RELATIONSHIP BETWEEN INVESTMENT PORTFOLIO CHOICE AND FINANCIAL PERFORMANCE OF INSURANCE FIRMS IN KENYA.

BY

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DECLARATION

This project is my original work that has not been presented for examination to any other college or any other institution of higher learning for academic accreditation.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this project to my wife and our son -Jay for all the support they gave me as I worked on this project.

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I appreciate my supervisor, Mr. James Karanja, for his guidance throughout the entire research. I acknowledge the support from my family both morally and financially.

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LIST OF ABBREVIATIONS

AKI – Association of Kenya Insurers

CDSC – Central Depository and settlement Corporation

GDP - Gross Domestic Product

IRA – Insurance Regulatory Authority

MIPs – Medical Insurance Providers

MPT – Modern Portfolio Theory

RBC – Risk Based Capital

ABSTRACT

The study sought to determine the relationship between investment portfolio choice and financial performance of insurance firms in Kenya. The study used a descriptive research design. Data for a 5-year period (2014-2018) was collected for 50 insurance firms in Kenya. Secondary data collected from published financial statements of insurance firms in Kenya was collected. Annual data was used for the study. The data was analysed giving a total of 250 data points. Multiple regression, corelation and descriptive analysis were done. From the findings, investment in government securities, investment in real estate, investment in bank deposits and investment in corporate bonds had a positive relationship with return on assets. However, investment in stocks had an negative relationship with return on assets. All the variables except investment in stocks displayed a significant relationship. The study concluded that investmet portfolio choice had a relationship with financial perfromance of insurance firms in Kenya. It was recommended that policy makers come up with policies that support the investment efforts made by the insurance firms in Kenya in order to enhance their financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

For insurance firms, the business of underwriting is usually half the equation, the rest is managing the assets that support and pay for the liabilities they carry for others (Ehiogu & Theophilus, 2018). Investment function is an extremely important function in the overall performance of insurance firms since premiums are paid in advance for them to be invested until needed to pay claims and expenses. Among the various uses of premiums, investment is the only utilization which provides positive income in future for the insurance firms. Investment in the insurance business is concerned with the application of insurance funds which are not immediately required for expenditure or for payment of insurance claims and benefits. When the funds are not meant for immediate consumption, they are employed to be productive and increase the value or even multiply depending on how long they are engaged in the productive activities (Chui & Kwot, 2008).

A number of investment theories and models can be applied to the concept of portfolio mix and performance of insurance firms. This study was based on Markowitz Portfolio Theory, Modern Portfolio Theory (MPT) and Risk Aversion Theory. Markowitz assumed that given the same level of return, an investor will choose the investment with the lowest amount of risk measured in terms of standard deviation or investment variance. Risk aversion theory argues that the value of sure chance with a lower yield is considered higher than the utility of an unsure chance with a higher yield. Modern Portfolio speculation bears witness to that it is possible to create viable edges of

perfect portfolios offering the most outrageous possible expected return for a given component of risk (Reilly & Brown, 2011).

1.1.1 Investments portfolio

An investment can be defined as the commitment of funds to one or more assets that will be held over some future period. It often refers to investing money in financial assets, such as certificates of deposits, common stocks or mutual funds (Jones, et al., 2009). Investment can be related to a product or asset bought for the purpose of income generation or appreciating given some investment time. Therefore, investment is the expenditure accrued for income-producing assets (Stores, 2015). There are different types of investments that can be made by firms, both individuals and firms can have investments (Harvey, 2012). This may include stocks, mutual fund distributions, investment in government securities, interest-bearing bank accounts, corporate bonds and other debt instruments.

Investment decisions are made after a complete analysis of the investment project, one of the basic factors that influence the decision is the risk factor of the investment. This risk exists because it is uncertain that the cost of the investment will be recovered and a profit will be gained (Virlics, 2013). The investor's decision to invest depends on the expected costs, his knowledge of the improved techniques and his risk perception which is entirely a subjective factor. Investors want to know the investment project's pay-off period to decide whether to make the investment expenditure or not (Harcourt, 2008).

Reilly and Brown (2011) define portfolio mix as the combination of different asset investments for a speculator's thriving among countries and asset classes for motivations behind ideal investments. A portfolio composition is an allocation of investments into different assets. Asset

allocation is the strategy an investor uses to distribute his or her investments among various asset classes i.e. equity, debt, liquid and real assets (Kimeu, 2015). Investment portfolios within the insurance sector are held by investors and regulated by asset managers who are further regulated by the capital markets authority. The investments portfolio mix for insurance firms varies over time depending on factors such as regulator's guidelines and macro-economic factors. The risk appetite increases when the economy is favorable and tends to reduce during poor economic times (Ehiogu & Theophilus, 2018).

1.1.2 Financial performance

Financial performance refers to the process of using various financial instruments to measure the performance or profitability of an organization. It's therefore more interested in the profitability of the firm than any other aspect (CAPI, 2009). Financial performance is one of many different measures to evaluate how well a firm is using its resources to generate income. Examples of financial performance include operating income, earnings before interest and taxes, and net asset value (Ngui, 2010).

Measuring financial performance of an organization is very important since it determines whether the organization has been able to achieve its financial objectives or not. Measures of financial performance consolidate a large amount of information into a convenient form of analysis (Jiru, Jibrel, & Tesfaye, 2014). Financial performance may be used to relate or differentiate firms with similar characteristics or to evaluate sectors or industries in total to enable an entity decide on how well to enhance the existing circumstances or carry on a wanted arrangement (Haque,2004).

The financial performance of insurance firms plays an important role in the growth of the industry as a whole, which ultimately contributes to the success of an economy (Iswatia & Anshoria, 2007).

The Insurance Regulatory Authority (IRA) determines the Risk Based Capital (RBC) for insurance firms which they are required to achieve and maintain to be considered financially stable. These ratios are updated periodically in the IRA regulations guidelines release. The profitability of insurance firms can also be appraised at the micro, meso and levels of the economy. The micro level refers to how a firm's specific factors such as size, capital, efficiency, age and ownership structure affect profitability. The meso and macro levels refers to the influence of support institutions and macroeconomic factors respectively (Gonga & Sasaka, 2017).

1.1.3 Investment Portfolio and Financial performance

Investment is one of the key determinants of the financial performance on an organization. Organizations invest their resources to earn returns that will enable them enhance their financial performance. There exists a positive relationship between investment and the level of financial performance achieved by an organization, however this may not be long lasting but a temporary position that may last for some short time (Loof & Heshmat, 2008).

Insurance is a pooling arrangement used by a group of policyholders to accumulate a fund that pays a stated benefit in case of financial loss by covered risks or perils. Insurance firms share the risk among the large numbers of risk exposure. Modern insurance firms are typical financial institutions like banks and investment firms that manage the fund as well as absorb the risk of customers with due risk management practices (Ghimire, 2013)

The performance of a firm can be measured by the amounts of its earnings. Risk and profitability are two major factors which jointly determine the value of a firm (Pi & Timme, 1993). Financial decisions which increase risks will decrease the value of the firm while on the other hand, financial decisions which increase profitability will increase the value of the firm. Risk and profitability are

two essential ingredients of a business concern. There has been a considerable debate about the ultimate objective of firm performance, whether it is profit maximization or wealth maximization (Pi & Timme, 1993). It is observed that while considering the firm performance, the profit and wealth maximization are linked and are effected by one-another. There are several dimensions of insurance regulations such as Solvency Regulation, Capital Adequacy Regulation, Price Regulation, Regulation of Claim Settlement and Fraud Detection. Regulations of the investment funds plays a major role to safeguard the interest of the policy holders and help to stop from the insolvent of the insurers (Gupta, 2011)

The basic sense of construction of portfolio is making the optimal relation between risk and contribution by combining various assets. For life insurance firms, the procedure of making a portfolio must be in accordance with their obligations which includes; expected profit affluence, price policy and strategy of assets management. The optimal structure of every portfolio should be reevaluated so that the risk can be minimized and the highest possible level of return for the given level of risk be obtained. Life insurance firms can invest capital in short-term and long-term financial instruments such as treasury bills, treasury bonds, corporate bonds, mutual funds, stocks and investment properties. The portfolio in different financial assets reflects on money circulation of the insurers, that is, affluence and emission of money. The most important functions of portfolio are; stabilization of income, balancing of risk in portfolio, diversification of sources of income, liquidity, protection of fluctuation of interest rate, flexibility of portfolio and agreement of accounts (Stankovic, 2009)

The financial performance of a firm and effect of portfolio composition is of vital interest to many different groups and individuals. Investors are concerned with company's ability to repay investment returns as well as whether it is abiding to agreed contracts. Potential investors are

interested in determining the financial strength of the company as an element in assessing the company's portfolio composition. In addition to these, external analysts and managers within the investment market segment are also concerned with analyzing its financial performance. These internal analysts compare the actual performance of the various securities composition in line of business plans, budgets or objectives. They also compare the company's performance with that of current and potential competition (Scott, 2007).

While past performance as portrayed in the financial statements is interesting, managers and analysts are more interested in what will happen in the future (Kimeu, 2015). The past performance of a company as shown in its financial statements may be used to predict future performance (Pi and Timme, 1993

1.1.4 Insurance firms in Kenya

In Kenya, the establishment and licensing of insurance firms is done by the insurance Regulatory Authority (IRA). These firms are registered as either private limited firms or public limited firms. As per the Central Depository and Settlement Corporation (CDSC) Kenya, there were six listed insurance firms as at 31st December 2018. According to the Association of Kenya Insurers (2017), the insurance industry in Kenya has 52 players in total, 27 in general/short-term insurance, 15 in life Assurance and 10 composite firms. In addition, there are 221 licensed insurance brokers, 31 Medical Insurance Providers (MIPs), 9320 insurance agents, 2 locally incorporated re-insurers. There are also 32 loss adjuster, 32 insurance surveyors and 9 risk managers.

According to the association of Kenya insurers (2017) the number of insurance firms has rapidly grown from 15 in the year 1978 to 52 currently. This was made possible due to springing up of a number of firms in the 1980s and 1990s due to liberalization of the economy. The collapse of the

giant state owned Kenya National Assurance in 1996 also served to intensify competition in the industry. In the year 2003, leading medical insurer Mediplus was wound up and the industry suffered a setback as a result (Njiiri, 2015).

The report on the financial position of the insurance industry reveals that gross written premium from non-life insurance was Ksh. 126.05 billion while that from life insurance business was Ksh 83.65 billion representing 6.5 % growth compared to the year 2016. Following the opening up of the Uganda and Tanzania Insurance market and increased emphasis on globalization and regionalization, the industry now faces greater competition from its neighbors. With the growth on the number of providers, it would be expected that the insurance penetration would have been enhanced. Insurance penetration is calculated as the percentage of total insurance premiums to the Gross Domestic Product (GDP). Unfortunately, this has not been the case with insurance penetration at 2.6% (AKI report, 2017).

1.2 Research Problem

Globally, the insurance industry is facing a number of challenges such as increasing levels of unemployment and sluggish economic growth which have negatively impacted growth of the industry. These challenges impact negatively on the investments made by insurance firms and this also has effects on the financial performance of the insurers. Poor insurance penetration is also due to the worsening economic times that force people to retain money for transactional motives (Barsuto, Romero, & Idris, 2012). This situation therefore raises issues on the relationship that exists between investment portfolio mix and the financial performance of insurance firms in Kenya.

The insurance industry is important in an economy. In Kenya, the contribution of the life insurance sector to the GDP grew by 4.6% to 1.08% in 2017 compared to 1.03% in 2016 (AKI report, 2017). Insurance business has stringent laws regarding investments following its long-term nature. As such, several organs of Government including Retirement benefits authority, Insurance regulatory Authority, Central Bank, and capital markets regulates the way in which such investments should be handled. As a result, insurance firms have to adhere by these rules and guidelines hence investing with caution which may affect their profitability.

Several studies have been done on the relationship between portfolio holding and financial performance. Hifza (2011) examined the determinants of insurance firms' profitability by conducting an analysis of insurance sector of Pakistan and established that key determinants include market base which determined how much premium was collected and claims paid out.

Moses and Kuloba (2013) carried out a survey of the insurance industry in Kenya. The study reveals that there is high optimism that the insurance industry in Kenya is growing despite the economic challenges. Njiiri (2015) carried out a research on the relationship between investment and financial performance of insurance firms in Kenya. The study revealed that investment choice for insurance firms in Kenya is a key determinant of the financial performance of the firms.

There is evidence that little has been done on the insurance industry in Kenya on the relationship that exist between investment portfolio and financial performance of insurance firms. There are new rules and regulations such as Risk Based Capital (RBC) requirements which have been issued by the Insurance Regulatory Authority (IRA). The RBC model requires insurance firms to hold more liquid assets hence the firms are disposing off real assets and investing in Government Securities and term deposits with insurance firms in order to achieve the recommended RBC and

remain compliant. This reveals that a research gap exists hence the researcher sought to answer the question; what is the relationship between investment portfolio choice and financial performance of insurance firms in Kenya?

1.3 Research Objective

To determine the relationship between investment portfolio choice and financial performance of insurance firms in Kenya.

1.4 Value of the Study

The findings of this study will be useful to the management of insurance firms who may use the discoveries to make the appropriate investment decision and to decide on the type of securities to invest in. The conclusions and recommendations of the study can also be used by the regulatory institutions like Insurance Regulatory Authority (IRA) and Association of Kenya Insurers (AKI) to develop policies towards investments made by the insurance firms. Finally, the study will be of significance to the academic community. The study will add on to the existing theoretical and empirical literature on investments portfolio mix and financial performance of insurance firms. Scholars will also be able to use this study as a basis for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents an overview of relevant literature on studies that have been conducted on investment portfolio and financial performance of insurance firms. The main areas of focus in this chapter includes the theories that are related to investment and financial performance; a review of empirical studies that have been carried out; a detailed review of literature review on investment portfolio; determinants of financial performance in insurance firms; review of literature on financial performance and a summary of the entire chapter.

2.2 Theoretical Review

Basically, portfolio management involves a proper investment decision making of what to buy & sell, proper wealth management in terms of investment in a basket of assets so as to satisfy the assets preferences of investors, reduce the risk and increase the return. Rubinstein (2006) argues that the other ancillary aspects are as per need of investors, namely: regular income, marketability and liquidity, appreciation of capital safety of investment and minimizing of tax liability. Portfolio management is a process encompassing many activities of investment in assets and securities. It is a dynamic and flexible concept and involves regular and systematic analysis, judgement and actions. Several theories have been compounded to show the effects of portfolio mix/management on financial performance.

2.2.1 Markowitz Portfolio Theory

Markowitz (1959) developed the portfolio model which includes not only the expected return but also the level of risk for a particular return. Markowitz assumed that given the same level of return, an investor will choose the investment with the lowest amount of risk. Risk is measured in terms of standard deviation or investment variance. Markowitz work on an individual's investment behavior is important not only when looking at individual investment, but also in the context of a portfolio composition. The risk of a portfolio takes into account each investment's risk and return as well as the investment's correlation with the other investments in the portfolio. Risk of a portfolio is affected by the risk of each investment in the portfolio relative to its return, as well as each investment's correlation with other investments in the portfolio.

An efficient portfolio is the one which gives the investor a higher expected return with the same or lower level of risk as compared to other investments (Fama, 1993). The efficient frontier is simply a plot of those efficient portfolios. While an efficient frontier illustrates each of the efficient portfolios relative to risk and return levels, each of the efficient portfolios may not be appropriate for every investor. When developing an investment policy, risk and return are the key objectives. An investor's risk profile is illustrated with indifference curves. The optimal portfolio is the point on the efficient frontier that is tangential to the investor's highest indifference curve. However, portfolio composition mainly depends on advice investors get in securities market with little regard to performance of investment company.

2.2.2 Agency Theory

The principal-agent theory is an agency model developed by economists who deals with situations in which the principal is in a position to induce the agent, to perform some task in the principal's

interest but not necessarily the agent's (Health & Norman, 2004). Jensen and Meckling (1976) were the first people to suggest the agency theory in a theory of the firm based on conflicts of interest between various parties such as shareholders, corporate managers and debtors. However, the finance theory has gradually developed both theoretically and empirically to allow more investigation of the problems caused by divergence of interest between shareholders and corporate managers. The agency theory indicates that the agency problems arise because of the impossibility of perfectly contracting for every possible action of an agent whose decisions affect both his own welfare and the welfare of the principal (Brennan, 1995).

McColgan (2001) argues that the modern corporation appears to be the most popular form of corporate organization. This can be largely attributable to the evolution of governance mechanisms designed to limit the scope agency problems. Under insurance sector, pension schemes may be considered as agents of the members. They are entrusted with money that belongs to the members for them to manage on their behalf. This implies that the pension schemes are only agents who need to act for the benefit of the owners who are contributors to the pension schemes. The schemes may have other divergent interests to pursue but the main purpose of their existence is to create value for the scheme members. The contributors have a right to decide how their savings into pension schemes are invested and accessed including early access.

2.2.3 Risk Aversion Theory

Risk aversion is an investor's attitude according to which the value of sure chance with a lower yield is considered higher than the utility of an unsure chance with a higher yield (Fischer, 1972). Investors typically wish to maximize their returns at the lowest level of risk possible. A rational investor faced with two investment opportunities with similar returns will always choose the

investment with least risk as there is no benefit of choosing a higher level of risk unless there is an increased level of return.

2.2.4 Modern Portfolio Theory

Modern Portfolio Theory is a mathematical formulation of the concept of diversification in investing with the aim of selecting a collection of investment assets that has collectively lower risk than any other individual asset. This theory suggests that it is possible to construct an efficient frontier of optimal portfolios, offering the maximum possible expected return for a given level of risk. It suggests that it is not enough to look at the expected risk and return of one particular stock. By investing in more than one stock, an investor can reap the benefits of diversification, also known as not putting all of your eggs in one basket (Kaplan & Schoar, 2005). The risk in a portfolio of diverse individual stocks would less than the risk inherent in holding any one of the individual stocks.

In their investment and intermediation activities, insurance firms construct portfolios in the process of creating and holding different types of both real and financial assets. The portfolio behavior of insurance firms is targeted at creating optimum amounts and varieties of assets and hence optimum returns on investment at a given level of risk (Ehiogu & Theophilus, 2018).

2.3 Determinants of Financial Performance in Insurance firms

These are the factors that are considered to greatly affect the financial performance of an insurance company. In this study, the determinants included;

2.3.1 Portfolio Mix

Portfolio mix is an important aspect in the management and investment by insurance firms in the capital market. It promotes diversification of risk. Markowitz (1959) indicated that the weighing of individual securities inside the portfolio is basic. The weight that a portfolio manager apportions to a given security in a portfolio makes responsibility to discount that is correspondingly as basic as the security assurance and investment timing choices. It is major concern of all financial institutions to minimize cases of non-performing investments. This reduces cases of such investments affecting financial performance. A lower rate of nonperforming investments to total investments shows that the insurance company's portfolio is performing well (Markowitz, 1959)

2.3.2 Size of the insurance firm

The size of an insurance company has a very significant relationship with the efficiency of its operations. A large insurance company has enough resources that can enable it to exploit the economies of scale and scope thus providing it with the ability to significantly reduce its operating costs and enhance its performance. However, this may not be the case with small firms that must struggle to gather enough resources. For insurance firms, the size can be equated to the net earned premium after reinsurance deductions. The amount of premium earned by an insurance company largely determines the fraction of policy liabilities the firm can be able to handle (Teece, 2009).

2.3.3 Age of the insurance firm

According to (Murigu, 2015) the older the firm, the more experienced and learned it's hence not being affected by the liabilities of being new. Considering that old firms have been in the industry for long, they are considered to have built their reputation which will in turn allow them to earn higher margin on sales.

2.3.4 Liquidity

Liquidity measures the ability of managers of insurance and reinsurance firms to fulfill their immediate commitments to policyholders and other creditors without having to increase profit from underwriting and investment activities and/or liquidate financial assets (Adam & Buckle, 2013). Therefore, having high liquidity obviates the need for the management of the insurance firms to improve their financial performance.

2.3.5 Equity returns

Equity capital, which is the capital raised from owners in the firm, is the residual claimant or interest of the most junior class of investors in assets after all liabilities are paid; if liability exceeds assets, negative equity exists (Lee, 2008). In an accounting concept, shareholder's equity represents the remaining interest in the assets of a company spread among individual shareholders of common or preferred stock. A negative shareholder's equity is often referred to as a positive shareholder's deficit.

2.4 Determinants of Insurance Firms' Investment Portfolio

2.4.1 Investment Trends

The long-term nature of life insurance contracts has led to preferred investments by life insurance firms largely in long-term fixed–income assets. This means that reserves have been placed primarily in investments bearing a fixed rate of return and regular payments of interests. This would provide a characteristic of stability over time aligning the contractual obligations of life insurance firms to policyholders. Specifically, life insurance firms' reserves have been placed primarily in mortgages, corporate bonds, Government securities, stocks and real estates (Nwobodo, 1975).

2.4.2 Factors Governing Investment Policies

Long-term insurance firms are profit maximizers, that is, they strive for the highest possible rates of return. However, there are some constraints such as the risk involved with holding each class of securities, the need to maintain a desired liquidity level, strict financial and economic motivation of profit, public interest aspect to the investment policies of life insurance firms whereby they might wish to project the image of a good corporate citizen and portray themselves as serving the direct and immediate needs and interests of their policyholders by engaging in residential mortgage lending, small business loans even when this may not be the most profitable outlets of their funds (Nwobodo, 1975).

2.4.3 Uncertainties That Affect the Risk Rating of Various Securities

Tobin (1958) discussed the following factors that affect the degree of risk associated with each security; purchasing power risk where by the purchasing power of currency affects securities with fixed face value in money terms. Uncertainty about future interest rates whereby capital gains or losses will be made on interest-bearing bonds depending on whether future rates fall or raise. Default risk which relates to the ability of the issuing company to redeem debt claims against itself. Profitability risk where private equities are subject to the specific risk of uncertainty regarding the earning power of a particular firm.

2.5 Empirical Review

Loof and Heshmat (2008) conducted a study on investment and performance of firms. Their main objective was to establish whether the relationship that exist between the two variables is that of correlation or causality. The performance variables for the study included sales, value added, profit, cash flow, capital structure and employment. The research variables were research,

development and physical capital. The researchers adopted a multivariate vector autoregressive approach and the study findings revealed that there exists a two-way causal relationship mainly temporary in nature. It was further established from the study that some negative relationship between the firm's investment and performance existed.

Ismail (2013) conducted a study on the determinants of financial performance of Takaful and Insurance Firms in Malaysia. The study utilized the economic paradigm in analyzing performance and not behavioral paradigm. The study of the financial performance of the Takaful and insurance firms was particularly significant in view of the financial landscape that is becoming increasingly challenging. The growing number of insurance firms' failure in recent years has caused further concerns on the financial stability of the Takaful and insurance firms to stakeholders. The findings indicate that company's size, portfolio investment and solvency margin are statistically significant determinants of financial performance of the general Takaful firms in Malaysia. For Malaysian general insurers, investment in all sectors are statistically significant determinants of financial performance.

Njiiri (2015) conducted a study on the relationship between investment and financial performance of insurance firms in Kenya. The study established that investment has a significant effect on the financial performance of insurance firms in Kenya. The amounts of fund that insurance firms invest are positively correlated to their financial performance. The study further established that there was a strong positive correlation between investment in real estate and Government securities. It was evident that insurance firms invest more funds in real estate, Government securities, certificate of deposits and stocks.

Murungi (2013) also carried out a study on the relationship between macroeconomic variables and financial performance of insurance firms in Kenya. The financial performance of insurance firms was measured by Return on Assets (ROA) computed from the financial statements of the firms. The other macroeconomic variables were obtained from the figures available from the Central Bank of Kenya. The study took the form of a descriptive research design with a target population of 46 insurance firms that were registered by the Association of Kenya Insurers in the year 2013. The findings revealed that portfolio investment, interest rates, gross domestic products, claim ratio and expense ratio were statistically significant in influencing financial performance of insurance firms. Portfolio investment was found to have a positive relationship with financial performance except for investment in government securities which showed a negative relationship.

Campbell (2002) found that Portfolio Management is a highly deficient area globally and locally. By owning several assets, certain types of risks can be reduced. The assets in the portfolio cold include stocks, bonds, warrants, options, real estates, future contracts, or any other item that is expected to retain its value. Holding a portfolio is part of an investment and risk limiting strategy called diversification. Portfolio composition involves deciding what assets to include in the portfolio, given the goals of the portfolio owner and changing economic conditions. Selection involves deciding what assets to include in the portfolio, how many to purchase, when to purchase and what assets to diversify. Some investors are more risk averse than others. Investment firms have developed particular investment techniques to optimize their portfolio holdings. These decisions always involve some sort of performance measurement, most typically expected return on the portfolio, and the risk associated with this return.

Sornette (2003) indicates that there are several forms of investments that include investment property (buildings), real estate investments, mutual funds, Government securities (treasury bills

and bonds), deposits with financial institutions (fixed deposits and on-call deposits), investment in associates, investment in subsidiaries and investment in stocks (equity). Shefrin (2006) argues that overall, there are three kinds of investments, these includes stocks, bonds and cash. The different types of investments can also be put in two categories of risk tolerance of either high risk or low risk depending on how risky it is to invest in such investments.

2.6 Summary and Research Gaps

The review has evaluated the various theories that the study was based on. These theories are important in explaining what inferences the portfolio composition has on financial performance of insurance firms. The literature reveals that there are a number of studies that have been conducted on insurance firms in Kenya. Njiiri (2015) conducted a study on the relationship between investment and financial performance of insurance firms in Kenya which is closely related to relationship between portfolio mix and financial performance of insurance firms in Kenya. However, lots of factors have changed such as the introduction of Risk Based Capital (RBC) which has consequently affected the nature of investments held by the insurance firms in Kenya over the period. This therefore creates a research gap that this study sought to fill.

2.7 Conceptual Framework

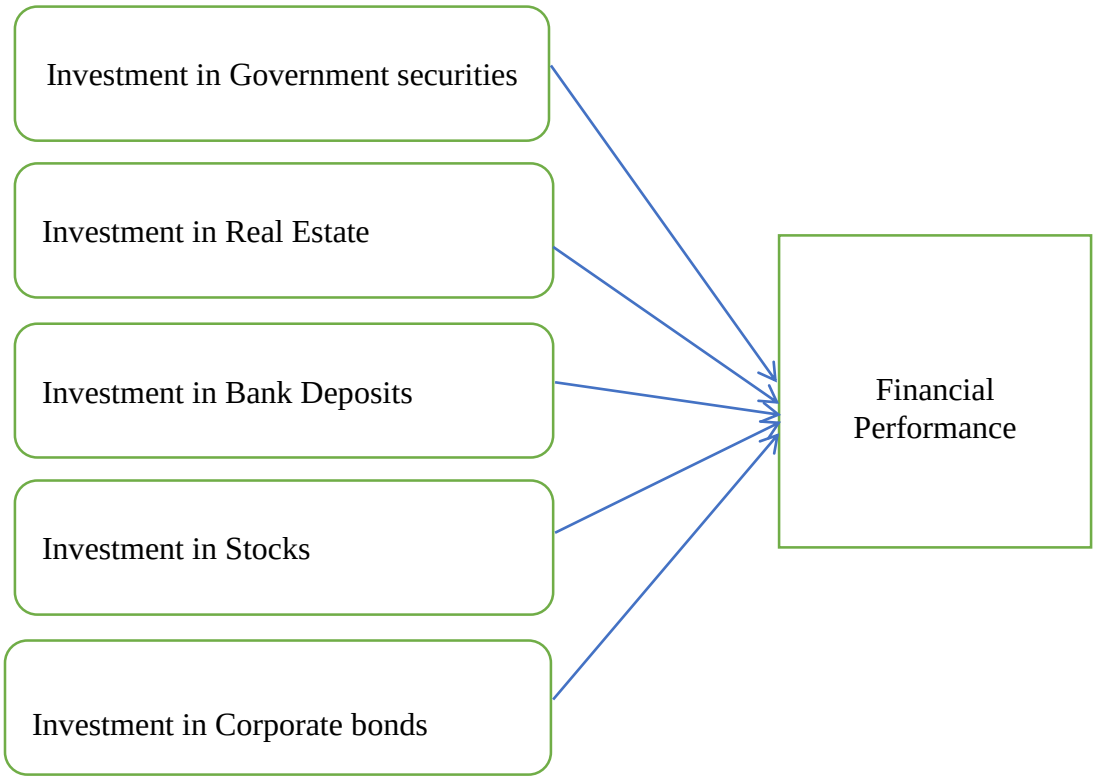

Figure 2.1: Conceptual framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology to be adopted by the researcher studying the relationship between investment portfolio mix and the financial performance of insurance firms in Kenya. The methodology includes the research design, data collection methods which includes data collection instruments to be used and the way they were structured, and data analysis techniques to be employed in analyzing the quantitative data to be collected.

3.2 Research design

The study adopted a descriptive research design. According to Mugenda and Mugenda (1999), a descriptive research is a process of collecting data in order to answer questions concerning the status of the subjects in the study. Consequently, this type of research took the form of closed-end questions. This research design was appropriate for this study since it focused on the financial performance of insurance firms in relation to investment portfolio mix over a duration of time.

3.3 Target Population

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements and events, group of things or households that are being investigated. The target population of this study included all the insurance firms in Kenya. According to the Association of Kenya Insurers

(AKI) there were a total of fifty (50) insurance firms that have existed between 2014 and 2018. The 50 insurance firms between 2014 and 2018 formed the target population of the study.

3.4 Sample Size and Sampling Techniques

The study involved a causality relationship of several independent variables associated with investment portfolio mix and are perceived to have an effect on financial performance of insurance firms in Kenya. The sample size involved all the fifty (50) insurance firms that existed between 2014 and 2018. The main reason of involving all the 50 insurance firms is because the number is not huge and the data required was easily obtained from the audited financial statements.

3.5 Data Collection

The research involved use of secondary data that is in quantitative form. The secondary data was obtained from published financial statements of insurance firms. The data to be collected was for five years from 2014 to 2018. The data collected involved five variables: investment in Government securities, investments in real estate/investment properties, investment in bank deposits, investment in stocks and investment in corporate bonds.

3.6 Diagnostic Tests

Various diagnostic tests including the test for normality, heteroskedasticity and multicollinearity were undertaken. Normality was tested using Shapiro Wilk in order to test for normality. Breusch–Pagan test was done to test for heteroskedasticity. Multicollinearity was tested using Variance inflation factor.

3.7 Data Analysis

The data collected was subjected to multivariate regression analysis to establish the relationship between investment and the financial performance of insurance firms in Kenya. A regression model in the form of $\mathbf{Y= \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon}$ was used to depict the relationship between financial performance of insurance firms and portfolio investments.

Where:

Y= the financial performance which was measured using the return on assets,

α = the value of Y when X=0,

X_1 = Investment in Government securities,

X_2 = Investments in real estate,

X_3= Investment in bank deposits,

X_4= Investment in stocks

X_5= Investment in corporate bonds

β1-β5= Regression weights

ϵ = error term

Correlation analysis was done and a correlation matrix was obtained to show the relationship between the variables in the study. The findings were presented in tabular form. A t-test was conducted to determine the significance of the relationship between financial performance and investment portfolio. The collected data from the financial statements was coded and entered into SPSS 21 and the summarized using statistical methods that are descriptive such as the mean, standard deviation.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

Data analysis and presentation is done in this chapter. This study sought to determine the relationship between investment portfolio choice and financial performance of insurance firms in Kenya from 2014 to 2018.

4.2 Descriptive Statistics

Table 4.1: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Return on assets	250	-48.021	174.112	6.812	21.982
Investment in Government securities	250	21.646	54912.864	4203.104	8774.551
investments in real estate	250	.000	10534.000	1432.960	1955.390
investment in bank deposits	250	.000	7078.079	995.559	1238.679
investment in stocks	250	.000	8349.518	108.436	705.324
investment in corporate bonds	250	.000	2596.999	263.272	493.582
Valid N (listwise)	250				

The study sought to describe the data based on mean, standard deviation and other measures of central tendency. From the findings presented in table 4.1, return on assets showed a mean of 6.812% and a standard deviation of 21.982. Investment in government securities on the other hand displayed a mean of 4203.104 million shillings and a standard deviation of 8774.551. Investment in real estate averaged at 1432.960 million shillings with a standard deviation of 1955.390 between 2014 and 2018. Investment in bank deposits showed an average of 995.559 million shillings and a standard deviation of 1238.679.

Investment in stocks showed a mean of 108.436 million shillings and a standard deviation of 705.324. Investment in corporate bonds between 2014 and 2018 averaged at 263.272 million shillings with a standard deviation of 493.582. The variables showed a high standard deviation which indicates that the portfolio mix of insurance firms varied so much in the period between 2014 and 2018.

4.3 Diagnostic Tests

Table 4.2: Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Return on assets	.480	249	.001
Investment in Government securities	.960	249	.780
Investments in real estate	.997	249	.268
Investment in bank deposits	.998	249	.903
Investment in stocks	.989	249	.798
Investment in corporate bonds	.875	249	.319

The study sought to test for normality of the data used in the research. This was done using Shapiro-Wilk test. From the findings, Investment in Government securities, real estate, bank deposits, stocks and corporate bonds showed p-values above 0.05. Hence, we presume that the data values for the variables are normally distributed. However, return on assets, showed a significance value of less than 0.05. Hence, we presume that data for return on assets is not normally distributed.

Table 4.3: Heteroskedasticity Test

Breusch-Pagan test statistics and sig-values

Test	LM	Sig.
BP	4.324	.504

Null hypothesis: heteroskedasticity not present (homoskedasticity)
if sig-value less than 0.05, reject the null hypothesis

From the findings, the Breusch–Pagan test shows a $p>0.05$. This shows that the regression has not violated the assumption of homoscedasticity. Hence, we do not reject the null hypothesis that heteroskedasticity is not present in our data.

Table 4.4: Multicollinearity Test

Variable	Tolerance	VIF
Investment in Government securities	.706	1.416
Investments in real estate	.778	1.285
Investment in bank deposits	.676	1.480
Investment in stocks	.946	1.058
Investment in corporate bonds	.455	1.524

Multicollinearity was tested for the data used in the research. This was done using the variance inflation factor which quantifies how much the variance is inflated. The findings indicate that the VIF values were less than 2 with the tolerance values close to 0.95 an indication that the variance of the variables was inflated at a very low level. Hence multicollinearity is not a problem in the model data.

4.4 Correlation Analysis

Table 4.5: Correlation Analysis

		Return on assets	Investment in Government securities	Investment in real estate	Investment in bank deposits	Investment in stocks	Investment in corporate bonds
Return on assets	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	250					
Investment in Government securities	Pearson Correlation	.165**	1				
	Sig. (2-tailed)	.009					
	N	250	250				
Investment in real estate	Pearson Correlation	.179**	.370	1			
	Sig. (2-tailed)	.007	.430				
	N	250	250	250			
Investment in bank deposits	Pearson Correlation	.158*	.061	.158	1		
	Sig. (2-tailed)	.013	.336	.413			
	N	250	250	250	250		
Investment in stocks	Pearson Correlation	-.221	.091	.129	.130	1	
	Sig. (2-tailed)	.067	.110	.442	.339		
	N	250	250	250	250	250	
Investment in corporate bonds	Pearson Correlation	.137*	.611	.343	.372	.172	1
	Sig. (2-tailed)	.030	.032	.090	.281	.216	
	N	250	250	250	250	250	250

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The study sought to do a correlation analysis to establish the relationship between portfolio investment and financial performance of insurance firms. From the correlation table, investment in government securities displayed a positive relationship with return on assets as shown by

correlation coefficient of 0.165 significant at the 0.05 significance level. Investment in real estate showed a positive relationship with return on assets as shown by correlation coefficient of 0.179 significant at the 0.01 significance level. Further, investment in bank deposits showed a positive relationship with return on assets as shown by correlation coefficient of 0.158 significant at the 0.05 significance level. However, Investment in stocks showed an insignificant negative relationship with return on assets as shown by correlation coefficient of -0.221. Investment in corporate bonds showed a positive relationship with return on assets as shown by correlation coefficient of 0.137 significant at the 0.05 significance level.

4.5 Regression Analysis

Table 4.6: Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.719[a]	.516	.499	21.551730

a. Predictors: (Constant), investment in corporate bonds, investment in stocks, investments in real estate, investment in bank deposits, investment in Government securities
b. Dependent Variable: Return on assets

From the model summary, the findings showed an R squared value of 0.516. This shows that return on assets varied by 51.6% due to changes in investment in government securities, investment in real estate, investment in bank deposits, investment in stocks and investment in corporate bonds. 48.4% of the changes in return on assets can be accrued to other factors other than portfolio mix considered in the study.

Table 4.7: ANOVA

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7006.242	5	1401.248	3.017	.012[a]
	Residual	113332.400	244	464.477		
	Total	120338.642	249			

a. Predictors: (Constant), investment in corporate bonds, investment in stocks, investments in real estate, investment in bank deposits, investment in Government securities
b. Dependent Variable: Return on assets

From the Anova table, the findings show a calculated F value (3.017) which was higher than F critical (2.251) indicating that the model fits the data. The p-value (0.012) was also less than 0.05 indicating the model was significant.

Table 4.8: Regression Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	sig.
1	(Constant)	-13.493	6.135		-2.199	.029
	Investment in Government securities	.527	.185	.414	2.849	.005
	Investments in real estate	.434	.162	.342	2.679	.008
	Investment in bank deposits	.785	.288	.737	2.757	.006
	Investment in stocks	-.319	.232	-.375	-1.375	.170
	Investment in corporate bonds	.215	.057	.202	3.772	.000

a. Dependent Variable: Return on assets

The multiple regression equation:

$$Y= \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_4X_4 + \epsilon$$

was fitted into;

$$Y = -13.493 + 0.527X_1 + 0.434X_2 + 0.785X_3 - 0.319X_4 + 0.215X_5$$

From regression equation established from the regression table, the findings showed that holding investment in government securities, investment in real estate, investment in bank deposits, investment in stocks and investment in corporate bonds to a constant zero, the return on assets for the period between 204 and 2018 would stand at -13.493. A unit increase in investment in government securities would increase return on assets by 0.527. Increase in investment in real estate by a unit would increase return on assets by 0.434 while a unit rise in investment in bank deposits would reduce the return on assets by 0.785. However, a unit increase in investment in stocks decreases return on assets by 0.319. On the other hand, a unit increase in investment in corporate bonds would increase the return on assets by 0.215. All p values<0.05, except investment in stocks, showing that the variables had a significant effect on return on assets.

4.6 Discussions

The study found that portfolio investment (government securities, real estate, bank deposits, stocks and corporate bonds) had a relationship return on assets as a measure of performance. The findings are in line with those of Ismail (2013) who found that portfolio investment had a significant relationship with financial performance. The findings concurred with those of Njiiri (2015) who found that there was a correlation between investment (real estate and Government securities) and financial performance. If portfolio investment remained unchanged between 2014 and 2018, the insurance firms would experience negative return on assets, an indication that the investment is the main determinant of financial performance. Investment in real estate was found to be the most significant factor influencing return on assets of insurance firms in the period.

The study found that there was a significant positive relationship between investment in government securities and return on assets. The findings concur with those of Njiiri (2015) who found that a positive relationship existed. The findings however differed with those of Murungi (2013) who found a negative relationship with financial performance.

From the findings investment in real estate showed a significant weak positive relationship with return on assets. The findings concur with those of Murungi (2013) who found that investment in real estate had a positive relationship with financial performance. The findings differ with those of Loof and Heshmat (2008) who found a negative relationship.

Investment in bank deposits and return on assets displayed a significant but weak positive relationship with return on assets. Findings concurred with the findings of Njiiri (2015) and Murungi (2013) who found a positive relationship. However, the findings differed with those of Loof and Heshmat (2008) who found a negative relationship.

The study further established that there was a significant weak negative relationship between investment in stocks and return on assets. Findings concurred with the findings of Loof and Heshmat (2008) who found a negative relationship. However, the findings differed with those of Njiiri (2015) and Murungi (2013) who found that a positive relationship existed between the two.

The findings showed that investment in corporate bonds had a significant positive relationship with return on assets. Findings concurred with the findings of Njiiri (2015) and Murungi (2013) who found a positive relationship between the two variables. However, the findings differed with those of Loof and Heshmat (2008) who found a negative relationship.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter was based on the objective of the study. The conclusions and recommendation together with a summary of the findings were given in this section.

5.2 Summary

From the descriptive statistics, between 2014 and 2018, insurance firms displayed a mean return on assets of 6.812%. Investment in government securities averaged at 4203.104 million shillings. Investment in real estate averaged at 1432.960 million shillings, investment in bank deposits at 995.559 million shillings, investment in stocks at 108.436 million shillings and investment in corporate bonds at 263.272 million shillings. The variables showed a high standard deviation which indicates that the portfolio mix of insurance firms varied so much in the period between 2014 and 2018.

From the correlation analysis, investment in government securities, investment in real estate, investment in bank deposits and investment in corporate bonds showed a weak positive relationship with return on assets. However, investment in stocks showed a weak negative relationship with return on assets. The weak relationship was shown by the absolute correlation coefficients that were less than 0.5. The relationships were significant at the 95% confidence level.

From the model summary, there was variation of 51.6% on return on assets due to changes in investment in government securities, investment in real estate, investment in bank deposits,

investment in stocks and investment in corporate bonds at 95% confidence interval. The effect was found to be significant as the value of the p-value was below 0.05. From the Anova table, the calculated F value was found to be higher than the critical with the level of significance an indication that the model was significant. The influence of investment in government securities, investment in real estate, investment in bank deposits, investment in stocks and investment in corporate bonds on the changes in the return on assets existed and was significant.

From regression equation established from the regression table, the findings showed that holding investment in government securities, investment in real estate, investment in bank deposits, investment in stocks and investment in corporate bonds to a constant zero, the return on assets for the period between 204 and 2018 would be negative. An increase in investment in government securities, investment in real estate, investment in bank deposits and investment in corporate bonds led to an increase in the return on assets. However, the findings indicate that return on assets decreased by small proportion due to increase in investment in stocks. The effect of investment variables was significant except for investment in stocks.

5.3 Conclusions

From the regression analysis, the study concludes that investment portfolio choice (government securities, real estate, bank deposits, stocks and corporate bonds) influence financial performance of insurance firms in Kenya. The study concludes that investment in government securities affects the financial performance of insurance firms in Kenya. The study further concludes that investment in government securities has a significant positive relationship with financial performance of insurance firms in Kenya. This is an indication that if insurance firms in Kenya invest in government securities, they would experience improved financial performance.

The study concludes that investment in real estate has a significant effect on financial performance of insurance firms in Kenya through return on assets. The study further concludes that investment in real estate has a significant positive relationship with financial performance of insurance firms in Kenya. This is an indication that when insurance firms in Kenya invest in real estate, they experience improved financial performance.

The study concludes that investment in bank deposits has a significant effect on financial performance of insurance firms in Kenya. The study further concludes that investment in bank deposits has a positive relationship with financial performance of insurance firms in Kenya. This means that if insurance firms in Kenya increased investment in bank deposits, their financial performance would improve through increased return on assets.

The study concludes that investment in stocks insignificantly affects financial performance of insurance firms in Kenya. Investment in stocks has an insignificant negative relationship with financial performance of insurance firms in Kenya. This means that if insurance firms increase their investment in stocks, the change in their financial performance would be insignificant.

The study concludes that investment in corporate bonds has a significant effect on financial performance of insurance firms in Kenya. Investment in corporate bonds has a significant positive relationship with financial performance of insurance firms in Kenya. This means that if insurance firms in Kenya increased their investment in corporate bonds, their financial performance would improve through increased return on assets.

5.4 Recommendations

The study found that investment portfolio choice contributed to more than 50% of the change in return on assets as a measure of financial performance. This shows that insurance firms are involved in various investment portfolios which in turn affect their financial performance. This leads to the recommendation that policy makers come up with policies that support the investment efforts made by the insurance firms in Kenya in order to enhance their financial performance.

The study found that financial performance of insurance firms in Kenya is significantly and positively influenced by investment in government securities, investment in real estate, investment in deposits and investment in corporate bonds. The researcher therefore recommends that the management of insurance firms in Kenya should emphasize on investing in government securities, real estate, deposits and corporate bonds to ensure that they enhance the financial performance of their firms in financial terms.

The study found that investment in stocks had an insignificantly negative relationship with affect the financial performance of insurance firms in Kenya. There is a need for the insurance firms to reduce the level of investment in stocks as this may negatively affect the financial performance and lead to reduced returns on their assets.

5.5 Limitations of the Study

The study faced a limitation where the firms were reluctant to provide data required for the study. They were worried that the information provided may be used for other purposes other than academic purposes. To assure the firms, the researcher carried with her a data collection letter to assure them that the information was for academic purposes only.

The study also faced financial limitation where the researcher had limited funds to facilitate comprehensive data collection and analysis. However, the researcher used industry consolidated data to allow generalization of the findings.

The study was limited by the variables of the study. The study only used one measure of performance - Return on Assets. Other ratios like return on investment and return on invested capital can also be used to measure financial performance. The study focused on insurance firms despite the fact that there are other financial institutions with different portfolio choice. The findings therefore were limited to insurance firms and not the various forms of financial institutions in Kenya.

5.6 Area for Further Research

The study was done on the relationship between investment portfolio choice and financial performance of insurance firms in Kenya between 2014 and 2018. The study recommends a similar study over a longer period in order to compare the results. The study established that the variables considered in the study contributed to 51.6% of the change in financial performance. The researcher recommends a study on other factors influencing financial performance measured by other ratios like return on invested capital.

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APPENDICES

Appendix I: List of Insurance Firms in Kenya (2014-2018)

1. AAR INSURANCE KENYA
2. AFRICAN MERCHANT ASSURANCE COMPANY
3. AIG INSURANCE COMPANY
4. APA INSURANCE COMPANY
5. APA LIFE ASSURANCE COMPANY
6. BRITAM GENERAL INSURANCE COMPANY (K) LIMITED
7. CAPEX LIFE ASSURANCE COMPANY
8. CIC GENERAL INSURANCE COMPANY
9. CIC LIFE ASSURANCE COMPANY
10. CONTINENTAL REINSURANCE PLC
11. CORPORATE INSURANCE COMPANY
12. DIRECTLINE ASSURANCE COMPANY
13. EAST AFRICA REINSURANCE COMPANY
14. FIDELITY SHIELD INSURANCE COMPANY
15. FIRST ASSURANCE COMPANY
16. GA GENERAL INSURANCE COMPANY
17. GA LIFE ASSURANCE LIMITED
18. GEMINIA INSURANCE COMPANY LIMITED
19. HERITAGE INSURANCE COMPANY
20. ICEA LION GENERAL INSURANCE COMPANY
21. ICEA LION LIFE ASSURANCE COMPANY
22. INTRA-AFRICA ASSURANCE COMPANY
23. INVESCO ASSURANCE COMPANY
24. JUBILEE INSURANCE COMPANY
25. KENINDIA ASSURANCE COMPANY
26. KENYA ORIENT INSURANCE COMPANY

27. KENYA ORIENT LIFE ASSURANCE
28. KENYA REINSURANCE CORPORATION
29. KENYAN ALLIANCE INSURANCE COMPANY
30. LIBERTY LIFE ASSURANCE KENYA
31. MADISON INSURANCE COMPANY
32. MAYFAIR INSURANCE COMPANY
33. METROPOLITAN LIFE ASSURANCE
34. MONARCH INSURANCE COMPANY
35. MUA INSURANCE COMPANY LIMITED
36. OCCIDENTAL INSURANCE COMPANY
37. OLD MUTUAL ASSURANCE COMPANY
38. PACIS INSURANCE COMPANY
39. PIONEER ASSURANCE COMPANY
40. PRUDENTIAL LIFE ASSURANCE
41. RESOLUTION HEALTH INSURANCE COMPANY
42. SAHAM INSURANCE COMPANY
43. SANLAM GENERAL INSURANCE COMPANY LIMITED
44. SANLAM LIFE INSURANCE COMPANY
45. TAKAFUL INSURANCE OF AFRICA
46. TAUSI ASSURANCE COMPANY
47. TRIDENT INSURANCE COMPANY
48. UAP INSURANCE COMPANY
49. UAP LIFE ASSURANCE COMPANY
50. XPLICO INSURANCE COMPANY

Appendix II: Data Collection sheet

Year	Investment					Total assets	Net income
	Government Securities	Property	Deposits	Stocks	Corporate Bonds		
	shs.	shs.	shs.	shs.	shs.	shs.	Shs.
2014							
2015							
2016							
2017							
2018							

Appendix III: Data

Firm	Year	Investment						
		Government Securities	Property	Deposits	Stocks	Corporate Bonds	Total assets	net income
		shs. M.	shs. M.	shs. M.	shs. M.	shs. M.	shs. M.	shs. M.
AAR INSURANCE KENYA	2014	332.491	0	1256.771	0	0	3488.277	84.03
	2015	605.408	0	1090.143	0	108.977	3115.511	-505.794
	2016	1223	0	2013.412	0	107.595	5160.166	218.245
	2017	1258.329	0	792.967	0	107.633	3587.325	-342.483
	2018	1366.924	0	608.649	0	108.981	5337.845	-252.547
AFRICAN MERCHANT ASSURANCE	2014	212	497.5	1011.721	0	27.309	39664.15	103.346
	2015	368.711	510	1377.416	0	21.843	3637.271	421.637
	2016	490.086	525	541.378	0	16.362	3969.134	-37.444
	2017	502.551	530	617.741	0	11.012	3874.326	-17.414
	2018	507.375	535	378.822	0	0	3333.852	39.599
AIG INSURANCE COMPANY	2014	2163.262	600	347.379	0	0	1777.661	694.694
	2015	2424.458	600	0.956	0	0	4174.707	1288.723
	2016	2619.527	510	204.762	0	0	4206.384	202.855
	2017	2995.295	510	1.101	0	0	4721.822	416.855
	2018	3248.307	0	380.786	0	0	70659.59	377.754
APA INSURANCE COMPANY	2014	3332.467	943	2022.474	0	19.141	445.801	776.193
	2015	4449.241	1160	2048.194	0	15.313	13676.99	2879.216
	2016	6548.144	1225	990.747	0	280.278	14327.71	649.577
	2017	7332.33	1313	633.241	25.516	361.573	14179.67	659.764
	2018	5768.374	1000	2015.421	27.687	327.354	12185.53	510.85
APA LIFE	2014	991.009	360	714.276	33.846	92.03	6706.712	44.196
	2015	1260.768	295	913.271	32.74	92.127	3670.729	-12.54
	2016	2403.059	313	448.09	15.209	92.13	3979.418	18.558
	2017	3276.18	273	398.038	41.017	92.163	4682.761	-45.016
	2018	3316.403	155	1012.72	38.91	70.514	707.89	-66.752
BRITAM INSURANCE COMPANY	2014	11203.23	4842.314	2508.428	0	1397.713	2866.732	2187.821
	2015	16409.69	3725.907	1912.361	0	1320.343	54919.28	-200.892
	2016	13928.73	4008.762	2239.416	6908.253	1450.295	71801.84	3340.961
	2017	20938.99	4578.915	2313.02	8349.518	1218.485	73772.99	970.108
	2018	38040.37	6392.954	1134.441	0	944.195	2540.465	-1219.95
CAPEX LIFE	2016	21.646	429.985	0	0	0	471.636	2.552
	2015	63.646	394.785	0	0	0	478.684	2.447
	2014	61.646	365	0	0	2.009	1772.073	-1.771
	2017	85.6	501.5	38	0	0	668.357	-12.797
	2018	163.093	512	33	0	0	7799.537	-13.783
	2014	1196.066	1320	2486.306	413.691	0	566.706	603.35

CIC GENERAL INSURANCE COMPANY	2015	1272.494	1440	2243.63	315.165	0	10798.05	1905.501
	2016	2110.12	1536	1326.44	510.94	235.828	11982.28	-0.279
	2017	2738.823	1588	1873.853	269.668	235.15	11458.8	271.875
	2018	2249.307	1602	2380.461	185.819	160.203	1677.706	380.29
CIC LIFE	2014	1270.643	1676	1488.938	633.625	58.268	45443.98	239.82
	2015	1812.577	1945	835.142	639.841	313.253	7458.395	184.14
	2016	2622.211	2100	552.087	525.67	324.721	8352.836	675.745
	2017	3528.143	2160.875	789.725	598.599	376.394	10285.06	80
	2018	5204.527	2181.875	980.533	517.53	300.363	80063.88	80
CONTINENTAL INSURANCE COMPANY	2014	282.571	0	513.417	0	78.263	59833.05	80.076
	2015	472.049	0	478.172	0	107.276	1819.813	141.477
	2016	762.976	0	251.419	0	92.631	1966.822	240.326
	2017	978.278	0	436.517	0	28.262	7410.529	0.076
	2018	113.709	832.5	10.027	0	0	10369.17	-59.819
CORPORATE INSURANCE COMPANY	2014	249.9	965	437.806	1.237	0	6211.67	162.969
	2015	332.039	1104	417.582	0	0	2273.206	472.672
	2016	333.9	1153	346.59	0	0	2243.436	125.897
	2017	316.752	1183.5	304.69	0	0	2540.918	30.143
	2018	152.389	385	308.444	0	0	106949.4	136.483
DIRECTLINE ASSURANCE COMPANY	2014	915.977	294	1484.752	0	0	22838.45	380.723
	2015	1010.633	1185.4	1437.365	0	0	5137.968	408.992
	2016	972.055	2066.55	312.35	0	0	5176.081	145.432
	2017	800.175	1332	405.429	0	0	1371.809	119.673
	2018	830.371	1692.606	1059.78	0	0	23702.94	-87.053
EAST AFRICA REINSURANCE COMPANY	2014	671.326	735.809	2613.611	0	431.235	6811.009	219.323
	2015	1419.256	765	2460.477	0	421.115	6864.533	325.248
	2016	2354.747	780	1916.415	0	411.093	7215.829	465.558
	2017	3244.182	800	1328.228	0	621.214	16199.53	601.567
	2018	293.47	82	60.167	0	0	13995.2	57.008
FIDELITY SHIELD INSURANCE	2014	195.992	795.411	332.465	0	0	14535.81	149.8
	2015	233.628	1275.795	181.873	0	0	2887.954	492.459
	2016	234.751	1121.766	150.465	0	0	2763.526	60.631
	2017	418.781	1126.883	282.356	0	0	6178.88	17.251
	2018	588.539	1015.883	269.157	0	0	15125.13	615.549
FIRST ASSURANCE COMPANY	2014	491.976	1510	1607.847	0	76.792	22045.66	22030.74
	2015	878.096	1402.5	1666.146	0	66.481	5499.377	1147.102
	2016	1043.403	1462.5	1412.733	0	56.229	5569.478	-96.552
	2017	1595.258	1488	307.585	0	46.278	7719.19	-71.495
	2018	1253.518	1450	291.944	0	29.467	8525.561	-213.134
	2014	777.845	1273.29	1087.507	0	309.35	1036.911	444.89
	2016	2050.772	1396.07	756.893	0	269.515	8547.646	540.983

GA GENERAL INSURANCE COMPANY	2017	2702.735	1390.757	718.747	0	291.937	3098.905	784.887
	2018	3055.485	1554	829.751	0	261.885	1069.436	943.592
	2015	1373.278	1380.843	808.614	0	291.502	7887.026	890.806
GA LIFE ASSURANCE LIMITED	2014	720.976	205.6	662.371	0	129.315	1031.556	5.217
	2015	1306.18	797.368	234.326	0	143.611	2532.828	4.3
	2016	2601.103	1030.992	271.924	0	143.669	4121.253	3.765
	2017	4303.353	1107.574	82.484	0	180.326	1662.291	30.56
	2018	5957.572	1353.629	67.236	0	158.092	24166.47	40.295
GEMINIA INSURANCE COMPANY	2014	656.9	721	1361.409	0	28.05	1092.714	88.023
	2015	720.5	973	1213.287	0	27.3	4253.468	552.169
	2016	1324	973	1188.757	0	26.55	4995.396	438.314
	2017	1475	973	1380.228	0	25.8	5157.461	270.118
	2018	4229.952	1012	3179.77	0	122.622	3451.45	231.499
HERITAGE INSURANCE COMPANY	2014	1263.92	120	1119.423	0	263.375	8573.352	514.138
	2015	1432.563	145	1062.602	0	192.349	5450.249	1569.588
	2016	2662.602	14.563	820.653	0	190.77	5937.023	498.194
	2017	3279.797	0	742.381	0	175.124	9642.192	577.09
	2018	3133.24	0	2028.023	0	98.322	11264.42	380.647
ICEA LION GENERAL INSURANCE	2014	2955.33	2355	250.433	0	282.99	2728.926	583.217
	2015	3013.764	2590	374.644	0	303.802	8850.161	2233.774
	2016	4100.655	2640	270.223	41.647	264.948	9697.446	313.149
	2017	4642.316	2730	210.452	44.7	259.896	5038.861	801.847
	2018	4427.685	2750	176.772	47.615	232.922	3816.009	442.59
ICEA LION LIFE ASSURANCE COMPANY	2014	24052.24	10000.12	1801.861	0	1463.086	2661.151	443.12
	2015	28647.5	9104.75	3677.967	0	1534.531	50473.79	306.329
	2016	36993.98	9882.477	1926.28	0	1194.239	57153.81	575.542
	2017	46471.88	10276	3099.594	0	1429.498	5989.797	410.021
	2018	54912.86	10534	3651.925	0	1419.466	3392.297	427.237
INTRA-AFRICA ASSURANCE COMPANY	2014	230.2	270	197.302	0	0	4055.129	14.548
	2015	222.45	288.66	280.224	0	0	1687.231	37.608
	2016	227.146	294.26	263.904	0	0	1754.207	26.885
	2017	238.135	301.2	248.746	0	0	7303.808	32.24
	2018	229.233	313.43	293.921	0	0	5121.145	25.409
INVESCO ASSURANCE COMPANY	2014	182	1178.48	245.969	0	0	12388.11	-96.221
	2015	189	1178.48	315.442	0	0	3118.667	-1307.02
	2016	176	1178.48	165.86	0	0	3103.786	-15.05
	2017	177	1423.48	88.394	0	0	10226.44	-174.148
	2018	174	1423.48	58.664	0	0	1340.926	-93.254
JUBILEE INSURANCE COMPANY	2014	20809.64	3577	6552.032	0	1686.706	7597.414	1599.873
	2015	27326.31	3930	7078.079	0	1854.524	60030.05	3282.883
	2016	36273.35	4180	4896.713	0	1422.26	66339.52	1986.722

	2017	44125.63	4378.402	5647.887	0	904.007	2938.624	2009.967
	2018	51358.15	4458	5629.582	0	841.398	23591.05	2109.695
KENINDIA ASSURANCE COMPANY	2014	17188.22	2415.413	1650.026	0	0	12010.1	-137.038
	2015	20662.11	2640.628	3178.228	0	0	32149.77	957.868
	2016	24526.34	2825.47	1016.663	0	105.56	33837.45	274.948
	2017	28979.1	3106.204	859.248	0	105.56	73170.38	245.174
	2018	32872.25	3281.192	705.552	0	105.05	13712.14	360.016
KENYA ORIENT INSURANCE COMPANY	2014	174.58	413.302	116.725	0	5.247	1279.649	89.116
	2015	171.288	429.152	109.303	0	5.248	2937.442	71.569
	2016	170.453	429.152	68.293	0	5.252	3018.299	55.071
	2017	149.024	533.823	57.854	0	5.254	13087.43	15.273
	2018	151.38	358.323	93.835	0	5.258	1367.755	-90.264
KENYA ORIENT LIFE ASSURANCE	2014	32.102	0	123.206	0	19.045	4319.606	-56.066
	2015	120.143	0	210.953	0	32.122	477.712	36.69
	2016	157.121	0	130.555	0	32.387	554.218	33.077
	2017	350.275	0	79.004	0	24.125	63419.02	5.625
	2018	451.206	175	53.151	0	24.447	5566.87	-4.275
KENYA REINSURANCE CORPORATION	2014	7712.401	7195	6507.244	0	419.134	7780.392	979.459
	2015	9186.523	8025	5881.609	0	494.146	35572.2	3433.619
	2016	11721.28	8903	3951.416	0	487.923	38031.45	3378.602
	2017	14562.84	9622	3092.508	0	482.696	13291.65	3767.291
	2018	2774.942	1850	4345.32	0	24.447	10196.3	2209.705
KENYAN ALLIANCE INSURANCE	2014	250.1	1389.849	1297.938	0	75.65	1951.444	96.376
	2015	270.234	1555.849	1669.068	0	83.175	4628.578	1025.843
	2016	717.562	1260.849	1615.673	0	84.172	5698.653	36.417
	2017	644.946	1764.849	1672.948	0	80.126	3958.349	201.8
	2018	612.811	2306.849	1325.626	0	10.493	4701.026	-217.877
LIBERTY LIFE ASSURANCE	2014	9533.811	1015	3550.158	451.775	2085.33	4617.959	584.828
	2015	9979.621	1144.5	4568.465	0	2301.319	23495.8	437.448
	2016	12335.02	1049	2876.83	0	2122.209	23463.17	201.574
	2017	13722.11	1066.5	1214.386	0	1629.501	30429.33	391.414
	2018	12641.88	1081.555	2454.944	0	1010.285	4672.741	117.842
MADISON INSURANCE COMPANY	2014	1051.098	3057	477.981	30.513	72.992	9344.341	219.613
	2015	1553.451	4542	764.105	53.768	108.052	10436.61	892.511
	2016	2536.826	5250	429.673	32.914	171.907	12695.26	135.366
	2017	3236.083	5453.394	676.697	116.215	149.732	8551.323	-4.393
	2018	4037.501	6444	1570.354	74.918	96.068	16153.87	-617.388
MAYFAIR INSURANCE COMPANY	2014	334.893	389.357	676.56	0	112.164	3066.447	257.701
	2015	429.352	404.913	763.718	0	129.477	3649.385	513.214
	2016	430.268	434.974	1039.416	0	111.38	3995.652	285.123
	2017	730.458	460.458	1062.042	0	98.895	2461.968	270.516

	2018	1039.62	426.088	1165.633	0	52.493	1261.796	361.826
METROPOLITAN CANNON ASSURANCE	2014	1003.432	1114.5	291.921	0	139.947	6292.617	18.759
	2015	975.832	1076.5	293.105	0	165.003	4854.484	309.315
	2016	1499.556	1092.7	214.166	0	153.549	5081.517	-477.749
	2017	1827.772	1031	321.841	0	91.676	10522.28	-349.618
	2018	1914.153	1097	536.339	0	70.032	17186.32	100.07
MONARCH INSURANCE COMPANY	2014	184.59	556.9	44.369	0	0	4761.217	132.251
	2015	211.997	643.857	5.393	0	0	1582.302	40.666
	2016	214.508	689.5	58.334	0	0	1832.284	3.246
	2017	144.304	758.45	126.331	0	0	26356.26	53.964
	2018	173.002	1027.88	371.861	0	0	5322.228	106.738
MUA INSURANCE COMPANY	2014	138.5	0	955.009	0	0	5830.082	779.087
	2015	258	0	656.819	0	0	2014.337	1122.007
	2016	517.5	0	51.021	0	0	1557.918	-396.633
	2017	576.849	0	81.57	0	0	33876.73	93.411
	2018	516.456	0	173.132	0	0	1904.071	-97.142
OCCIDENTAL INSURANCE COMPANY	2014	640.758	440	394.707	0	18.574	8723.577	243.695
	2015	650.593	441.683	475.477	0	34.864	2580.025	487.724
	2016	1056.675	491	171	0	11.183	2877.504	137.369
	2017	1201.394	531	135.022	0	14.675	24494.82	-28.767
	2018	1376.751	540	112.781	0	10.963	3283.957	244.879
OLD MUTUAL ASSURANCE COMPANY	2014	3816.393	891	2948.135	17.457	438.06	1513.125	-84.571
	2015	3887.247	950	993.784	18.642	803.062	13887.27	229.048
	2016	3434.187	980	2686.982	19.888	732.005	13436.67	-1460.63
	2017	4989.633	2270	1295.279	20.904	597.279	3980.866	43.926
	2018	4342.14	2271.038	2167.387	21.957	359.255	13744.08	451.04
PACIS INSURANCE COMPANY	2014	151.57	672	68.215	0	0	3108.232	120.108
	2015	145.57	709	45.087	0	0	1742.179	296.979
	2016	156.955	730	28.101	0	0	2054.233	44.306
	2017	224.955	730	111.72	0	0	4534.689	-14.867
	2018	240.7	730	129.215	0	0	8108.844	65.31
PIONEER ASSURANCE COMPANY	2014	294.258	601.647	583.54	0	1.213	2747.508	263.376
	2015	447.126	875.059	996.954	0	1.283	3148.383	156.369
	2016	646.631	1152.347	1759.503	0	1.456	5166.954	172.193
	2017	323.143	1241.847	1408.481	0	1.875	13748.68	37.738
	2018	536.254	1411.5	1120.518	0	0	36299.21	-66.453
PRUDENTIAL LIFE ASSURANCE	2014	46.983	0	0	0	0	26243.01	-39.762
	2015	252.431	0	0	0	0	840.045	-263.807
	2016	248.449	0	331.728	0	0	923.443	-376.495
	2017	1093.221	0	59.757	0	0	2733.57	-326.074
	2018	1156.659	0	105.052	0	0	4648.404	-257.417

RESOLUTION INSURANCE COMPANY	2014	145.859	0	413.1	0	0	3146.583	-100.319
	2015	130.366	0	429.893	0	0	1473.705	-143.623
	2016	372.559	0	569.34	0	0	4470.29	-424.888
	2017	254.081	0	352.306	0	0	2313.109	-525.42
	2018	133.018	0	677.808	0	0	5138.754	-357.885
SAHAM INSURANCE COMPANY	2014	462.891	74	916.681	0	183.783	4081.841	16.97
	2015	734.215	76	920.107	0	142.889	2202.131	138.56
	2016	1109.311	80	624.01	0	119.75	2551.098	46.208
	2017	1335.834	75	755.405	0	142.362	16178.71	78.489
	2018	1331.228	75	617.899	0	118.315	3750.214	95.652
SANLAM GENERAL INSURANCE	2014	10807.46	1007	2222.916	1210.328	1086.562	0	20.132
	2015	11600.07	2674.799	2523.436	572.762	2480.348	2041.474	-113.709
	2016	224.8	516.7	154.759	0	15	1253.455	49.705
	2017	388.91	1056.7	78.21	0	20	5288.954	560.253
	2018	793.7	516.7	272.421	0	14.746	3565.535	115.665
SANLAM LIFE	2014	234.5	1034	124.984	0	15	12393.94	374.346
	2015	258	0	656.819	0	0	22809.25	204.211
	2016	12269.86	2244.5	1663.895	530.478	2228.617	26522.23	375.442
	2017	12190.87	2409	426.463	1734.972	2596.999	1046.355	68.839
	2018	14322.9	2924	364.404	1280.221	1254.774	2189.128	0
TAKAFUL INSURANCE OF AFRICA	2014	31.969	0	344.107	55	0	5216.903	-3.102
	2015	85.026	21.1	262.384	0	80.869	1422.331	-142.426
	2016	87.075	21.1	649.031	0	85.153	1704.209	122.961
	2017	85.978	21.1	458.37	0	85.153	4749.367	-105.96
	2018	85.439	21.1	114.679	0	83.39	5805.798	-314.967
TAUSI ASSURANCE COMPANY	2014	583.346	0	333.12	36.126	0	2497.932	133.31
	2015	800.034	0	256.677	28.893	0	1874.085	262.268
	2016	1009.123	0	214.605	0	0	1984.621	171.609
	2017	977.883	0	363.281	0	0	1944.065	248.936
	2018	1156.598	0	512.004	0	7.012	1840.319	252.727
TRIDENT INSURANCE COMPANY	2014	289.45	1345.399	25	19.562	27.5	886.734	142.409
	2015	253.549	1716.399	10.905	17.155	25	4011.187	1347.197
	2016	249.061	1716.399	61.427	16.955	23.75	4259.595	-20.657
	2017	239.061	1716.399	98.589	20.193	20	2247.186	-142.281
	2018	236.561	1716.399	154.066	19.8	20	1781.929	-256.867
UAP INSURANCE COMPANY	2014	1926.009	3450	248.818	0	468.141	3911.965	854.569
	2015	2715.04	3582.7	688.896	0	579.19	14519.16	5000.602
	2016	3399.986	3636.7	1285.487	0	807.724	16055.83	621.494
	2017	3842.735	3711.7	729.959	0	715.752	3124.977	969.215
	2018	3893.614	3713.4	0	0	479.054	4177.896	171.615
	2014	3237.379	880	224.594	0	826.552	14702.21	0

UAP LIFE ASSURANCE COMPANY	2015	3820.747	900	1056.017	0	850.625	9823.482	-268.047
	2016	5971.192	920	350.261	0	961.135	10818.3	23.681
	2017	5508.592	930	945.589	0	822.029	286.574	470.054
	2018	6466.578	840	339.676	0	638.676	14583.59	175.784
XPLICO INSURANCE COMPANY	2014	90	0	334.281	103	0	1261.838	-16.22
	2015	80	19.2	301.785	103	0	2049.05	55.615
	2016	80	0	214.108	103	0	2092.379	-12.943
	2017	86.7	657.3	214.108	103	0	1458.41	52.717
	2018	126.4	674.4	859.373	77.25	0	2412.103	-78.051