

**THE EFFECT OF MACROECONOMIC FACTORS ON FINANCIAL
PERFORMANCE OF INSURANCE FIRMS IN KENYA**

BY

FAITH NYAMU

**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL
OF BUSINESS, UNIVERSITY OF NAIROBI**

2016

DECLARATION

This research project is my original work and has not been presented for a degree at any other university for examination.

Signature _____

Date _____

Faith Nyamu

D63/72887/2014

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

Signature _____

Date _____

Dr. Kennedy Okiro

Lecturer, Department of Finance and Accounting

School of Business

University of Nairobi

ACKNOWLEDGEMENTS

My dedication of the research project to my family. Their support and encouragement
Impelled to achieve my goal.

DEDICATION

This research project would not have been a success without the support and contribution of a number of people, who immeasurably contributed towards my ultimate goal.

I candidly give my gratitude to my project supervisor Dr.Kennedy Okiro, Lecturer department of finance and Accounting for his selfless dedication, guidance and encouragement towards the conclusion of the project.

I would also wish to acknowledge the contribution of the rest of the university of Nairobi fraternity especially the MSC coordination office and moderators to the success of this project.

I also wish to thank my family and close friends, for their moral support and encouragement towards the achievement of my goal and for understanding during the project period. I would not have made it this far without their prayers and cooperation.

Most important I wish to extend my gratefulness to the Almighty God for providing me with good health, strength and knowledge that helped me make this project a success.

TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGEMENTS	iii
DEDICATION.....	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF ABBREVIATIONS	ix
ABSTRACT.....	x
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Macroeconomic Factors	2
1.1.2 Financial Performance.....	3
1.1.3 Macro Economic Factors and Financial Performance	4
1.1.4 Insurance Firms in Kenya.....	5
1.2 Research Problem	6
1.3 Research Objective.....	8
1.4 Value of the Study.....	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.1 Introduction	9
2.2 Theoretical Literature Review	9
2.2.1 Arbitrage Pricing Theory.....	9
2.2.2 Modern Portfolio Theory.....	10
2.2.3 Intertemporal Capital Asset Pricing Model	11
2.3 Determinants of Financial Performance.....	11
2.3.1 Liquidity.....	11
2.3.2 Underwriting Risk.....	12

2.3.3 Size of the Firm	12
2.4 Empirical Literature Review	13
2.5 Conceptual Framework	17
2.6 Summary of the Literature Review.....	17
CHAPTER THREE	18
RESEARCH METHODOLOGY	18
3.1 Introduction	18
3.2 Research Design	18
3.3 Population of the Study.....	18
3.4 Data Collection	18
3.5 Data Analysis.....	19
3.5.1 Analytical Model.....	19
3.5.2 Test of Significance.....	19
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION	21
4.1 Introduction	21
4.2 Descriptive Statistics	21
4.3 Correlation Analysis	21
4.4 Regression Analysis	22
4.5 Interpretation of the Finding.....	24
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS ..	26
5.1 Introduction	26
5.2 Summary	26
5.3 Conclusion.....	27
5.4 Recommendations	27
5.5 Limitations of the study	28
5.6 Suggestions for Further Research	28
REFERENCES.....	29
APPENDICES	35
Appendix I: List of Insurance Firms in Kenya	35

LIST OF TABLES

Table 4.1 Descriptive Summary Statistics	21
Table 4.2 Correlation Matrix	22
Table 4.3: Model Summary	22
Table 4.4 Analysis of Variance (ANOVA).....	23
Table 4.5 Regression Coefficients	23

LIST OF FIGURES

Figure 2.1 Conceptual Framework	17
---------------------------------------	----

LIST OF ABBREVIATIONS

APT	- Arbitrage Pricing Theory
CAPM	- Capital Assets Pricing Model
COMESA	- Common Market For Eastern and Southern Africa
EAC	- East Africa Community
EM	- Equity Multiplier
GDP	- Gross Domestic Product
ICAPM	- Intertemporal Capital Assets Pricing Model
ICT	- Information Communication Technology
IRA	- Insurance Regulatory Authority
IT	- Information Technology
M3	- Broad Money Supply
MPT	- Modern Portfolio Theory
ROA	- Return on Assets
ROE	- Return on Equity
SADC	- Southern Africa Development Community

ABSTRACT

The insurance industry in particular is part of immune and repair system of an economy and successful operation of the industry can set energy for other industries and development of an economy. However, insurance companies are always caught in a dilemma of crunching profit coming from underwriting and investment when the investment environment is changing and adversely pressing the interests of shareholders and might be having trouble in off-setting the obligations. The aim of this study was to investigate the effect of macroeconomic factors on financial performance of insurance firms in Kenya. This study employed a descriptive research design and the population of the study comprised of the 50 Insurance firms in Kenya as at 31.12.2015. The study used secondary data. Secondary data on macro economic factors was obtained from the Central Bank of Kenya and the Kenya National Bureau of Statistics. Secondary data on financial performance was obtained from the firm's annual financial reports i.e. statement of income and the statement of financial positions. The data covered a period of 10 years from 2006 to 2015. The multiple linear regression and correlation was used to analyze data for the study using the Statistical Package for Social Sciences. The study found that an insignificant positive relationship between financial performance of insurance firms and GDP growth rate and inflation and an insignificant negative relationship between financial performance of insurance firms and lending rates, exchange rates and money supply. The study concluded that there is direct relationship between economic growth, inflation and an inverse relationship between lending rates, exchange rates and money supply and financial performance of insurance firms in Kenya. The study recommended that the government and through line ministries of finance and planning should undertake measures to ensure good performance of the economy. The study also recommended that the central banks should undertaken effective mechanisms to ensure that inflations rate, lending rates, exchange rates and money supply do not have adverse effects on financial performance of firms.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Insurance companies like banks provide financial intermediation by facilitating the flow of funds from surplus spending units to deficit spending units through the process of issuing insurance cover to policyholders and investing the premium generated in productive sectors (Gatsi & Gadzo, 2013). The financial performance of the insurance companies plays a pivotal role in the growth of the industry as a whole, which ultimately contributes to the success of an economy. The insurance companies endanger their financial performance by assuming different types of risks (Wani & Showket, 2015). The financial performance of insurance companies can be analyzed at micro and macroeconomic level, being determined by both internal factors represented by specific characteristics of the company, and external factors regarding connected institutions and macroeconomic environment (Burca & Batrinca, 2014).

Theoretically, a more efficient insurance company should have growth in profits since it is able to maximize on its net premiums and net underwriting incomes (Akotey, Sackey, Amoah & Manso, 2013). The multifactor arbitrage-pricing model presupposes that many macroeconomic factors are involved in the determination of risk and return relationship hence the performance of a firm (Saeed & Akhter, 2012). The modern portfolio theory suggests that investors can improve their financial performance of their firms by allocating their investments into different classes of financial securities and industrial sectors that are not expected to react similarly if new information emerges (Suheyli, 2015). Thus, the financial performance of insurance companies is also relevant within the macroeconomic context since the insurance industry is one of the financial system' components, fostering economic growth and stability (Wani & Showket, 2015).

The insurance industry plays a significant role in the growth and development of the financial services sector in Kenya. The insurance sector is identified in the Vision 2030 as critical in the transformation of Kenya under the economic pillar (Oino, Osiemo & Kuloba,

2012). The main players in the Kenyan insurance industry are insurance companies, reinsurance companies, intermediaries such as insurance brokers and insurance agents, risk managers or loss adjusters and other service providers (Kiragu, 2014). The industry has experienced financial innovation whereby a broad range of services and products have been created, ranging from investment products to life insurance (Ndal, 2016).

1.1.1 Macroeconomic Factors

Macro-economic variables are the external variable, which the management is not able to control. Macroeconomic indicators are factors that are outside the company, but have influence on the increase or decrease the company performance directly or indirectly (Nurlaily et al., 2013). Macro economic factors include economic growth, interest rates, exchange rates, money supply and inflation. Economic growth is a measure of aggregate economic progress at a national level. It reflects the process of the year-to-year increase in the total value of goods and services produced in a domestic economy, as well as the income generated within it (Bednarczyk, 2014). The GDP is a measure of the country's overall economic performance. Poor economic conditions worsen the quality of the finance portfolio, thereby reducing profitability. If GDP grows, the likelihood of selling insurance policies also grows and insurers are likely to benefit from that in form of higher profits (Suheyli, 2015).

Interest rates represent the cost of borrowing capital for a given period borrowing capital for a given period of time (Muthama, Mbaluka & Kalunda, 2013). Inflation is a sustained increase in the general price level of goods and services in an economy over a period due to the devaluation of the fiat currency being used (Simiyu & Ngile, 2015). Interest rate risk is the exposure of the firm's financial position due to fluctuations in interest rates. Excessive and frequent interest rate changes pose significant threats to a firm's earnings and capital base changes and increase its operating expenses. Changes of interest rates may also affect the underlying value of assets, liabilities and present value of future cash flows (Osoro & Ogeto, 2014).

Exchange rate (also known as a foreign-exchange rate, forex rate, between two currencies is the rate at which one currency will be exchanged for another (Simiyu & Ngile, 2015).

Companies are exposed to three types of foreign exchange risk: translation exposure, transaction exposure and economic exposure (Osoro & Ogeto, 2014). Foreign exchange rate has an effect on the country's economy whereas from a micro perspective it affects the firms' performance. Exchange rate depreciation is the decrease in the price of the domestic currency in terms of a foreign currency, while exchange rate appreciation is an increase in the price of the domestic currency relative to the foreign currency (Nurlaily et al., 2013).

Money supply refers to the total amount of money in circulation or in existence in a country. There are several standard measures of the money supply, including the monetary base, M1, and M2 (Shrestha & Subedi, 2014). Money supply also refers to the total amount of monetary assets available in an economy at a specific time. An increase in money supply leads to inflation (or expected inflation) in the economy, which in turn increases the discount rate and lowers the stock market returns. Use of high expected rate of return will decrease value of the firm and will result in lower performance of firms (Samveg, 2012).

Inflation refers to the persistent increase in general price levels in an economy over the time. Low or medium levels of inflation in a country can have a positive effect on the business sector, in that it can act as an incentive to production (Muthama, Mbaluka & Kalunda, 2013). Inflation certainly plays a role in insurance and has adverse impact on many aspects of insurance operations, such as claims, expenses and technical provisions. In expectation of inflation claim payments increases as well as reserves that are required in anticipation of the higher claims, consequently reducing technical result and profitability (Suheyli, 2015). A consumer price index (CPI) measures changes in the price level of a market basket of consumer goods and services purchased by households (Simiyu & Ngile, 2015).

1.1.2 Financial Performance

Financial performance refers to the performance of how well a firm is using its resource to make a profit, which is measured by return on assets, return on sales and sales growth (Wei, 2012). Financial performance is a subjective measure, which determines how well the organizations use their available resources to generate more revenues (Wani & Showket, 2015). Financial performance is also defined as the use of outcome-based financial

indicators that are assumed to reflect the fulfillment of the economic goals of the firm (Nurlaily et al., 2013). Financial performance measures the financial soundness and health of the organization in monetary terms and thus, can be used to compare the performance of different corporations within any particular industry or between the industries (Wani & Showket, 2015).

Financial performance of a company, being one of the major characteristics, defines competitiveness, potentials of the business and economic interests of the company's management and reliability of present or future contractors (Dufera, 2010). Firm financial performance as the firm operating results within a certain period; it can be comprehensive reflection by the situation of profitability, asset quality, financial risk and business growth conditions (Wei, 2012). Financial performance is considered very important by financial experts, investors and regulators as it indicates profitability, solvency and returns to investors. Corporate managers and investors are concerned about financial performance because it has significant impact on the market value of the firm (Gatsi & Gadzo, 2013).

Financial performance measurement generally looks at firms' financial ratios (derived from their financial statements) such as liquidity ratios, activity ratios, profitability ratios, and debt ratios (Bouba, 2011). Financial performance can be measured from various perspectives including: solvency, profitability, and liquidity (Mwangi & Angima, 2016). Company financial performance can be measured through accounting-based measures calculated from firm's financial statements such as Return on Equity, Return on Assets, and Gross profit margin (Nurlaily et al., 2013). In insurance, performance is normally expressed in net premiums earned, profitability from underwriting activities, annual turnover, returns on investment and return on equity (Mwangi & Murigu, 2015).

1.1.3 Macro Economic Factors and Financial Performance

The relationship between macroeconomic factors and performance has gotten generous thought in the available literature. The arbitrage-pricing model predicts that the biggest part of the returns of firms is from unexpected events, which are linked to the general economic environment (Sadiye, 2014). The modern portfolio theory Modern portfolio theory assumes that a company's business performance is influenced by the interaction various

macroeconomic variables which are a source of systematic risk (Çekrezi, 2015). Hence, the financial performance of insurance companies is influenced in the macroeconomic context since the insurance industry is one of the financial system' components, fostering economic growth and stability (Burca & Batrinca, 2014). The macroeconomic variables, both real and financial have a considerable influence, positive as well as negative, on the performance of the corporate sector of the economy (Kumar, 2014).

In their study, Osoro and Ogeto (2014) explored the effects of the macroeconomic environment on the financial performance and established that foreign exchange, interest rate and inflation rate have significant effects on the performance of the firms in the construction and manufacturing sectors in Kenya. Nurlaily et al. (2013) investigated the influence of macroeconomic and microeconomic variable on capital structure and financial performance of Indonesia Food and Beverage Companies and revealed that macroeconomic and microeconomic variables had a significant negative influence on financial performance.

Dorofti and Jakubik (2015) investigated the link between the macroeconomic environment and insurers' profitability using cross-country European aggregate data and found that low interest rates along with limited economic growth, poor equity market performance and high inflation negatively affect insurance profitability. Siew and Shaikh (2015) studied the impact of nominal GDP and inflation on the financial performance of Islamic banks and found that nominal GDP has significant and positive impact on financial performance while inflation rate an insignificant negative correlation with financial performance.

1.1.4 Insurance Firms in Kenya

The Kenyan insurance industry is among the top insurance markets in Africa in terms of attractiveness and growth potential. In Kenya, there are 50 insurance companies, 3 reinsurance companies, 198 insurance brokers and 4 reinsurance brokers. There are 5,155 insurance agents in Kenya. Out of the 50 insurance companies, 25 companies offer non-life insurance business only, 13 offer life insurance business only while 12 are composite (both life and non-life) (Association Of Kenya Insurers, 2014). In addition, there a six-listed insurance company in Kenya. The Insurance Regulatory Authority (IRA) is the

regulator of all insurance companies in Kenya, with a mandate to regulate, supervise and develop the insurance industry in Kenya (Cytonn Investments, 2015).

The insurance industry in Kenya is known for perennially relying on conventional insurance products, services and distribution channels (Insurance Regulatory Authority, 2015). The insurance industry players in Kenya continue to innovate products. This increased competition has led to companies embracing technology by making it possible to make payments through mobile phone and the internet (Cytonn Investments, 2015). This has led to foreign investors to enter the market by buying stake in the existing local insurance companies as the fundamentals for future growth remain apparent. Emerging risks such as Micro insurance, oil & gas and initiatives such as adoption of alternative distribution channels (bancassurance) and use of technology will improve insurance penetration level in Kenya (Association Of Kenya Insurers, 2014).

Kenya insurance companies have been spreading their foothold in the region covering EAC, COMESA and SADC. This has been necessitated by insured's in Kenya with interests in manufacturing, tourism, transport & communication, building and construction across the region to be covered by the same insurer (Association of Kenya Insurers, 2015). However, despite the enhanced growth in premiums from both sectors of the industry, insurance penetration continues to be far below the desired benchmark (Akotey, Sackey, Amoah & Manso, 2013). A study by Mwangi and Murigu (2015) studied the factors that affect the profitability of general insurers in Kenya and found that profitability was positively related to leverage, equity capital, management competence index and negatively related to size and ownership structure.

1.2 Research Problem

The insurance industry in particular is part of immune and repair system of an economy and successful operation of the industry can set energy for other industries and development of an economy (Sambasivam & Ayele, 2013). However, insurance companies are always caught in a dilemma of crunching profit coming from underwriting and investment when the investment environment is changing and adversely pressing the interests of shareholders and might be having trouble in off-setting the obligations (Datu,

2016). The modern portfolio theory presupposes that the returns of a firm are correlated with only the surprises in some factors related to the aggregate economy. The arbitrage-pricing theory also explains that macroeconomic forces are the major underlying risk sources for most firms (Suheyli, 2015). Therefore, the behavior of macroeconomic variables, both internal and external, has positive as well as the negative effect on the firm performance depending on the nature of the variables (Kumar, 2013).

Kenya's insurance industry is one of the fastest growing industries in Africa. However, the industry is facing a number of challenges that must be addressed jointly with its stakeholders (Insurance Regulatory Authority, 2015). However, the contribution of insurance of the Gross Domestic Product in Kenya is very low compared to other countries like South Africa. In addition, the combined industry profit before taxation decreased from Kshs. 17.79 billion in 2013 to Kshs. 15.46 billion in 2014 (Association of Kenya Insurers, 2015). Further, Kenya has witnessed the insolvency of several insurance companies with several of them like Blue Shield Insurance Company, Invesco Assurance, United Insurance Company, Standard Assurance and others being put under receivership (Muiruri & Bosire, 2015). Hence, the need to explore the effect of macroeconomic factors on financial performance of insurance firms in Kenya.

A study by Datu (2016) on the association between insurer-specific indicators and macroeconomics on profitability established that insurer-specific factors significantly affect profitability while macroeconomic indicators like gross domestic product and inflation had no significant effect on profitability of insurance firms in Philippine. Chen-Ying (2015) investigated the relationship between firm specific factors and macroeconomics on profitability in Taiwanese property-liability insurance industry and established that firm specific factors had a significant influence on profitability in both operating ratio and ROA models while economic growth rate had a significant influence on profitability in operating ratio model but insignificant influence on profitability in ROA model.

In their study, Muthama, Mbaluka and Kalunda (2013) analyzed the influence of the macro economic factors on the capital structure of selected listed companies in Kenya and found that macro economic factors like GDP, inflation, and interest rates influence the capital

structure of the listed companies. Onger (2014) explored the effect of selected macroeconomic variable on financial performance of non-bank institutions in Kenya and found that currency exchange, GDP and interest rate had a positive relationship with financial performance. From the reviewed global studies, it is evident that most studies combine both the micro and macroeconomic factors to examine their influence on financial performance of insurance firms. Additionally, most studies carried out in Kenya focus on micro and macroeconomic variables and capital structure, share returns and stock market performance and not the financial performance. This had created an empirical literature gap, which necessitates this study. Thus, this study seeks to solve the question: what is the effect of macroeconomic factors on financial performance of insurance firms in Kenya?

1.3 Research Objective

To investigate the effect of macroeconomic factors on financial performance of insurance firms in Kenya

1.4 Value of the Study

This study will be of value to various stakeholders in the insurance industry, the policy makers and other scholars. The study findings will be of benefit the various stakeholders in the insurance industry including; investors, suppliers, customers and the management for proper decision making. The management will be able to make informed decisions regarding the various firms with the direction on maximizing the shareholder's wealth.

The findings of this study will also be significant to policy makers like the Insurance Regulatory Authority who will look at the macro-economic proponents of insurance firms. They will either tighten or loosen the laws and regulations affecting insurance development and economic growth.

Lastly, the study findings will be of benefit to future researchers and scholars since it will add on to the existing literature on the impact of the relationship between insurance development and economic growth in Nairobi. The study will also increase the knowledge base that will enable future researchers to build upon the concepts resolute by this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the theoretical literature review, the determinants of financial performance of insurance firms, the empirical literature review and the summary of literature reviewed.

2.2 Theoretical Literature Review

The arbitrage pricing theory, the modern portfolio theory and the Intertemporal Capital Asset Pricing Model will be explored as the underlying theories to explain the relationship between macroeconomic factors and financial performance.

2.2.1 Arbitrage Pricing Theory

The Arbitrage Pricing Theory (APT) was introduced by Ross (1976). The theory assumes a positive relationship between risk and expected return. The APT model is an expansion of the CAPM and describes returns as a linear function of several rather than of one variable. Some of these variables are macroeconomic factors and others are market indices (Sadiye, 2014). The APT is less restrictive compared to CAPM, and has three major assumptions being; capital markets are perfectly competitive, investors always prefer more wealth to less wealth with certainty (Ouma & Muriu, 2014). APT agrees that though many different specific forces can influence the return of any individual firm, these particular effects tend to cancel out in large and well diversified portfolio. This is the principle of diversification and it has an influence in the field of insurance (Suheyli, 2015).

APT uses multiple variables and is a multi-beta model. The sensitivity of movements in each variable is represented with a beta coefficient, which is factor specific, and indicates the unique sensitivity of each particular variable (Sadiye, 2014). The model also attributes the expected return of a capital asset to multiple risk factors, and in the process measures the risk premiums associated with each of these risk factors (Ouma & Muriu, 2014). According to the APT model total risk is a combination of systematic and unsystematic

risk. Systematic risk is also termed as market risk and it cannot be eliminated. Therefore expected return of the asset is dependent upon the systematic risk. Systematic risk includes macro-economic factors, which are not diversifiable (Saeed & Akhter, 2012).

The APT relates the various types of risk associated with a security such as changes in interest rates, inflation and productivity with the expected return of that same security (Ouma & Muriu, 2014). Thus, an insurance company has no way of knowing whether any particular individual will become sick or will be involved in an accident, but the company is able to accurately predict its losses on a large pool of such risk. However, an insurance company is not entirely free of risk simply because it insures a large number of individuals (Suheyli, 2015). With reference to the APT model, insurance firms like other firms are also affected by several macro economic factors like inflations, interest rates, money supply and exchange rates.

2.2.2 Modern Portfolio Theory

The Modern portfolio theory (MPT) was introduced by Markowitz (1952). The modern portfolio theory attempts to maximize expected portfolio returns for a given amount of portfolio risk, or equivalently minimize risk for a given level of return by carefully choosing the proportions of various assets MPT emphasizes maximizing returns while minimizing risks, while giving recognition to the existence of systematic and non-systematic risks (Suheyli, 2015). Modern portfolio theory by Markowitz explains how investors should select a portfolio and make the highest possible return from a certain level of risk or get the lowest possible risk for a certain level of return. There is a positive relationship between the risk and the expected return of a financial asset (Sadiye, 2014).

The Modern portfolio theory provides a broad context for the interactions of systematic risk and return. According to the theory an effectively diversified portfolio minimizes the unsystematic risk, which is affected by microeconomic factors specific to the individual firms. The systematic risk, which is mainly created by macroeconomic factors, cannot be eliminated by diversification. Therefore, one can say that risk and return on a diversified portfolio depend on domestic and foreign economic and financial variables (Erdugan, 2012). Since insurance firms are investments by themselves its standard practice for them

to invest in a diversified portfolio to minimize risk and harness the returns of the various investment options on offer. Thus, when choosing a portfolio insurance firms should maximize the discounted (or capitalized) value of future earnings or returns (Suheyli, 2015).

2.2.3 Intertemporal Capital Asset Pricing Model

The Intertemporal Capital Asset Pricing Model (ICAPM) was developed by Merton (1973) using utility maximization to get exact multifactor predictions of expected security returns. The Intertemporal Capital Asset Pricing Model builds on one of the main critiques of the earlier CAPM, that it is a one period model and does not hold Intertemporal (Bak, 2012). The Merton's (1973) model states that the expected excess return on any asset is given by a multi-beta version of the CAPM with the number of betas being equal to one plus the number of state variables. The Intertemporal model is based on consumer investor behavior and captures effects, which would never appear in a static model (Bellalah & Wu, 2009).

The ICAPM presupposes that continuous period work that an Intertemporal optimizer will act quite different if facing a changing rather than constant opportunity set. That the investment opportunity set faced by investors in the real world is in fact changing is obvious (Bak, 2012). An Intertemporal model for the capital market is deduced from the portfolio selection behaviour by an arbitrary number of investors who act to maximize the expected utility of lifetime consumption and who can trade continuously in time (Erdugan, 2012). According to ICAPM many of the factors are influencing the term structure and are therefore included in a way, which is consistent with maximizing behaviour and rational expectations hypothesis.

2.3 Determinants of Financial Performance

This study will explore liquidity, asset utilization and company size as the main determinants of financial performance of insurance firms.

2.3.1 Liquidity

Liquidity refers to an enterprise's ability to pay its short term debts when they are due. It refers to the solvency of the enterprise's total financial position (Bouba, 2011). Liquidity

measures the ability of managers in insurance and re-insurance companies to fulfill their immediate commitments to policyholders and other creditors without having to increase profits on underwriting and investment activities and/or liquidate financial assets (Wani & Showket, 2015). Liquidity is proxied by current ratio; calculated as current assets over current liabilities. The current ratio reveals how capable a firm is in paying its current liabilities by using current assets only. The higher current ratio, the more liquid the firm is (Wei, 2012).

2.3.2 Underwriting Risk

Underwriting risk is the risk that the premiums collected will not be sufficient to cover the cost of coverage. Insurance prices are established based on estimates of expected claim costs and the costs to issue and administer the policy. Huge fluctuations in net premiums written indicate a lack of stability in underwriting operation of an insurance company. An unusual increase in net premiums written might indicate that the company is engaging in the so-called “cash-flow underwriting” to attempt to survive its financial difficulty (Suheyli, 2015). The underwriting risk emphasizes the efficiency of the insurers’ underwriting activity and it is measured through the losses incurred divided by annual premium earned.

2.3.3 Size of the Firm

The size of the firm determines the level of economics of scale enjoyed by a firm. When a firm becomes larger it enjoys economics to scale and its average cost of production is lower and operational activities are more efficient (Chandrapala & Knapkova, 2013). Large firms have more layers of management, greater number of departments, increased specialization of skills and functions, greater formalization, greater centralization, and greater bureaucracy than smaller firms (Hendricks & Singhal, 2000). In the insurance sector, large insurers are likely to perform better than small insurers because they can achieve operating cost efficiencies through increasing output and economizing on the unit cost of innovations in products and process development (Wani & Showket, 2015). Large insurance companies normally have greater capacity for dealing with adverse market fluctuations than small insurance companies do. In addition, large insurance companies have economies of scale

in terms of the labor cost, which is the most significant production factor for delivering insurance services (Suheyli, 2015).

2.4 Empirical Literature Review

Nzuve (2016) examined the impact of macroeconomic variables on financial performance of deposit taking microfinance institutions in Kenya. The study used secondary data from 9 deposit taking microfinance's in Kenya for a periods of 10 years from 2005 and 2014. Using multiple linear regression, the findings of this study established a negative relationship between inflation rate and financial performance, a positive relationship between gross domestic product, exchange rates, national savings, employment rate and financial performance of deposit-taking micro finance institutions in all the years studied. The study recommended that the government should closely monitor and prudently manage the macroeconomic variable in order to spur greater financial performance as they explain a higher variation in financial performance of the deposit taking microfinance institutions in Kenya.

Guțu (2015) explored the microeconomic factors affecting bank's financial performance of commercial banks in Romania. The study focused on 11 entities for the period between 2003 and 2013. The study measured performance-using return on assets and the micro economic variables included bank's size, financial leverage, loans to assets ratio, deposits to assets ratio, number of employees, liquidity, net result and monetary policy rate. The results of the study established that bank's size, loans to assets ratio and liquidity had no significant impact on performance whereas financial leverage had a negative impact while the number of employees, deposits to assets ratio and net result had a positive effect on financial performance.

Simiyu and Ngile (2015) examined the effect of macroeconomic variables on financial profitability of listed commercial banks in the Nairobi Securities Exchange from 2001 to 2012. Using panel data analysis and the Fixed Effects model the study established that real GDP growth rate had positive but insignificant effect to profitability of commercial banks. The study also found that real interest rates had a significant negative influence on profitability of listed commercial banks in Kenya. Finally, the study found that exchange

rates had a positive significant effect on the profitability of listed commercial banks on Nairobi Securities Exchange.

Kaya (2015) investigated the firm-specific factors affecting the profitability of non-life insurance companies operating in Turkey. The study used secondary data of 24 non-life insurance companies in Turkey from 2006–2013. The study measured profitability in terms of technical profitability ratio and sales profitability ratio. The findings of the study established that the firm-specific factors affecting the profitability of Turkish non-life insurance companies are the size of the company, age of the company, loss ratio, current ratio and premium growth rate.

Muiruri and Bosire (2015) investigated the determinants of capital structure decisions of listed insurance company. The study carried out a census of the six listed insurance firms in Kenya and collected data from a sample of 50 respondents using questionnaires. Using descriptive statistics and inferential statistics, the study concluded that profitability was the main determinant of capital structure decisions in listed insurance companies followed by the size of the firm. The study recommended that listed insurance companies should expand their projects, new product lines and acquisitions of other firms.

Ondura (2015) examined the factors that influence the adoption of Information Technology outsourcing by insurance companies in Kenya. The study carried out a census of 49 registered insurance companies and a questionnaire was used to collect the data. The study revealed that the key factors that influence adoption of IT outsourcing among the insurance companies in Kenya were financial drivers and core competencies while government policy has least if no influence at all. The study recommended that ICT managers encourage the application of outsourcing practices in their organizations because of the benefits that accrue to organizations.

Using unbalanced panel data and a period of 10 years from 2002-2012, Taoulaou and Burchuladze (2014) investigated the relation between macroeconomic factors and the capital structure of 233 Swedish companies. The study employed the Random Effects model, to identify the macroeconomic determinants that affect the capital structure of Swedish firms. The study found that leverage measures are positively related to the GDP

Growth rate, Interest rate, Banking Credit as percentage of GDP ratio and the Stock price performance, while the Inflation rate has a negative effect on the leverage.

Kanwal and Nadeem (2013) investigated the impact of macroeconomic variables on profitability of public limited commercial banks in Pakistan for years 2001- 2011. The study used pooled ordinary least square method to examine the effect of 3 major external factors; inflation rate, real gross domestic product and real interest rate on profitability indicators; return on assets, return on equity and equity multiplier ratios in 3 separate models. The results of the study established a strong positive relationship of real interest rate with ROA, ROE and EM. The study also found that real GDP had an insignificant positive effect on ROA, but an insignificant negative impact on ROE and EM. The study also found that inflation rate has a negative link with all 3 profitability measures.

Zhang and Daly (2013) examined the impact of bank specific and macroeconomic factors on the performance of Chinese banking from 2004 to 2010. The results of the study established that banks with lower credit risk, which are well capitalized tend to be more profitable while banks with higher expense preference exert a negative impact on bank performance. A review of macroeconomic variables revealed that China's financial services tend to grow along with economic growth. Finally, the study findings established that greater economic integration via increased trade and capital flows coincide with an increase in bank profitability.

Chandrapala and Knapkova (2013) investigated the role of internal factors in generating financial performance of firms in the Czech Republic. The study used a sample of 974 firms in the Czech Republic and collected data from 2005 to 2008 and used pooled and panel cross-sectional time series techniques for the data analysis. Using ROA as the dependent variable, the study established that the firm size, sales growth and capital turnover had a significant positive impact on financial performance of firms. The study also found that debt ratio and inventory reflect significant negative impact on financial performance of firms.

Gatsi and Gadzo (2013) examined the effects of macroeconomic variables and firm level characteristics on the performance of insurance companies in Ghana from 2005 to 2011.

Using the Panel least square regression the study findings established that leverage, tangibility, liquidity, risk and premium growth from the firm level characteristics as well as inflation from the macroeconomic factors were significant determinants of performance, thus the major factors that influence financial performance of insurance companies in Ghana. The study also found that the performance of insurance firms had a statistically insignificant relationship with firm size, age, GDP and exchange rate.

Njau (2013) investigated the effect of selected macroeconomic variables on the financial performance of private equity firms in Kenya from 2005 to 2012. Using multiple linear regression, the study established that the financial performance of private firms' in Kenya was heavily influenced by the selected macroeconomic variables with GDP having the largest influence and systematic risk having the least impact. The study also established positive correlation between the dependent and independent variables where gross domestic product, inflation and banks lending interest were found to have the greatest positive effect on private equity firms' financial performance while exchange rate of the dollar against the Kenya Shilling showed a negative relationship albeit to a small extent.

Mudaki et al (2012) studied the extent to which operational factors affect the performance of insurance firms. The study adopted a descriptive census survey design and a sample 40-registered insurance company. The study-collected data using questionnaires and the data collected was analyzed using descriptive statistics and inferential statistics. Using regression analysis the study found that operational factors have no relationship with organizational performance.

Bekeris (2012) evaluated macroeconomic factors affecting the profitability of small and medium enterprises with focus on foreign direct investment, gross domestic product, unemployment, inflation, taxes paid, average salary, and several others in Lithuania. The study found that most of the selected macroeconomic indicators such as inflation, average wages, the number of enterprises, the monetary base were not to be statistically significant and had no strong correlation with corporate profitability of small and medium enterprises in Lithuania.

2.5 Conceptual Framework

This study seeks to evaluate the effect of macroeconomic factors on financial performance of insurance firms in Kenya. The independent variables will be economic growth, interest rates, exchange rates, money supply, inflation while the dependent variable will be financial performance. Figure 2.1 shows the conceptual framework

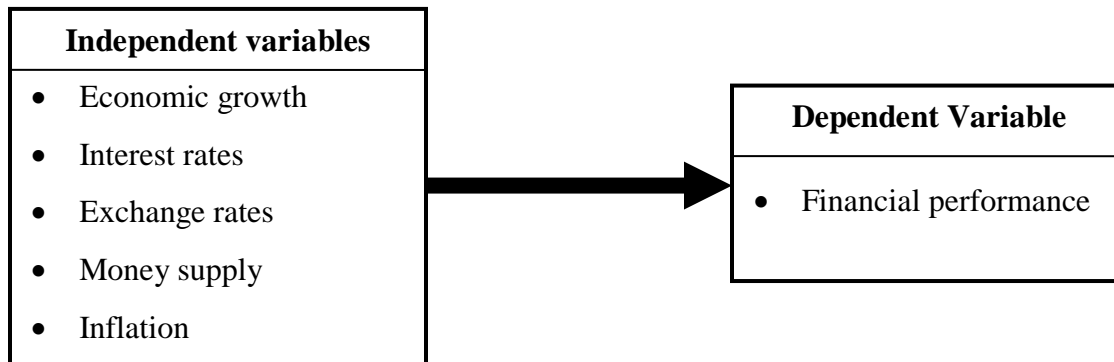


Figure 2.1 Conceptual Framework

2.6 Summary of the Literature Review

As per the reviewed literature, several studies have been carried out on the effect of macroeconomic variable on financial performance. Guçu (2015), Simiyu and Ngile (2015) & Zhang and Daly (2013) found that macroeconomic factors affect the performance of the banking industry and Nzuve (2016) found that macroeconomic variables affect financial performance of deposit taking microfinance institutions in Kenya. Kanwal and Nadeem (2013) also found that macroeconomic variables affected profitability of public limited commercial banks in Pakistan while Njau (2013) found that macroeconomic variables influenced the financial performance of private equity firms in Kenya. Taoulaou and Burchuladze (2014) found that macroeconomic factors affects capital structure of Swedish companies. Gatsi and Gadzo (2013) also found that macroeconomic variables and firm level characteristics on the performance of insurance companies in Ghana. However, studies on the effect of macroeconomic variable on financial performance of insurance firms in Kenya are limited and the available one combine both micro and macro economic variables.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter previews the research design, the population of the study, the data collection method and also the data analysis procedure.

3.2 Research Design

According to Hair et al. (2007), a research design should provide relevant information that will most efficiently and effectively address the research questions or hypotheses. This study seeks to investigate the effect of macroeconomic factors on financial performance of insurance firms in Kenya. This study employed a descriptive research design. A descriptive research is usually structured and specifically designed to measure the characteristics described in the research questions. In addition, a descriptive research aims at providing an accurate and valid representation of the factors or variables that pertain or are relevant to the research questions (Hair et al., 2007).

3.3 Population of the Study

A population is a group of individual persons, objects, or items from which samples are taken for measurement. According to the Insurance Regulatory Authority (2015), there are 50 insurance firms in Kenya. Thus, the population of the study comprised of the 50 Insurance firms in Kenya as at 31.12.2015. The study carried out a census of the 50 Insurance firms.

3.4 Data Collection

The study used secondary data. Secondary data on macro economic factors was obtained from the Central Bank of Kenya and the Kenya National Bureau of Statistics. Secondary data on financial performance was obtained from the firm's annual financial reports i.e. statement of income and the statement of financial positions. The data covered a period of 10 years from 2006 to 2015.

3.5 Data Analysis

Multiple linear regression and correlation was used to analyze data for the study using the Statistical Package for Social Sciences. Regression was used to establish the relationship between macro-economic variables and financial performance while correlation was used to determine the strength and nature of the relationship between the variables.

3.5.1 Analytical Model

The study employed a regression model, which was formulated as follows

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where; Y = Financial performance measured using annual average Return on Assets (ROA) for all the insurance firms in Kenya.

X_1 = Economic growth measured using the gross domestic product (GDP) on quarterly basis

X_2 = Interest rates measured using average lending rates by commercial banks in Kenya on quarterly basis

X_3 = Exchange rate measured using average Kenya shilling per unit of US dollar on quarterly basis

X_4 = Money supply measured using the Natural log of broad money supply (M3) on quarterly basis

X_5 = Inflation measured using the the quarterly consumer price index

β_0 = Intercept of the regression model

$\beta_1 - \beta_5$ = Coefficients of the Regression Model

ε = Error of the regression model

3.5.2 Test of Significance

The study used the t – statistics and F- statistics to test the statistical significance of regression coefficients and the regression equation respectively. The coefficient of

determination (R-square) was also used to determine the explained variation and unexplained variation.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This chapter previews the results of the study. The chapter outlines the descriptive statistics, the correlation analysis, regression analysis and interpretation of the findings.

4.2 Descriptive Statistics

Table 4.1 Descriptive Summary Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	40	.0062	.0133	.010068	.0023123
GDD growth rate	40	1.100	8.900	4.85750	1.792847
Lending rates	40	12.870	20.340	15.49700	2.087543
Exchange rate	40	62.641	102.760	81.11914	9.914495
Ln M3	40	13.079	14.793	13.94939	.514775
CPI	40	76.345	163.274	116.10505	28.009029

Source: Research findings

Table 4.1 shows the descriptive summary statistics of the study. The results show that the average ROA for the insurance firm was 0.010068 while average GDP growth rate was 4.86. The results also show that the average lending rates were 15.5% while the average exchange rate was 81.12. The results further indicate that the average money supply for the period was 13.94 while the mean Consumer price index (CPI) over the 10 years period was 116.11.

4.3 Correlation Analysis

Table 4.2 shows the correlation results obtained

Table 4.2 Correlation Matrix

	ROA	GDP growth	Lending rates	Exchange rate	Ln M3	CPI
ROA	1					
GDP growth	.439**	1				
Lending rates	-.221	-.236	1			
Exchange rate	.017	.010	.487**	1		
Ln M3	-.046	-.108	.652**	.900**	1	
CPI	.028	-.033	.637**	.905**	.978**	1

Source: Research Findings

Table 4.2 shows the correlation results. The table shows that ROA had a positive correlation with GDP growth, exchange rates and consumer price index (CPI). The results also established that lending rates, money supply and had a negative growth rate with average ROA of insurance firms in Kenya. This indicates that there is a positive correlation between GDP growth rate, exchange rates and inflation with financial performance of insurance firms in Kenya. The results also show that there is negative correlation between lending rates, money supply and financial performance of insurance firms in Kenya.

4.4 Regression Analysis

4.4.1 Model Summary

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523 ^a	.274	.167	.0336457

a. Predictors: (Constant), CPI, GDP growth, Lending rates, Exchange rate, Ln M3

Source: Research Findings

Table 4.3 shows the model summary, which indicates that the R- Square (coefficient of determination) is 0.274, which indicates that the variables of the study explain 27.4% of the variation in financial performance of the study. This indicates that inflation, GDP growth rate, lending rates, exchange rates and money supply affects 27.4% of the variation in financial performance of insurance firms in Kenya thus 72.6% is explained by other factors.

4.4.2 ANOVA

Table 4.4 Analysis of Variance (ANOVA)

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.015	5	.003	2.563	.045 ^b
Residual	.038	34	.001		
Total	.053	39			

a. Dependent Variable: ROA

b. Predictors: (Constant), CPI, GDP growth, Lending rates, Exchange rate, Ln M3

Source: Research Findings

The results on table 4.4 show that the regression model is significant since the significance value of 0.045 is less than 0.05 at 95% confidence level. This indicates that there is a significant relationship between macro economic factors and financial performance of insurance firms in Kenya.

4.4.3 Coefficients of the Regression Model

Table 4.5 Regression Coefficients

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.845	.652		1.295	.204
GDP growth	.007	.003	.324	1.999	.054
Lending rates	-.005	.004	-.268	-1.297	.203
Exchange rate	-.001	.001	-.173	-.471	.641
Ln M3	-.063	.056	-.885	-1.135	.264
CPI	.002	.001	1.232	1.600	.119

a. Dependent Variable: ROA

Source: Research Findings

The results on table 4.5 show an insignificant positive relationship between financial performance of insurance firms and GDP growth rate and also inflation. The results also show an insignificant negative relationship between financial performance of insurance firms and lending rates, exchange rates and money supply. This finding indicates that GDP growth rate and inflation positively influence financial performance of insurance firms while lending rates, exchange rates and money supply negatively influences insurance firms financial performance though the relationships are insignificant in all cases.

4.5 Interpretation of the Finding

The findings of the study revealed that GDP growth rate and inflation positively affects the financial performance of insurance firms. This indicates that economic growth has a direct relationship with financial performance of insurance firms thus during times of good economic performance insurance firms maximises their returns. The results also indicate that inflation has a direct impact on financial performance of insurance firms such that an increase in inflation positively affects financial performance of insurance firms.

The study findings also established that lending rates, exchange rates and money supply have a negative relationship with financial performance of insurance firms. This indicates that increase in lending rates adversely affect the financial performance of insurance firms in Kenya. The results also indicate that increase in exchange rates and money supply adversely affects the financial performance of insurance firms in Kenya.

Similar findings were established by; Kanwal and Nadeem (2013) who found that real GDP had an insignificant positive effect on ROA. Suheyli (2015) found that poor economic conditions worsen the quality of the finance portfolio, thereby reducing profitability. Gatsi and Gadzo (2013) also found that the performance of insurance firms had a statistically insignificant relationship with GDP and exchange rate. In addition, Njau (2013) established that gross domestic product and inflation had positive effect on financial performance. Suheyli (2015) supported that expectation of inflation claim payments increases as well as reserves that are required in anticipation of the higher claims, consequently reducing technical result and profitability.

Additionally, Zhang and Daly (2013) established that greater economic integration via increased trade and capital flows coincide with an increase in bank profitability. Dorofti and Jakubik (2015) found that low interest rates along with limited economic growth, poor equity market performance negatively affect insurance profitability. Further, Osoro & Ogeto (2014) posit that excessive and frequent interest rate changes pose significant threats to a firm's earnings and capital base changes and increase its operating expenses. Samveg (2012) also explained that an increase in money supply leads to inflation (or expected inflation) in the economy, which in turn increases the discount rate and lowers the stock market returns. Use of high expected rate of return will decrease value of the firm and will result in lower performance of firms.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter describes the summary of the research, the study conclusions and recommendations; the chapter also describes the limitations of the study and finally the suggestion for further research.

5.2 Summary

This study sought to investigate the effect of macroeconomic factors on financial performance of insurance firms in Kenya. The independent variables will be economic growth, interest rates, exchange rates, money supply, and inflation while the dependent variable will be financial performance. The arbitrage pricing theory, the modern portfolio theory and the Intertemporal Capital Asset Pricing Model theories were adopted to explain the relationship between macroeconomic factors and financial performance. The study carried out a census of the 50 Insurance firms in Kenya and used secondary data, which covered a period of 10 years from 2006 to 2015.

The descriptive findings of the study found that average ROA for the insurance firm was 0.010068 while average GDP growth rate and lending rates were 4.86 and 15.5% respectively. The study also found that the average exchange rate was 81.12 whereas the average money supply was 13.94 while the mean Consumer price index (CPI) was 116.11. The correlation results revealed that ROA had a positive correlation with GDP growth, exchange rates and consumer price index (CPI) while that lending rates, money supply and had a negative correlation with average financial performance of insurance firms in Kenya. The findings thus revealed a positive correlation between GDP growth rate, exchange rates and inflation and a negative correlation between lending rates, money supply and financial performance of insurance firms in Kenya.

The results of the regression model found that inflation, GDP growth rate, lending rates, exchange rates and money supply affects 27.4% of the variation in financial performance

of insurance firms in Kenya. The findings also revealed that the regression model was significant since the P value of 0.045 was less than significance level of 0.05. The findings also found an insignificant positive relationship between financial performance of insurance firms and GDP growth rate and inflation and an insignificant negative relationship between financial performance of insurance firms and lending rates, exchange rates and money supply.

5.3 Conclusion

The findings of the study revealed that GDP growth rate and inflation positively affects the financial performance of insurance firms though the relationship is insignificant. However, the study concludes that there is direct relationship between economic growth and financial performance of insurance firms hence good economic growth enhances insurance firms financial performance. The study also concludes that there is a direct relationship between inflation and insurance firms financial performance hence low level of inflation enhance the financial performance of insurance firms and vice versa.

The findings of the study found that lending rates, exchange rates and money supply have a negative relationship with financial performance of insurance firms though the relationship is insignificant. However, the study concludes that high lending rates adversely affects insurance firms financial performance hence an increase in interest rates increase the discounting rates which reduces the returns of insurance firms. The study also concludes that exchange rates inversely affect insurance firms' financial performance as high exchange rate fluctuations increases the foreign exchange risk. Further, the study concludes that money supply inversely influence the financial performance of insurance firms as excess amount of money in circulation increases inflation.

5.4 Recommendations

Insurance firms are part of financial system and just like commercial banks; they play a critical role in mitigating risk. The study concluded that economic growth enhances the financial performance of insurance firms in Kenya. Therefore, the study recommends that the government and through line ministries of finance and planning should undertake measures to ensure good performance of the economy.

The study also concluded that inflation rates, exchange rates and money supply affect the financial performance of insurance firms in Kenya. As such, the Central Bank of Kenya is tasked with monetary policy, which entails formulating policies on exchange rates, inflation and money supply. The study therefore recommends that the central banks should undertake effective mechanisms to ensure that inflation rate, exchange rates and money supply do not have adverse effects on financial performance of firms.

The study also found that interest rates affect insurance firms financial performance. Interest rates are charged by commercial banks when they lend out money. The study therefore recommends that commercial banks should charge low interest rates to insurance firms to lower their discount rates and to ensure they maximize their returns on investment.

5.5 Limitations of the study

This study and its findings are limited to insurance firms in Kenya since the focus of the study was all the insurance firms in Kenya. In addition, insurance firms are part of the financial system in Kenya however; the study findings may not be applicable to another institution like commercial banks, microfinance's and saving and credit cooperative organizations since they do not operate in a similar manner.

5.6 Suggestions for Further Research

The study focused on macro economic variables and their effects on financial performance of insurance firms in Kenya. However, the financial performance of insurance firms is also influenced by other micro economic factors, which the study has not considered. The study therefore recommends an examination of the effects of micro economic factors on financial performance of insurance firms in Kenya.

Additionally, insurance firms are part of the financial system in Kenya, which comprises of commercial banks, microfinance banks, credit only microfinance and saving and credit cooperative societies. The study thus suggests an additional study on the effects of macroeconomic factors on financial performance of the other financial institutions in Kenya.

REFERENCES

- Akotey, J. O., Sackey, F. G., Amoah, L. & Manso, R. F. (2013). The Financial Performance of Life Insurance Companies in Ghana. University of Ghana
- Angima, C. B. & Mwangi, M. (2016). Actuarial Risk Management Practices and Financial Performance of Property and Casualty Insurance Firms: Identification of a Moderating Variable. *International Journal of Humanities and Social Science*, 6(2), 126 – 132
- Association of Kenya Insurers. (2014). Insurance Industry Annual Report 2014. The Association of Kenya Insurers
- Bak, N. B. (2012). The State of Intertemporal Asset Pricing -A Review, Synthesis and Empirical Application. *Master Thesis*. Copenhagen Business School
- Bednarczyk, T. H. (2014). Insurance Development as a Factor in Long-Term Economic Growth. Maria Curie- Sklodowska University
- Bekeris, R. (2012). The Impact of Macroeconomic Indicators upon SMEs Profitability. *Ekonomika*, 91(3), 117-128
- Bellalaha, M. & Wub, Z. (2009). An Intertemporal Capital Asset Pricing Model under Incomplete Information. *International Journal of Business*, 14(1), 47-63
- Bouba, I. (2011). Financial Performance Measurement of Manufacturing Small and Medium Enterprises in Pretoria: A Multiple Exploratory Case Study. *Unpublished Project*. University Of South Africa
- Burca, A & Batrinca, G. (2014). The Determinants of Financial Performance in the Romanian Insurance Market. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 299–308
- Çekrezi, A. (2015). Determinants of Financial Performance of the Insurance Companies: A Case of Albania. *International Journal of Economics, Commerce and Management*, 3(4), 1-9

- Chandrapala, P. & Knapkova A. (2013). Firm-specific factors and financial performance of firms in the Czech Republic. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 56 (7), 2183–2190
- Chen-Ying, L. (2014). The Effects of Firm Specific Factors and Macroeconomics on Profitability of Property-Liability Insurance Industry in Taiwan. *Asian Economic and Financial Review*, 4(5), 681-691
- Cytonn Investments. (2015). Cytonn Kenya’s Listed Insurance Companies Analysis November 2, 2015. Cytonn Investments.
- Cytonn Investments. (2016). Kenya’s Listed Insurance Companies Analysis Cytonn FY’2015. Insurance Sector Report: Given turbulence in banking, is all well in insurance? Cytonn Investments.
- Datu, N. (2016). How do Insurer Specific Indicators and Macroeconomic Factors affect the Profitability of Insurance Business? A Panel Data Analysis on the Philippine Non-Life Insurance Market. A paper presented at the DLSU Research Congress 2016 De La Salle University, Manila, Philippines March 7-9, 2016
- Dorofti, C. & Jakubik, C. (2015). Insurance Sector Profitability and the Macroeconomic Environment. Charles University, Prague
- Duferu, A. (2010). Financial Performance Evaluation. (A Case Study of Awash International Bank). *Unpublished Project*. Mekelle University
- Erdugan, R. (2012). The Effect of Economic Factors on the Performance of the Australian Stock Market. *Unpublished Thesis*. Victoria University Melbourne
- Gatsi, J. G. & Gadzo, S. G. (2013). Firm Level and Macroeconomic Effects on Financial Performance of Insurance Companies in Ghana. *International Journal of Business Administration and Management*, 3(1), 1-9
- Guțu, L. M. (2015). Microeconomic Factors Affecting Banks’ Financial Performance: The Case of Romania. *SEA - Practical Application of Science*, 3(1), 39 – 44

- Hair, J. F., Celsi, M. W., Arthur, H.M., Samouel, P. & Page, M.J. (2011). *Essentials of Business Research Methods*. New York. M.E. Sharpe Inc
- Hendricks, K. B. & Singhal, V. R. (2000). Firm Characteristics, Total Quality Management and Financial Performance. *Journal of Operations Management*, 238, 1–17
- Insurance Regulatory Authority. (2015). Insurance Industry Report for the year ended 31st December, 2014. Insurance Regulatory Authority
- Kanwal, S. & Nadeem, M. (2013). The Impact of Macroeconomic Variables on the Profitability of Listed Commercial Banks in Pakistan. *European Journal of Business and Social Sciences*, 2 (9), 186-201
- Kaya, E. O. (2015). The Effects of Firm-Specific Factors on the Profitability of Non-Life Insurance Companies in Turkey. *International Journal of Financial Studies*, 3, 510-529
- Kiragu, S. M. (2014). Assessment of challenges facing insurance companies in building competitive advantage in Kenya: A survey of insurance firms. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 467-490
- Kumar, R. (2013). The Effect of Macroeconomic Factors on Indian Stock Market Performance: A Factor Analysis Approach. *IOSR Journal of Economics and Finance*, 1(3), 14-21
- Mudaki, A. L., Wanjere, D., Ochieng, I. & Odera, O. (2012). Effects of Operational Factors on Organizational Performance in Kenyan Insurance Industry. *International Journal of Business and Social Science*, 3(17), 237 – 241
- Muiruri, J. W. & Bosire, N. (2015). Determinants of Capital Structure Decisions of Listed Insurance Companies in Kenya: A Survey of Insurance Companies in Nakuru Town. *International Journal of Scientific Engineering and Research*, 3(5), 78-85
- Muthama, C., Mbaluka, P. & Kalunda, E. (2015). An Empirical Analysis of Macroeconomic Influences on Corporate Capital Structure of Listed Companies in Kenya. *Journal of Finance and Investment Analysis*, 2(2), 41-62

- Mwangi, M. & Murigu, J. W. (2015). The Determinants of Financial Performance in General Insurance Companies in Kenya. *European Scientific Journal*, 11(1), 288 – 297
- Ndalu, C. (2016). Financial Deepening of Insurance and Economic Growth in Kenya. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(1), 7–14
- Njau, D. K. (2013). The Effect of Selected Macroeconomic Variables on the Financial Performance of Private Equity Firms in Kenya. *Unpublished MSc Project*. University of Nairobi
- Nurlaily, F., Suhadak, D., Rahardjo, K. & Hsu, W. L. (2013). The Influence of Macroeconomic and Microeconomic Variables on Capital Structure and Financial Performance. National Pingtung University of Science and Technology, Taiwan
- Nzuve, R. M. (2016). Impact of Macroeconomic Factors on Financial Performance of Deposit-Taking Micro Finance Institutions in Kenya. *Unpublished MBA Project*. South Eastern Kenya University
- Oino, T., Osiemo, P. & Kuloba, R. (2012). National Survey on Enterprises Perception of Insurance in Kenya Report. Insurance Regulatory Authority.
- Ondura, E. O. (2015). Factors Influencing Information Technology Outsourcing in the Insurance Sector in Kenya. *Unpublished MBA Project*. Kabarak University
- Ongeri, G. M. (2014). The Effect of Macroeconomic Variables on the Financial Performance of Non-Bank Financial Institutions in Kenya. *Unpublished MSc Project*. University of Nairobi
- Osoro, C. & Ogeto, W. (2014). Macro Economic Fluctuations Effects on the Financial Performance of Listed Manufacturing Firms in Kenya. *The International Journal of Social Sciences*, 21(1), 26-40

- Ouma, W. N. & Muriu, P. (2014). The Impact of Macroeconomic Variables on Stock Market Returns in Kenya. *International Journal of Business and Commerce*, 3 (11), 1-31
- Sadiye, Ç. (2014). The Influence of Macroeconomic Variables on Stock Performance. *Unpublished MBA Project*. University of Twente.
- Saeed, S. & Akhter, N. (2012). Impact of Macroeconomic Factors on Banking Index in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(6), 1200-1218
- Sambasivam, Y. & Ayele, A. G. (2013). A Study on the Performance of Insurance Companies in Ethiopia. *International Journal of Marketing, Financial Services & Management Research*, 2(7), 138 – 150
- Samveg, P. (2012). The effect of Macroeconomic Determinants on the Performance of the Indian Stock Market. *NMIMS Management Review*, 22, 117-127
- Shrestha, P. K. & Subedi, B. R. (2014). Determinants of Stock Market Performance in Nepal. NRB Working Paper series, NRB-WP-24, 2014.
- Siew, C. & Shaikh, H. (2015). The Impact of Nominal GDP and Inflation on the Financial Performance of Islamic Banks in Malaysia. *Journal of Islamic Economics, Banking and Finance*, 11(1), 158-180
- Simiyu, C. N. & Ngile, L. (2015). Effect of Macroeconomic Variables on Profitability of Commercial Banks Listed in the Nairobi Securities Exchange. *International Journal of Economics, Commerce and Management*, 3(4), 1-15
- Suheyli, R. (2015). Determinants of Insurance Companies Profitability in Ethiopia. *Unpublished Msc. Thesis*. Addis Ababa University, Ethiopia
- Taoulaou, A. & Burchuladze, G. (2014). How do Macroeconomic Factors Affect Capital Structure? The Case of Swedish Firms. *Unpublished Thesis*. Lund University

- Wani, A. A. & Showket, A. D. (2015). Relationship between Financial Risk and Financial Performance: An Insight of Indian Insurance Industry. *International Journal of Science and Research*, 4(11), 1424-1433
- Wei, W. (2012). Factors Affecting Financial Performance of Agricultural Firms Listed on Shanghai Stock Exchange. *Unpublished MBA Project*. University of the Thai Chamber of Commerce
- Zhang, X. & Daly, K. (2013). The Impact of Bank Specific and Macroeconomic Factors on China's Bank Performance. *Global Economy and Finance Journal*, 6(2), 1 – 25

APPENDICES

Appendix I: List of Insurance Firms in Kenya

1. AAR Insurance Kenya
2. Africa Merchant
3. AIG Kenya Insurance Company
4. APA
5. Apollo Life Assurance
6. British-American
7. Cannon Assurance Company Limited
8. Capex Life Assurance Company
9. CIC Insurance
10. Concord
11. Continental Reinsurance
12. Co-operative
13. Corporate Insurance Company
14. CFC Life
15. Directline Assurance Company
16. East Africa Reinsurance Company
17. Fidelity Shield Insurance Company
18. First Assurance Kenya Limited
19. GA Insurance Company
20. Gateway Insurance
21. Geminia Insurance Company
22. Heritage Insurance Company
23. ICEA LION Insurance Company
24. Intra Africa Assurance Company
25. Invesco Assurance Company
26. Jubilee Insurance Company Limited
27. Kenyan Alliance
28. Kenindia Assurance Company

29. Kenya Orient Insurance
30. Kenya Reinsurance Corporation
31. Liberty Life Assurance Kenya Limited
32. Madison Insurance Company Kenya
33. Mayfair Insurance Company
34. Mercantile Insurance Company
35. Metropolitan Life Insurance Kenya
36. Monarch Insurance Company
37. Occidental Insurance Company
38. Old Mutual Life Assurance Company
39. Pacis Insurance Company
40. Pan Africa Life Assurance
41. Pioneer Assurance Company
42. Phoenix of East Africa Assurance Company
43. Real Insurance Company
44. Resolution Insurance Company
45. Takaful Insurance of Africa
46. Tausi Assurance Company
47. The Monarch
48. Trident Insurance Company
49. UAP Insurance Company
50. Xplico Insurance Company