the six years. This gave a total of 222 data points for analysis. This chapter was based the key:

- Y is financial performance measured through return on assets ratio
- X1 is risk management as measured by underwriting loss ratio
- X2 is liquidity as measured by current ratio
- X3 is firm size as measured by natural logarithm of total assets of firm

## **4.2 Descriptive Statistics**

This section creates a description of data via mean, minimum, maximum and standard deviation. Here, statistics were summarized. The descriptive statistics are indicated by Table 4.2.

Table 4.2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Financial performance	222	1.648769	12.80127	-102.23	42.86
Risk management	222	59.32947	32.75039	.00	299.63
Liquidity	222	9.660574	8.085042	.00	48.46
Firm size	222	14.79397	2.56784	.00	16.59

From the descriptive statistics, financial performance represented in return of assets exhibited a mean value of 1.649% in time span between 2016 and 2021. This means that the firms generated 2 shillings for every 100 shillings worth of assets. This shows that the general insurers had low level of return on assets indicating poor financial performance as the return on assets was less than 5%. Gallo (2017) recommended that return on assets greater than 5% was good with that which is greater than 20% being great. Hence, general insurers in Kenya are not able to make maximum use of their assets for more profits which may create financial troubles. Financial performance exhibited a standard deviation of 12.801%. Minimum returns on assets for time span was -102.232% with the maximum return on assets being 42.86%. This indicates that for the period between 2016 and 2021, general insurers in Kenya exhibited a high variation in their financial performance.

For risk management, the mean value of underwriting loss ratio was 59.329% with a standard deviation of 32.750% for time span across 2016 and 2021. Underwriting loss ratio was less than 100% indicating that the general insurers incurred less claims compared to the earned premiums in the period between 2016 and 2021. This means that they are in a position to handle insurance risks with ease. For the period, the minimum underwriting loss ratio was 0 with a maximum ratio of 299.627 the period between 2016 and 2021.

Liquidity as measured by current ratio averaged at 9.66 for the period between 2016 and 2021. The current ratio was high as it was greater than 1 indicating that the liquid assets of general insurers were high enough to cover current liabilities. However, the value was very high (greater than 2) indicating that general insurers are not using their current assets efficiently or is not managing their working capital properly. It also shows that within the period between 2016 and 2021, general insurers held too much cash in their accounts. The standard deviation for liquidity was 8.085 for the period. Liquidity displayed a minimum ratio of 0 with a maximum of 48.463.

Nevertheless, firm size averaged at 14.794 for the period between 2016 and 2021. Firm size exhibited standard deviation of 2.568. It indicates firm size did not vary much for the general insurers for the period between 2016 and 2021.

### 4.3 Correlation Analysis

Researcher did correlational analytics for relation around risk management and financial performances of general insurers in Kenya. This was done using Person product moment correlations displayed by Table 4.3.

Table 4.3: Correlation Analysis

	Y	X1	X2	X3
Y	1.0000			
X1	-0.4991 0.0000	1.0000		
X2	0.1408 0.0361	0.0019 0.9776	1.0000	
X3	0.1023 0.1285	0.2591 0.0001	0.1965 0.0033	1.0000

From Table 4.3, the outcomes exhibited that risk management possessed a weak correlation coefficient (-0.4991) with a pvalue of 0.000. This indicates that, for the period between 2016 and 2021, risk management and financial performance of general insurers in Kenya have a weak, negative relationship. Nevertheless, liquidity exhibited a correlation coefficient of 0.1408 with pvalue of 0.0361. It exhibits liquidity having a weak positive linkage with financial performances of general insurers in Kenya for the period between 2016 and 2021. Firm size, nevertheless, exhibited correlational coefficients of 0.1023 with pvalue of 0.1285. This postulates firm size possessing weak positive but insignificant linkage with financial performances of general insurers in Kenya for the period between 2016 and 2021.

#### 4.4 Diagnostic Tests

The researcher did diagnostic tests. They included normality, model specification test, heteroscedasticity, and Multicollinearity.

Table 4.4: Normality Test

Shapiro-Wilk W test for normal data					
Variable	Obs	W	V	z	Prob>z
Y	222	0.71825	46.041	8.858	0.00000
X1	222	0.74650	41.425	8.613	0.00000
X2	222	0.80607	31.691	7.994	0.00000
X3	222	0.39236	99.297	10.635	0.00000

Researcher utilized Shapiro-Wilk in checking on normality of information used for analysis. Based on the data findings, the variables exhibited significance values of less than 0.05. From table 4.4, null hypothesis ends up being rejected. Hence, researcher assumes

that data on financial performance, risk management, liquidity and firm size was not normally distributed.

Table 4.5: Model Specification

	— Coefficients —			
	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
X1	-.187355	-.2126865	.0253315	.0125163
X2	.1323543	.1503497	-.0179954	.0660325
X3	.8061789	1.085599	-.27942	.2308454

```

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

      chi2(3) = (b-B)' [(V_b-V_B)^(-1)] (b-B)
            =          4.94
Prob>chi2 =          0.1765

```

Model specification was done in the utilization of Hausman test. From outcomes, p-value was 0.1765 higher compared to 0.05. Therefore, null hypothesis that random is best is not rejected, hence random effect model was preferred for this study.

**Breusch-Pagan / Cook-Weisberg test for heteroskedasticity**

```

Ho: Constant variance
Variables: fitted values of Y

```

```

chi2(1)      =      7.87
Prob > chi2  =      0.1490

```

Figure 4.2: Heteroscedasticity Test

Data utilized for analysis was checked for homoskedasticity done through Breusch Pagan's. Homoskedasticity exists in the data, as per null hypothesis. From figure 4.2, Breusch-



Pagan statistic exhibited 0.149 as pvalue. It was found to be more than 5% which makes investigator not reject null hypothesis with no heteroscedasticity issues.

Table 4.6: Multicollinearity Test

Variable	VIF	1/VIF
X3	1.12	0.894469
X1	1.07	0.930386
X2	1.04	0.958817
Mean VIF	1.08	

Multicollinearity was checked on information used in the research. This was done using the variance inflation factor. The findings indicated that VIFs were below two reflecting low variance inflations. The tolerance numbers were also close to 95%, hence no problems of linearity in the data for risk management, liquidity and firm size.

#### 4.5 Regression Analysis

Researcher conducted regressions analytics to determine the way risk management influences financial performances of general insurers in Kenya using a panel regression model. The analysis was based on annual data collected between 2016 and 2021.

Table 4.7: Model Summary

Random-effects GLS regression	Number of obs	=	222
Group variable: CD	Number of groups	=	37
R-sq:	Obs per group:		
within = 0.2294	min =		6
between = 0.5720	avg =		6.0
overall = 0.3156	max =		6
corr(u_i, X) = 0 (assumed)	Wald chi2(3)	=	93.09
	Prob > chi2	=	0.0000

The model summary shows that the random effect model (which was adopted in the analysis) fits the data since the model had a pvalue of 0.000 stipulating that modelling put into use was significant and so conclusions can be made anchored on outcomes. The random effect is a between regressor model, hence the researcher used the R2 in interpreting the findings. The summary table exhibited R2 value of 0.5720 stipulating that risks managements, liquidity and firm sizes contributed 57.2% change in financial performances of general insurers in Kenya. The remaining 42.8% of the change in financial performance of general insurers in Kenya was contributed by other predictors but not risk management, liquidity and firm size.

Table 4.8: Regression Coefficients

Y	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
X1	-.2126865	.0229388	-9.27	0.000	-.2576457	-.1677273
X2	.1503497	.0929167	1.62	0.106	-.0317636	.3324631
X3	1.085599	.304116	3.57	0.000	.4895426	1.681655
_cons	-3.245431	4.340506	-0.75	0.455	-11.75267	5.261805

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \epsilon$$

Was fitted into;

$$Y_{it} = -0.213X_{1it} + 1.086X_{3it}$$

Where;

$Y_{it}$  – Financial performance measured through return on assets ratio of firm  $i$  at time  $t$

$X_{1it}$  – Risk management measured through underwriting loss ratio of firm  $i$  at time  $t$

$X_{2it}$  – Liquidity as measured by current ratio of firm  $i$  at time  $t$

$X_{3it}$  – Firm size as measured by natural logarithm of total assets of firm  $i$  at time  $t$

$\beta_0$  – Constant term

$\beta_1$ - $\beta_3$  – Regression coefficients of the predictor variables

$\epsilon$  – Error term

From the regression coefficients, the model displays a constant value of -3.245 exhibiting that holding predictor variables (risk management, liquidity and firm's sizes) constant, financial performances of general insurers would stand at -3.245 for period between 2016 and 2021. When holding the other predictor variables constant, a percentage increment in underwriting loss would cause a decrement in financial performances of general insurers by 21.3 percent (pvalue: 0.000). Nevertheless, holding other predictor variables constant, a unit increase in liquidity would increase financial performance of general insurers by 0.15 (pvalue=0.106). Finally, holding other predictor variables constant, a percentage increment in firm size would display an increment on financial performances of general insurers by 108.6%. This indicates that risk management and firm size possessed

significant effects financial performances of general insurers. However, liquidity possessed insignificant effects on financial performances of general insurers.

#### **4.6 Discussions**

From the descriptive statistics, insurers exhibited an average return on assets of 2% indicating that the general insurers had low level of return on assets (less than 5%). This shows that the return on assets was low for the firms reflecting poor performance among the selected firms. This is a sign of poor financial performance among the firms as Gallo (2017) recommended a return on assets greater than 5% as good. The findings also stipulate that the target firms were not utilizing their assets to the maximum for more profits which may create financial troubles.

For risk management, the mean value of underwriting loss ratio was 59.329% for time across 2016 through 2021. Underwriting loss ratio was less than 100% indicating that the general insurers incurred less claims compared to the earned premiums in the period between 2016 and 2021. This means that they are in a position to handle insurance risks with ease. For the period, the minimum underwriting loss ratio was 0 with a maximum ratio of 299.627 time across 2016 through 2021. Outcomes exhibited that underwriting loss ratio had a weak and negative correlation coefficient. This was shown by the negative correlation coefficient which was less than 50%. The coefficient was significant at the 5% significance level as the significance values were less than 0.05. This indicates that risk management possessed a negative relationship with financial performance. Regression results exhibited that underwriting loss ratio possessed negative regression coefficient with financial performance of the selected firms.

There is similarity of outcomes with Malik, Zaman and Buckby (2020) exhibiting that ERM implementation was negatively correlated with firm performance. This was reflected in a negative regression coefficient displayed in the analysis. The study results were also similar to those of Nwude and Okeke (2018) who found positivity in the relationship around ERM implementation and firm's financial performances. The findings, however, differs Alawattagama (2019) that exhibited positivity in the link around risk management and financial performances of the targeted firms. The findings of this study also differed with those of Nwude and Okeke (2018) who found that risk management had a positive and significant impact on financial performance

Liquidity via current ratio averaged at 9.66 around 2016 through 2021. Liquidity ratio was high as it was greater than 1 showing the current assets were enough to cover the current obligations. The liquidity was very high indicating underutilization of current assets and poor management of working capital within the selected firms with the firms holding a lot of cash in their accounts. In addition, firm liquidity exhibited a positive and significant correlation with financial performance. This was shown by a positive correlation coefficient displayed by firm liquidity against financial performance of the select firms. Firm liquidity also exhibited a significant correlation coefficient against financial performance since the significance level was less than 0.05. This is an indication that firm liquidity possessed positive linkage with financial performances of selected firms. Hence, this shows that when the liquidity of general insurers increases, the financial performance is expected to improve through increased return on assets.

The findings are similar to the findings of Camino-Mogro and Bermdez-Barrezueta (2019) who found that businesses need to enhance their liquidity in order to achieve higher

profitability. The findings are also similar to those of Taseva (2020) who found that firms with more liquid assets perform better because they generate cash at any time to satisfy their obligations and are less vulnerable to liquidity hazards. Nevertheless, they differ with those of Saleh and Abu Afifa (2020) who found that maintaining a high liquidity ratio, is invaluable to a company. This indicates that firm liquidity has no effect on financial performance. This means that even if firms increase their liquidity levels, they would experience no significant change in their financial performance in terms of return on assets. Firm size exhibited positive but insignificant correlational coefficient. Firm size, hence, possessed an insignificantly positive relationship with financial performance. This was indicated by a significance level which was greater than 5%. This shows that increase in firm size in terms of assets would not cause a significant effect on financial performance. When firms increase their asset levels, they experience a positive change in financial performance. However, the increase in financial performance is negligible making firm size not a major factor influencing financial performance.

The findings are similar to those of Pan and Wu (2022) who found that firm size positively relates to financial performance. They displayed firm size positively relating to financial performances in that large enterprises can exploit investment opportunities which increases the revenue which in turn is reflected in increased profits. The findings, however, differed with those of Xie et. al (2019; Wang, Akbar and Akbar (2020); Gambardella and Von Hippel (2019); and Aduralere Opeyemi (2019) who found that large firms had poor financial performance. Xie et. al (2019) found that many firms while increasing in size experienced poor financial performance. Wang, Akbar and Akbar (2020) attributed the financial problem of increased size to the attainment of personal interest of firm managers

which led to loss of revenue. Gambardella and Von Hippel (2019) indicated that increased size negatively affected financial performance in that large firms replaced firm's profit maximisation motive with manager's utility maximisation motive. Aduralere Opeyemi (2019), nevertheless, attributes negative linkage on large enterprises requiring more coordination, making managerial tasks more difficult, resulting in lower profitability.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This study sought to establish the relationship between risk management and financial performance of general insurers in Kenya. This chapter gave a summary of findings as well as the conclusions and policy recommendations of the study. Limitations in addition to areas for future studies were also discussed in this chapter.

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

This research was based on annual panel data collected from general insurers in Kenya between 2016 and 2021. This study adopted descriptive, correlation and regression analysis for the data. From the descriptive statistics, financial performance (return of assets) averaged at 1.649% in the period between 2016 and 2021 indicating that general insurers had low levels of financial performance. The general insurers exhibited a return on assets ranging between -102.23% and 42.86% indicating that there was a very high variation in the financial performance for the period between 2016 and 2021. The general insurers, for the period between 2016 and 2021, exhibited an average underwriting loss ratio of 59.329% indicating that the firms incurred less claims than premiums earned. This shows that the firms managed their risk well. Nevertheless, Liquidity (current ratio) averaged at 9.66 indicating that within the period, general insurers had high levels of current assets to pay off debt. However, they had a high level of idle cash lying around which may lead to working capital issues. For firm size (natural log of assets) the averaged figure was 14.794 between 2016 and 2021.



From the correlation analysis to establish the relationship between risk management and financial performance of general insurers in Kenya, risk management exhibited a weak negative correlation coefficient with financial performance. This indicates that risk management had a weak negative relationship with financial performance of general insurers. Nevertheless, liquidity exhibited a significant positive correlation coefficient with financial performance. This shows that liquidity had a positive relationship with financial performance of general insurers. Firm size, however, exhibited an insignificant correlation coefficient with financial performance. This shows that firm size had no significant relationship with financial performance of general insurers.

From the regression analysis, risk management, liquidity and firm size contributed 57.2% to the financial performance of general insurers with other factors contributing 42.8% to the financial performance of general insurers. From the regression coefficients, increase in risk management (underwriting loss) was found to cause a significant decrease in financial performance. This was indicated by a negative regression coefficient which was significant at the 5% significance level. However, increase in liquidity would cause no significant increase financial performance of general insurers. This was shown by a positive regression coefficient which was not significant at the 5% significance level. Finally, increase in firm size was found to cause an increase financial performance of general insurers significantly. This was shown by a positive regression coefficient which was significant at the 5% significance level.

### **5.3 Conclusions**

From the descriptive statistics, financial performance exhibited an average return on assets of 1.649% in the period between 2016 and 2021. Hence, this study concludes that the

general insurers in Kenya have a low return on assets. The study further concludes that general insurers in Kenya perform poorly in terms of financial performance.

The general insurers exhibited a mean underwriting loss ratio of 59.329%. Hence, the researcher concluded that there is effective risk management among general insurers in Kenya. From the correlation analysis, the findings exhibited that risk management exhibited a weak negative correlation coefficient with financial performance. This means that where the general insurers in Kenya experience increased underwriting loss ratio, their financial performance deteriorates in terms of reduced return on assets.

Liquidity exhibited a mean current ratio of 9.66. This study, therefore, concludes that general insurers in Kenya have high liquidity levels and so can easily pay off current liabilities as they fall due. The study also concludes that general insurers in Kenya have working capital management challenges with high levels of idle cash lying around. From the correlation analysis, liquidity exhibited a significant positive correlation coefficient with financial performance. Hence, the study concludes that liquidity has a positive relationship with financial performance of general insurers in Kenya.

Firm size exhibited a mean log of 14.794. This leads to the conclusion that general insurers in Kenya have high asset levels. From the regression analysis, Firm size had an insignificant positive correlation coefficient with financial performance. This leads to the conclusion that firm size has no significant relationship with financial performance of general insurers in Kenya. Hence, increased assets would have no significant increase in financial performance of general insurers in Kenya.

#### **5.4 Policy Recommendations**

From the descriptive statistics, this study concludes that general insurers in Kenya have a low return on assets. This means that the firms have low net income compared to the assets. This study recommends that general insurers in Kenya work towards increasing their net income in order to enhance their financial performance. This can be done by reducing costs and increasing the level of gross income.

The researcher concluded that risk management had a negative correlation coefficient with financial performance. This means that underwriting loss ratio reduce return on assets leading to poor performance among the general insurers in Kenya. This study recommends that general insurers in Kenya reduce the level of insurance claims incurred and paid as well as reduce the adjustment expenses. This would reduce the underwriting losses which would in turn increase their financial performance. The firms also need to increase the level of premiums earned which would reduce the risks through underwriting loss ratio. This would also improve their performance through increased return on assets

On liquidity, the study concluded that general insurers in Kenya have high liquidity levels and so can easily pay off current liabilities as they fall due. However, the liquidity was so high that it has created working capital management challenges due to high levels of idle cash in the firms. This study recommends that general insurers in Kenya adopt an optimal level of liquidity in order to enhance their financial performance. From the correlation analysis, the study concludes that liquidity has a positive relationship with financial performance. This study recommends that general insurers in Kenya increase their liquidity ratios for improved financial performance. This can be done by reducing current liabilities and increasing the current assets in of general insurers in Kenya.

General insurers in Kenya have high asset levels. From the regression analysis, firm size has no significant relationship with financial performance of general insurers in Kenya. This shows that even if the firms increase their assets, they would get no value as far as financial performance is concerned. However, the general insurers in Kenya may have a high level of unproductive assets since theoretically; firm size ought to increase financial performance of firms. This study recommends that, in order to enhance their financial performance, general insurers in Kenya dispose unproductive assets which would turn the positive relationship significant.

### **5.5 Limitations of the Study**

This study was faced various limitations. The study was limited by the scope of the study. the study sought to establish the relationship between risk management and financial performance of general insurers in Kenya. The study was limited by the variables of risk management and financial performance as well as the measures of the variables. The study was also limited to general insurers in Kenya which may limit the generalizability of the study.

The study was also limited by the kind of data utilized as well as the period of research. The study adopted secondary sources of data and limited to the period between 2016 and 2021. This means that adoption of different data sources and period may give differing results. Further, secondary data's historical nature created a limitation for this study. This was overcome by adoption of the most recent data. The study also used annual data meaning that adoption of monthly, quarterly or semi-annual data may give different results.

## **5.6 Recommendations for Future Studies**

The study was limited by the scope of the study. The study recommends a similar study focusing on long-term insurers to widen the scope. The study was limited to the variables of risk management and financial performance. Similar research should focus on other factors influencing financial performance other than risk management for comparison of results. Similar study is also recommended based on other measures of risk management and financial performance to compare results. The study was limited to general insurers in Kenya. The study also recommends similar study based on other firms other than general insurers.

The study was limited by secondary annual data utilized as well as the period of research between 2016 and 2021. This study recommends similar research based on monthly, quarterly or semi-annual data for comparison of results. Similar research is needed based on a different period like 10 years to compare results. Recent data like for the last two years can be used in similar studies to reduce the historical effect of secondary data.

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## APPENDICES

### Appendix I: List of General Insurers In Kenya (2016-2021)

1. AAR Insurance Kenya
2. African Merchant Assurance
3. AIG Insurance Company
4. Allianz Insurance Company
5. APA Insurance Company
6. Britam General Insurance
7. Metropolitan Cannon General
8. CIC General Insurance Company
9. Corporate Insurance Company
10. Directline Assurance Company
11. Fidelity Shield Insurance
12. First Assurance Company
13. GA Insurance Company
14. Geminia Insurance Company
15. Heritage Insurance Company
16. ICEA Lion General Insurance
17. Intra-Africa Assurance
18. Invesco Assurance Company
19. Jubilee Insurance Company
20. Kenindia Assurance Company
21. Kenya Orient Insurance

22. Madison Insurance Company
23. Mayfair Insurance Company
24. Occidental Insurance Company
25. Pacis Insurance Company
26. Mua Insurance Company
27. Pioneer General Insurance
28. Resolution Insurance Company
29. Saham Insurance Company
30. Sanlam General Insurance
31. Takaful Insurance Of Africa
32. Tausi Assurance Company
33. The Kenyan Alliance Insurance
34. The Monarch Insurance
35. Trident Insurance Company
36. UAP Insurance Company
37. Xplico Insurance Company

Source: Insurance Regulatory Authority

## Appendix II: Research Data

	Year	Current assets	Current liabilities	Total Assets	Insurance claims incurred	Adjustment expenses	Total earned premiums	Net income
		Ksh. '000	Ksh. '000	Ksh. '000	Ksh. '000	Ksh. '000	Ksh. '000	Ksh. '000
AAR INSURANCE KENYA	2016	4589738.000	364656.000	4678420.000	2861885.000	0.000	6244856.000	320935.000
	2017	3477244.000	303761.000	3587325.000	4228107.000	709932.000	5225452.000	-342483.000
	2018	3723705.000	537265.000	3816009.000	3304547.000	334645.000	4307606.000	-252547.000
	2019	3947157.000	942026.000	4028310.000	1682818.000	0.000	3133971.000	517230.000
	2020	4166025.000	1034784.000	4228557.000	2594960.000	0.000	3751434.000	234499.000
	2021	4678161.000	810851.000	4678162.000	3101333.000	0.000	6686858.000	372386.000
AFRICAN MERCHANT ASSURANCE	2016	2389584.000	52610.000	3828632.000	1220452.000	0.000	3162247.000	336102.000
	2017	2474531.000	260911.000	3874326.000	1494221.000	25421.000	2329488.000	-17414.000
	2018	2002283.000	297488.000	3392297.000	857095.000	0.000	1710083.000	39599.000
	2019	2036335.000	502389.000	3404894.000	735126.000	76217.000	1340195.000	-76217.000
	2020	2115634.000	532121.000	3465567.000	866212.000	595177.000	947104.000	-409020.000
	2021	1717243.000	153123.000	2973170.000	478162.000	0.000	1008357.000	228433.000
AIG INSURANCE COMPANY	2016	3610588.000	591760.000	4176866.000	1388332.000	0.000	3669939.000	246941.000
	2017	4158973.000	1615395.000	4721822.000	849560.000	0.000	1483800.000	416855.000
	2018	4983381.000	1956504.000	5121145.000	410688.000	0.000	837284.000	377754.000
	2019	5058165.000	2089037.000	5197753.000	482551.000	0.000	922037.000	269720.000
	2020	4135157.000	1051769.000	4277305.000	314652.000	0.000	745572.000	189466.000
	2021	4173225.000	1220138.000	4173225.000	174643.000	0.000	3224828.000	1716453.000
ALLIANZ INSURANCE COMPANY	2016	992278.000	54130.000	1029208.000	5167.000	183781.000	63061.000	-90035.000
	2017	1118778.000	212282.000	1185182.000	89880.000	176582.000	129871.000	-127057.000
	2018	1285820.000	434284.000	1340926.000	164284.000	190194.000	249955.000	-135087.000
	2019	1988884.000	702802.000	2033485.000	219121.000	62915.000	404127.000	-48192.000
	2020	1606101.000	588763.000	1645282.000	329317.000	46852.000	500012.000	-300888.000
	2021	1729479.000	634148.000	1729478.000	367625.000	87637.000	1150690.000	-700176.000



APA INSURANCE COMPANY	2016	13016027.000	818751.000	14371226.000	4953198.000	107947.000	8995975.000	664021.000
	2017	12768202.000	529845.000	14179668.000	4097311.000	0.000	6088245.000	659764.000
	2018	12106162.000	435963.000	13189115.000	4307013.000	0.000	6498956.000	510850.000
	2019	12353948.000	835385.000	13450749.000	4748195.000	0.000	6782949.000	770230.000
	2020	12048309.000	1002477.000	13133807.000	4162049.000	0.000	6454270.000	463837.000
	2021	11875404.000	681514.000	12895405.000	4714626.000	0.000	10626654.000	3234117.000
BRITAM GENERAL INSURANCE	2016	8969050.000	558134.000	9162550.000	3675629.000	0.000	6997225.000	506501.000
	2017	10444886.000	1434587.000	10596709.000	4057173.000	0.000	6845492.000	469608.000
	2018	10277507.000	2234952.000	10401934.000	4037568.000	40123.000	6701153.000	-52035.000
	2019	10231925.000	1853074.000	10330217.000	4298563.000	306347.000	6400402.000	-185399.000
	2020	11619615.000	1688741.000	11697284.000	4038876.000	0.000	6283021.000	363651.000
	2021	12843198.000	1974085.000	12843198.000	5007396.000	0.000	9881856.000	421840.000
CANNON GENERAL	2016	1922120.000	385507.000	2338126.000	838434.000	369657.000	1725576.000	-441549.000
	2017	2018553.000	534080.000	2415087.000	780226.000	273201.000	1030050.000	-161246.000
	2021	2332289.000	456166.000	2563835.000	772361.000	32840.000	1590938.000	20135.000
	2018	1958734.000	334934.000	2337362.000	539013.000	22848.000	904678.000	84908.000
	2019	1873585.000	289399.000	2246378.000	537183.000	143004.000	809344.000	49558.000
	2020	2175774.000	340174.000	2408113.000	487091.000	110684.000	849606.000	77557.000
CIC GENERAL INSURANCE	2016	9609068.000	355676.000	11624876.000	4521575.000	7707.000	8407498.000	-7707.000
	2017	9418283.000	573147.000	11458803.000	5616981.000	0.000	8353502.000	271875.000
	2018	9334857.000	376788.000	11346654.000	6023459.000	0.000	9136871.000	380290.000
	2019	10107430.000	539634.000	12061657.000	6472105.000	458201.000	9000514.000	278110.000
	2020	10678768.000	710189.000	12597039.000	6003086.000	0.000	8610721.000	15355.000
	2021	10249957.000	580704.000	12085956.000	5830192.000	0.000	11422041.000	2400400.000
CORPORATE INSURANCE	2016	556834.000	106181.000	1340750.000	135947.000	0.000	312615.000	43970.000
	2017	554352.000	110158.000	1371809.000	125992.000	0.000	300355.000	29204.000
	2018	530109.000	106161.000	1367755.000	137483.000	0.000	262365.000	-11073.000
	2019	764219.000	83460.000	1497014.000	231250.000	0.000	334419.000	-41690.000

	2020	1038443.000	72607.000	1647102.000	382334.000	23445.000	743161.000	-80395.000
	2021	1001973.000	79137.000	1605531.000	553450.000	24499.000	667264.000	208794.000
DIRECTLINE ASSURANCE	2016	3106682.000	88059.000	5173232.000	1787823.000	17006.000	3224740.000	142583.000
	2017	4433286.000	96657.000	6178880.000	1937163.000	0.000	3211896.000	119673.000
	2018	3451252.000	236608.000	5566870.000	1973201.000	306275.000	3011169.000	-87053.000
	2019	4368960.000	598869.000	5557667.000	2288487.000	254907.000	3190575.000	-389606.000
	2020	2990943.000	412022.000	5018843.000	2107676.000	477154.000	2672513.000	-345705.000
	2021	4313563.000	392475.000	6321063.000	2124197.000	0.000	3589899.000	238183.000
FIDELITY SHIELD INSURANCE	2016	1340440.000	106187.000	2764186.000	778444.000	0.000	1717326.000	52085.000
	2017	5453227.000	1026043.000	3098905.000	947074.000	0.000	1505109.000	17251.000
	2018	1757541.000	109036.000	3059140.000	1096218.000	0.000	1738990.000	57008.000
	2019	1810024.000	156979.000	3104614.000	1315619.000	59056.000	1805337.000	-33748.000
	2020	1724382.000	112358.000	2980829.000	1175871.000	191989.000	1465087.000	-49696.000
	2021	2110101.000	199395.000	3294256.000	901343.000	0.000	2281326.000	504925.000
FIRST ASSURANCE COMPANY	2016	3415300.000	643937.000	5158179.000	1951648.000	428916.000	3930953.000	-56273.000
	2017	1673765.000	131155.000	4667716.000	1023703.000	194248.000	1714429.000	-56955.000
	2018	2828893.000	1055845.000	4672741.000	1496947.000	522266.000	2035281.000	-200026.000
	2019	2855174.000	1126321.000	4776472.000	1282134.000	17522.000	2217774.000	130368.000
	2020	2817680.000	890749.000	4727924.000	1349953.000	0.000	2383071.000	28934.000
	2021	3573912.000	1128967.000	5115509.000	1765500.000	64950.000	4513423.000	162654.000
GA INSURANCE COMPANY	2016	5925203.000	1234387.000	8502503.000	1441422.000	0.000	4782080.000	492723.000
	2017	2866500.000	922314.000	9642192.000	1602087.000	0.000	2712176.000	784887.000
	2018	7693228.000	1461701.000	10458741.000	1758016.000	0.000	2987234.000	943592.000
	2019	8648508.000	1671379.000	11530161.000	1760933.000	0.000	3214676.000	1061496.000
	2020	10109935.000	2114992.000	12983775.000	2325388.000	0.000	3820946.000	945958.000
	2021	12739895.000	3245722.000	15533661.000	3110401.000	0.000	11021966.000	4074335.000
GEMINIA INSURANCE COMPANY	2016	3483152.000	350328.000	4517228.000	1117599.000	0.000	2222724.000	172170.000
	2017	7076535.000	1454643.000	5038861.000	1476283.000	0.000	2391513.000	272319.000
	2018	3992296.000	375131.000	5695129.000	2075971.000	0.000	3388433.000	231499.000

	2019	4601215.000	457942.000	6240584.000	2646818.000	0.000	4340749.000	260051.000
	2020	5119151.000	735529.000	6743929.000	2772776.000	0.000	4099042.000	355940.000
	2021	4774823.000	546076.000	6404898.000	2744147.000	0.000	4800247.000	1640989.000
	2016	5578105.000	378174.000	5696114.000	1355302.000	0.000	5340180.000	498194.000
HERITAGE INSURANCE	2017	4002374.000	262702.000	7303808.000	1501361.000	0.000	3098001.000	577090.000
	2018	7388125.000	1108458.000	7457982.000	1673685.000	0.000	3146204.000	380647.000
	2019	7813701.000	930633.000	7875691.000	1475576.000	0.000	3406250.000	609133.000
	2020	8498920.000	1122772.000	8590389.000	1610963.000	0.000	3470003.000	654573.000
	2021	8780651.000	920320.000	8882682.000	1911595.000	0.000	6331469.000	3165219.000
ICEA LION INSURANCE	2016	6809022.000	1073611.000	9591461.000	2284044.000	0.000	6304588.000	322335.000
	2017	7216027.000	1236078.000	10226441.000	2200521.000	0.000	3737910.000	801847.000
	2018	6889447.000	768755.000	9728338.000	1642077.000	0.000	3036033.000	442590.000
	2019	8088729.000	1536148.000	10923507.000	1255384.000	0.000	2840981.000	894322.000
	2020	8210962.000	1368768.000	10985283.000	1480393.000	0.000	3156237.000	672888.000
	2021	9286071.000	1545236.000	12060821.000	1574758.000	0.000	6331148.000	5169363.000
INTRA-AFRICA ASSURANCE	2016	1310170.000	71314.000	1757259.000	462073.000	0.000	1014275.000	46797.000
	2017	7366238.000	1052253.000	1861263.000	470288.000	0.000	873919.000	32240.000
	2018	1428829.000	29483.000	1904071.000	527335.000	0.000	972337.000	25409.000
	2019	1601368.000	57889.000	2083684.000	585274.000	0.000	1069173.000	69161.000
	2020	1457955.000	41304.000	1982967.000	582414.000	0.000	1084632.000	28709.000
	2021	1775127.000	82130.000	2318360.000	686363.000	0.000	1544171.000	115776.000
INVESCO ASSURANCE COMPANY	2016	1876774.000	184840.000	3189085.000	959959.000	63709.000	2300894.000	-42649.000
	2017	1807558.000	221859.000	3352641.000	1161097.000	262954.000	1983691.000	-174148.000
	2018	1754895.000	231752.000	3283957.000	883511.000	151268.000	1547123.000	-93254.000
	2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JUBILEE GENERAL INSURANCE	2019	6479457.000	505013.000	6505191.000	2495998.000	0.000	2847757.000	-748132.000
	2020	5783810.000	362547.000	5809995.000	1716121.000	140310.000	2276187.000	-99797.000
	2021	5258692.000	251052.000	5281189.000	1860990.000	776294.000	3489031.000	-877648.000

	2016	13742229.000	1150095.000	13797029.000	6579683.000	0.000	14089297.000	656039.000
	2017	13022001.000	387354.000	13087425.000	5584301.000	0.000	9198086.000	1585657.000
	2018	13681099.000	1703858.000	13744083.000	4884210.000	0.000	7575159.000	1049904.000
KENINDIA ASSURANCE COMPANY	2016	4383050.000	1173817.000	6185671.000	1337219.000	0.000	2996565.000	61843.000
	2017	5796978.000	2001500.000	7816446.000	1337550.000	0.000	1984463.000	185174.000
	2018	5988554.000	1743374.000	8108844.000	1364837.000	0.000	1925478.000	187242.000
	2019	5750390.000	1460216.000	7876121.000	1700192.000	259307.000	1747415.000	-387582.000
	2020	5770450.000	879481.000	7888919.000	1303900.000	0.000	1570968.000	221634.000
	2021	6438645.000	1097864.000	8568034.000	1425723.000	0.000	2580576.000	1432052.000
KENYA ORIENT INSURANCE	2016	2347285.000	256068.000	2900880.000	1308511.000	0.000	2525535.000	84329.000
	2017	1747863.000	100066.000	2461968.000	1191245.000	14696.000	2001836.000	15273.000
	2018	1596513.000	89137.000	2118603.000	802242.000	33719.000	1512769.000	-90264.000
	2019	1945909.000	598127.000	2265242.000	620603.000	161338.000	1121213.000	-305340.000
	2020	2131703.000	609840.000	3238660.000	488498.000	30965.000	1006988.000	-187993.000
	2021	2342395.000	766774.000	3446692.000	961637.000	377956.000	1684630.000	-1530117.000
MADISON GENERAL INSURANCE COMPANY	2016	2264031.000	129553.000	2923551.000	1834656.000	0.000	3102439.000	54129.000
	2017	3026581.000	195164.000	3980866.000	2334622.000	0.000	3310103.000	62950.000
	2018	3568958.000	309637.000	4648404.000	3158270.000	169569.000	4000681.000	-106708.000
	2019	3753921.000	421944.000	4443310.000	3060141.000	0.000	4119576.000	14368.000
	2020	3783655.000	334387.000	4468124.000	2561003.000	0.000	3733101.000	32449.000
	2021	4248926.000	177282.000	4927170.000	3436757.000	93861.000	5784650.000	504189.000
MAYFAIR INSURANCE	2016	3277398.000	481327.000	4011015.000	528846.000	0.000	2302053.000	305980.000
	2017	3771334.000	366033.000	4534689.000	618724.000	0.000	1322682.000	270516.000
	2018	4358408.000	358878.000	5138754.000	717853.000	0.000	1406316.000	361826.000
	2019	4824660.000	445194.000	5613622.000	941177.000	0.000	1722739.000	359493.000
	2020	5624112.000	532277.000	6410936.000	1056547.000	0.000	1687077.000	393887.000
	2021	6817239.000	991210.000	7596354.000	1214855.000	0.000	4262082.000	1389163.000
	2016	1683625.000	73635.000	1716646.000	293547.000	201019.000	438725.000	-201019.000

MUA INSURANCE COMPANY	2017	1504738.000	115996.000	1527113.000	73484.000	14867.000	303777.000	-14867.000
	2018	1394614.000	140954.000	1412852.000	150925.000	97142.000	333239.000	-97142.000
	2019	1535987.000	215564.000	1548520.000	196721.000	0.000	449698.000	8374.000
	2020	2618030.000	299884.000	2625903.000	231602.000	0.000	459079.000	-195760.000
	2021	4259126.000	824005.000	4302422.000	1470804.000	203808.000	3554095.000	204556.000
OCCIDENTAL INSURANCE COMPANY	2016	2344792.000	229033.000	2825767.000	1060371.000	0.000	2033089.000	108723.000
	2017	2789850.000	299490.000	3366994.000	1152401.000	0.000	1720125.000	93411.000
	2018	2946060.000	277216.000	3565535.000	1224317.000	0.000	1993336.000	244879.000
	2019	3363044.000	457021.000	3842302.000	1327622.000	0.000	2094037.000	248119.000
	2020	3593830.000	666013.000	4070329.000	1567913.000	64262.000	2051848.000	-80953.000
	2021	3634467.000	572435.000	4100913.000	1672180.000	0.000	3124815.000	663142.000
PACIS INSURANCE COMPANY	2016	1136762.000	155417.000	2012375.000	355135.000	0.000	1042137.000	34500.000
	2017	1439783.000	232757.000	2313109.000	378487.000	0.000	893507.000	43926.000
	2018	1312085.000	323103.000	2189128.000	403783.000	0.000	976521.000	65310.000
	2019	1404499.000	412905.000	2278970.000	779880.000	236109.000	1106830.000	-253163.000
	2020	1733295.000	426329.000	2607573.000	556109.000	0.000	1103738.000	130593.000
	2021	1696818.000	327038.000	2553796.000	746204.000	34628.000	1667830.000	102267.000
PIONEER GENERAL INSURANCE	2017	1042988.000	239972.000	1046355.000	39294.000	53601.000	84145.000	3143.000
	2018	1191148.000	209625.000	1198784.000	199634.000	75315.000	319509.000	-8659.000
	2019	1090760.000	125739.000	1405120.000	358103.000	20396.000	632821.000	21102.000
	2020	1018575.000	90292.000	1411687.000	419223.000	41670.000	710234.000	9884.000
	2016	652567.000	22538.000	652567.000	0.000	0.000	0.000	29.000
	2021	1482048.000	146159.000	1876780.000	699065.000	98722.000	1403556.000	-24497.000
RESOLUTION INSURANCE COMPANY	2016	4931723.000	3183318.000	5076026.000	803735.000	198234.000	3956999.000	-198234.000
	2017	3232462.000	2041777.000	3371844.000	1437995.000	718628.000	1913344.000	-525420.000
	2018	4495400.000	2819953.000	4607014.000	1916316.000	504134.000	2675832.000	-357885.000
	2019	5057221.000	3732035.000	5174644.000	1768199.000	235114.000	2615064.000	-172871.000
	2020	4553963.000	3389318.000	4624666.000	1234893.000	0.000	1952085.000	150680.000
	2021	4147126.000	3177347.000	4191321.000	1589442.000	409758.000	4158397.000	- 2505064.000

SAHAM INSURANCE COMPANY	2016	1255006.000	260638.000	1265466.000	256981.000	0.000	1563080.000	36036.000
	2017	1934767.000	563133.000	1944065.000	423576.000	0.000	808324.000	78489.000
	2018	1826830.000	314484.000	1840319.000	531496.000	0.000	1018761.000	95652.000
	2019	2003260.000	436294.000	2091830.000	639639.000	28208.000	1098513.000	60157.000
	2020	1957197.000	143858.000	1962531.000	622723.000	0.000	1039841.000	64107.000
	2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SANLAM GENERAL INSURANCE	2017	1613548.000	312297.000	2689370.000	769875.000	0.000	1488607.000	68839.000
	2016	1626060.000	207993.000	2166366.000	144508.000	0.000	1002200.000	-14804.000
	2018	2290341.000	366891.000	2867036.000	733139.000	0.000	1435307.000	115665.000
	2019	2326382.000	255711.000	2905488.000	1026512.000	0.000	1695090.000	4419.000
	2020	3386265.000	365288.000	3534014.000	1167648.000	0.000	2046759.000	137739.000
	2021	3516358.000	400440.000	3630479.000	2372877.000	1080077.000	4857950.000	-791850.000
TAKAFUL INSURANCE OF AFRICA	2016	1456278.000	229112.000	1526694.000	140105.000	0.000	816450.000	242724.000
	2017	1529669.000	321289.000	1580700.000	189066.000	175533.000	491842.000	-113070.000
	2018	1790401.000	473951.000	1833990.000	259242.000	186013.000	535089.000	-277184.000
	2019	2125912.000	648135.000	2198639.000	366185.000	57587.000	696380.000	-11884.000
	2020	2137811.000	601059.000	2210463.000	208909.000	0.000	674497.000	102102.000
	2021	1706292.000	281691.000	1777127.000	383271.000	116551.000	910129.000	-283475.000
TAUSI ASSURANCE COMPANY	2016	1706726.000	101914.000	1995805.000	264355.000	0.000	963339.000	175384.000
	2017	1926376.000	127539.000	2247186.000	242926.000	0.000	743986.000	248936.000
	2018	2071535.000	155935.000	2392973.000	219125.000	0.000	801801.000	252727.000
	2019	2365729.000	133365.000	2709592.000	300104.000	0.000	840667.000	272618.000
	2020	2534090.000	100423.000	2871530.000	238903.000	0.000	806997.000	328784.000
	2021	2801474.000	126671.000	3130987.000	292618.000	0.000	1322354.000	1175624.000
THE KENYAN ALLIANCE INSURANCE	2016	1923109.000	723882.000	3327167.000	547096.000	0.000	1095925.000	48714.000
	2017	2018566.000	428218.000	3124977.000	356673.000	0.000	941101.000	174239.000
	2018	1821224.000	343165.000	2929255.000	539961.000	176046.000	1024568.000	-142889.000
	2019	2477609.000	993547.000	3927848.000	461394.000	0.000	1252409.000	62566.000
	2020	2314987.000	87706.000	3437595.000	617579.000	0.000	1311800.000	54626.000

	2021	2010430.000	817825.000	3355476.000	679008.000	220747.000	1937874.000	62195.000
THE MONARCH INSURANCE	2016	808043.000	66640.000	1191391.000	336344.000	0.000	1051639.000	32341.000
	2017	1025946.000	57475.000	1458410.000	463987.000	0.000	996163.000	53964.000
	2018	1090775.000	41928.000	1781929.000	567291.000	0.000	1117546.000	106738.000
	2019	1323445.000	69978.000	2091273.000	624233.000	0.000	1220586.000	89286.000
	2020	1610793.000	129410.000	2424408.000	744395.000	0.000	1359113.000	22487.000
	2021	877720.000	174712.000	1678339.000	1839135.000	1314496.000	1223585.000	-1715792.000
TRIDENT INSURANCE COMPANY	2016	2312510.000	404382.000	4294128.000	334321.000	0.000	1295774.000	19504.000
	2017	2413284.000	535613.000	4381181.000	473039.000	119287.000	945349.000	-142281.000
	2018	2213823.000	721054.000	4177896.000	361816.000	182875.000	513908.000	-256867.000
	2019	2151450.000	494701.000	4115877.000	375858.000	139208.000	522250.000	-71604.000
	2020	2287213.000	587494.000	4255817.000	154403.000	0.000	673183.000	22262.000
	2021	2259416.000	409577.000	4229574.000	380425.000	0.000	1190787.000	1188284.000
UAP INSURANCE COMPANY	2016	12336316.000	1790407.000	16040783.000	5836672.000	261979.000	10982070.000	606484.000
	2017	11838442.000	1170227.000	15594492.000	5039846.000	0.000	8188615.000	969215.000
	2018	10729646.000	690869.000	14583592.000	5396151.000	8879.000	8140782.000	171615.000
	2019	10845077.000	1484132.000	14635600.000	5548699.000	0.000	8296675.000	970453.000
	2020	11714996.000	1825881.000	15323880.000	5817527.000	0.000	8931923.000	452828.000
	2021	13024553.000	2032868.000	16021999.000	6965257.000	173914.000	13183224.000	4221890.000
XPLICO INSURANCE COMPANY	2016	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2017	1516498.000	289564.000	2285596.000	385842.000	9169.000	945171.000	52717.000
	2018	1639086.000	262567.000	2412103.000	589284.000	130195.000	1305320.000	-78051.000
	2019	1977195.000	271951.000	2784224.000	651785.000	106778.000	1262408.000	-58978.000
	2020	2330806.000	256973.000	3296446.000	856920.000	292913.000	1137442.000	-84247.000
	2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Source: Researcher (2022)