# EFFECT OF FINANCIAL MANAGEMENT PRACTICES ON FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN KENYA

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## **Effect of Financial Management Practices on Financial Performance**

of Insurance Companies in Kenya

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A Thesis Submitted in Partial Fulfillment for the Degree of Doctor of Philosophy in Business Administration in the Jomo Kenyatta University of Agriculture and Technology

## DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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## DEDICATION

I dedicate this thesis to my family and friends for their encouragement, advice and support that they accorded me during my studies.

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### **OPERATIONAL DEFINITION OF TERMS**

- Capital Budgeting Techniques: Capital budgeting is the process of determining the viability to long-term investments on purchase or replacement of property plant and equipment, new product line or other projects (Munyao, 2010)
- Capital Structure Decisions: Is the proportional relation between a firm's debt capital and equity capital. Firms use capital structure usually to fund their business and expand. This decision is vital for a firm as it has a direct influence on the risk and return of a firm (Besley & Brigham, 2008)
- Corporate Governance:Corporate governance is the set of processes,<br/>customs, policies, laws and institutions affecting<br/>the way a corporation is directed, administered or<br/>controlled. Corporate governance also includes<br/>the relationships among the many players<br/>involved (the stakeholders) and the goals for<br/>which the corporation is governed (Knell, 2006).
- Financial Budgeting:This is defined as an estimation of the revenue<br/>and expenses over a specified future period of<br/>time. It can also be the estimate of costs,<br/>revenues, and resources over a specified period,<br/>reflecting a reading of future financial conditions<br/>and goals (Maritim, 2013).

Financial Management Practices: Financial management refers to the systems of
efficient and effective management of resources
in such a manner as to accomplish the objectives
of the organization (Chung & Chuang, 2010)

Financial management:Financial management is the planning, directing,<br/>monitoring, organizing, and controlling of the<br/>monetary resources of an organization (Gitman,<br/>2007).

Financial Performance:A subjective measure of how well a firm can use<br/>assets from its primary mode of business and<br/>generate revenues. This term is also used as a<br/>general measure of a firm's overall financial<br/>health over a given period of time, and can be<br/>used to compare similar firms across the same<br/>industry or to compare industries or sectors in<br/>aggregation (Wood & Sangster, 2005).

Liquidity: A measure of the extent of which an organization has sufficient cash to meet its immediate and short-term financial obligations. It can also be defined as the ability of a debtor to pay off their debts as and when they fall due (Bhunia, 2011).

Working Capital: This can be defined as the cash available for dayto-day operations of an organization. It can also be defined as the as the difference between current assets and current claims to get the operating income (Eljelly, 2004).

## ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
ARR	accounting return rate
C.A.T.A.R	Current Asset to Total Asset Ratio
CCC	Cash Conversion Cycle
CLTAR	Current Claims to Total Asset Ratio
CR	Current Ratio
CVP	Cost-volume profit
D.T.A.R.	Debt to Asset Ratio
DTAR	Debt to Asset Ratio
EBIT	Earnings Before Interests and Taxes
EPS	Earnings Per Share
ERS	Electronic Regulatory System
EVA	Economic Value Added
IFIU	Insurance Fraud Investigation Unit
IRA	Insurance Regulatory Authority
IRR	internal return rate
ISE	Istanbul Stock Exchange
LTDTA,	Long-Term Debt Obligations to Total Asset
MPT	Modern Portfolio Theory
NOP	Net Operating Profitability
NPV	Net Present Value
OLS	Ordinary Least Squares
OPM	Operating Profit Margin

**OPM** Operating Profit Margin

- **RBS** Risk Based Supervision
- **R.O.A**. Return On Asset
- **R.O.I.C** Return On Invested Capital
- **ROA** Return On Assets
- **ROCE** Return On Capital Employed
- **ROIC** Return On Invested Capital
- **ROTA** Return on Total Assets
- **SPSS** Statistical Package for Social Sciences
- **STDTA** short-term debt obligations to total asset
- **TDTA** Total Debt Obligations To Total Asset
- TQ Tobin Q
- WCM Working Capital Management

## ABSTRACT

Insurance companies provide unique financial services to the growth and development of every economy. Such specialized financial services range from the underwriting of risks inherent in economic entities and the mobilization of large amount of funds through premiums for long term investments. The study sought to establish the effect of financial management practices on financial performance of insurance companies in Kenya. The study was guided by five specific objectives which were: to establish the effect of working capital, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance on financial performance of insurance companies in Kenya. The population of the research consisted of the 49 licensed insurance companies in Kenya from 2011-2015 which constituted the units of analysis. The study used both secondary and primary data. Data on gross premium, return on assets and return on equity were obtained from secondary sources while primary data was obtained from responses for the information on the financial management practices used by insurance companies in Kenya. The study adopted correlational research design. The data was analyzed by use of descriptive and inferential statistics. Reliability and validity tests were conducted to determine the internal consistencies of the variables under investigation. Descriptive statistics produced frequencies, trends, means and percentages while inferential statistics produced regression and correlation results which show the relationship among the variables. Analysis of Variance (ANOVA), multiple regression and correlation analysis was carried out to test the hypothesis. Pearson's product-moment correlation coefficient (r) was used to explore relationships between the variables, specifically to assess both the direction and strength. Statistical Package for Social Sciences (SPSS) was used in the analysis of data and results were presented on frequency tables to show how the responses for the various variables and indicators posed to the respondents. The study found that working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance had positive and statistical significant effect on financial performance of insurance companies in Kenya. It also established that firm characteristics had a moderating effect on the relationship between working capital management, capital budgeting techniques, capital structure decisions, claims management policies, corporate governance and financial performance of insurance companies in Kenya. The study recommends that the management of insurance companies to consider putting in place the recommended steps seen as probable ways of ensuring that their financial management practices are improved for better gross premium, return on assets and return on equity. For instance, they should improve the company's capital structure and ensure that the companies fully utilize their debt facility according to their capabilities.

## **CHAPTER ONE**

## **INTRODUCTION**

This chapter gives the overview of the financial management practices on financial performance in insurance companies. This chapter presents the background of the study, the statement of the problem, the study objectives, the hypotheses, the scope and justification of the study. Limitations of the study are also presented in the chapter.

## 1.1 Background of the Study

This study sought to examine the effect of financial management practices on financial performance of insurance companies in Kenya. Financial management is one of the several functional areas of management but it is the center to the success of any business. Inefficient financial management, combined with the uncertainty of the business environment often led business enterprises to serious problems (Lakew & Rao, 2014). According to Kwame (2007), careless financial management practices are the main cause of failure for business enterprises. Regardless of whether it is an owner-manager or hired-manager, if the financial decisions are wrong, profitability of the company will be adversely affected and consequently, the entire business organization.

The past two decades (1995-2015) has seen a dramatic rise in the number of insolvent insurers. The ostensible causes of these insolvencies are myriad. Some of the insolvencies were precipitated by rapidly rising or declining interest rates. Others resulted from losses on assets such as junk bonds, commercial mortgages, collateralized mortgage obligations, real estate, and derivatives (Arif & Showket, 2015).

The churning of policies by unscrupulous sales agents, insolvencies among the reinsurers backing the policies issued, noncompliance with insurance regulation, and malfeasance on the part of officers and directors of the insurance companies affected some as well. But despite the numerous and disparate apparent causes of these

insolvencies, the underlying factor in all of them was the same: inadequate financial management practices (Claudio, 2009).

Insurance companies are in the business of taking risks and Worldwide these companies write policies that deal with specific risks, and in many cases, even underwrite exotic risks. In carrying its core activities of pricing, underwriting, claims handling and reinsurance management, an insurer will face a wide range of risks which are often interlinked and if not properly managed, could threaten the ability of the institution to achieve/sustain its viability.

Therefore, obtaining coverage for every insurable risk is being replaced by the proper financial management practices that include risk management concept. Risk management, which includes insurance coverage, is intended to minimize the costs associated with assuming certain types of risk and providing prudent protection. It deals with pure risks that are characterized by chance occurrence and that may only result in a financial loss (Arif, & Showket, 2015).

## **1.1.1 Financial Management Practices**

Financial management refers to the systems of efficient and effective management of resources in such a manner as to accomplish the objectives of the organization (Chung & Chuang, 2010). Financial management practices include working capital, investment, financing, accounting information systems, financial reporting and analysis (Firer et al., 2004; Gitman, 2007). Walker and Petty as cited by Kieu (2004) defined the main areas of financial management including financial planning (cash planning, fixed asset planning, profit planning), investment decision-making, working capital management (cash, receivable and inventory management) and sources of financing (short-term and long-term financing, intermediate financing and going public).

Chung and Chuang (2010) classified financial management practice in to the following five specific areas: Capital structure management, working capital management, financial reporting and analysis, capital budgeting and accounting information system. Financial management helps to improve the profitability

position of business organizations with the help of strong financial control devices such as budgetary control, ratio analysis and Cost-volume profit (CVP) analysis (Paramasivan & Subramanian, 2009). According to Hoe, (2010), the components of financial management includes financial planning and control, financial accounting, financial analysis, management accounting, capital budgeting and working capital management.

Working capital is defined as a company's total investment in current assets or assets that a company expects to be converted into cash within a year or less (Keown; Martin; Petty; & Scott, 2005). The investment in working capital involves carrying costs and shortage costs, so the firms have to find the tradeoff between them. Working capital management involves managing the short-term assets and claims of a firm. Working capital management ensures that a firm has sufficient cash flow in order to meet its short-term debt obligations and operating expenses (Gitman, 2007).

Working capital management is important due to many reasons. For one thing, the current assets of a typical firm accounts for over half of its total assets. Excessive levels of current assets can easily result in a firm's realizing a substandard return on investment. However, firms with too few current assets may incur shortages and difficulties in maintaining smooth operations (Van Horne & Wachowicz, 2000). Businesses are therefore required to maintain a balance between liquidity and profitability while conducting their day to day operations.

According to Munyao (2010), capital budgeting techniques is used to evaluate whether investments in fixed assets such as new machinery, new plants, new products, and research development projects are worth pursuing. Capital budgeting techniques include non-discounted cash flow techniques (payback period and the accounting rate of return) and the discounted cash flow techniques (net present value, internal rate of return, profitability index and discounted payback period).

Capital budgeting decisions are critical to the success of any firm. Brigham and Ehrhardt (2013) argued that capital budgeting decision is vital to a firm's financial well-being and are among the most important decisions that owners or managers of a firm must make. Their rationale for that belief is that capital budgeting decision often involves significant capital outlay to acquire fixed assets. Additionally, the acquisition of these assets often comes with long lasting and recurring financial obligation. Furthermore, efficient utilization and control and management of acquired fixed assets are also equally important. Sophisticated investment appraisal techniques such as Net Present Value (NPV) and Internal Rate of Return (IRR) methods have a positive impact on the profitability of firms (Olawale et al., 2010).

Capital Structure Management (CSM) is the other financial management practice under review in this study. According to Romney (2010), Capital structure is defined as the relative amount of debt and equity used to finance a firm. It's the relative amount of permanent short term debt, long term debt, preferred stock and common equity used to finance a firm. When determining a company's cost of capital, the costs of each component of the capital structure are weighted in relation to the overall total amount. A company's capital structure refers to the combination of its various sources of funding. Most companies are funded by a mix of debt and equity. Capital structure is part of financial structure, representing the permanent sources of a firm's financing (Boateng, 2004).

Pottier and Sommer (2006) investigated whether certain insurers are inherently more difficult to evaluate than others. They identify certain insurer characteristics that are associated with greater difficulty in financial strength evaluation, as proxied for by the level of rating disagreement by Moody's and Standard and Poor's. Specifically, the empirical results indicated that insurers that exhibit the following characteristics are more difficult to assess in terms of financial strength: smaller insurers, stock insurers, insurers with a history of reserving errors, insurers that use less reinsurance, insurers with greater levels of investment in stocks and low grade bonds, and insurers that are more geographically diversified.

Sharpe and Stadnik (2007) developed and tested a statistical model to identify Australian general insurers experiencing financial distress over the 1999-2001 period. Using a logit model and two measures of financial distress they are able to predict, with reasonable confidence, the insurers more likely to be distressed. These insurers are generally small and have low return on assets and cession ratios. Relative to holdings of liquid assets they have high levels of property and reinsurance assets, and low levels of equity holdings. They also write more overseas business, and less motor insurance and long-tailed insurance lines, relative to fire and household insurance.

Corporate governance is a financial management reviewed by this study. Cadbury (2002) defined corporate governance as the systems by which a corporation is directed, controlled and held to account. Akinpelu (2012) define corporate governance as referring to private and public institutions, including laws, regulations and accepted business practice, which in a market economy govern the relationship between corporate managers and entrepreneurs (corporate insiders) on one hand, and those who invest resources in corporations (corporate outsiders), on the other hand. Corporate governance is concerned with relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability.

Corporate governance is concerned with structures and processes for decision making, accountability, control and behaviour at the top of organizations. Corporate governance is a concept that involves practices that entail the organization of management and control of companies. It is the means by which an organization is directed and controlled. In broad terms, corporate governance refers to the processes by which organizations are directed, controlled and held accountable. Corporate governance encompasses authority, accountability, stewardship, leadership, direction and control exercised in corporations. It reflects the interaction among those persons and groups, which provide resources to the company and contribute to its performance such as shareholders, employees, creditors, long-term suppliers and subcontractors (Foo & Zain, 2010).

According to (Thompson, 2008), Risk Based approach to supervision (RBS) is an aspect of corporate governance and entails forward looking, primarily risk based, consultative, consistent and in line with the international best practice. RBS results in an improved efficiency and an intentional attempt to compel insurance firms to achieve their goals and objectives while undertaking tolerable risks. Risk based

supervision involves the adoption of supervisory mechanisms on financial institutions and enhancement of internal controls that help prevent the occurrence of risk.

According to the Retirement Benefits Authority supervisory guideline 2010, the risk based approach to supervision is an approach whereby the intensity of the work of a regulatory agency on supervising individual schemes is in proportion to the size and the risk of each scheme. The major aspects that RBS might have over insurance companies includes increased scale of operations, improvement of financial performance, strengthening of good corporate governance, improvement in internal control environment and the reporting structures of the companies. The presence of an effective corporate governance system within a company helps to provide a degree of confidence that is necessary for the proper functioning of a market economy. As a result, the cost of capital is lower and firms are encouraged to use resources efficiently leading to growth (OECD, 2004).

### **1.1.2 Firm Characteristics**

Budhwar, Varma, and Katou (2009) argue that the intensity of the interface between firm characteristics and firm performance are dependent on the operational model of the organization. The model may involve the business strategies and human management policies. The outcome of the interface can be affected by management style. Organizational culture and reverse causation which are controlled by size of the firm, age, staff, and the industry the firm belongs to. Namada (2013) proposes need for right configuration of strategic planning to improve performance. The study confirms firm size as one of the most influential characteristics in organizational studies.

Structure-related firm characteristics include size, age and ownership. The size reflects how large an enterprise is in infrastructure and employment terms. McMahon (2001) found that enterprise size significantly linked to better business performance. Larger enterprises were found to have higher level of success. Firm size has also been shown to be related to industry- sunk costs, concentration, vertical integration and overall industry profitability (Dean et al., 1998). Recent research has found an

association between firm size and inertia defined as slow adaptation to change or resistance to fundamental changes in conducting business (Miller & Chen, 1994). Inertia can be caused by constraints on action associated with firm age and size.

According to Golan et al. (2003) firm's resources and objectives summarized as firm characteristics, influence performance of organizations. These include structure, market and capital-related variables. Structure-related variables include firm size, ownership and firm age. Market-related variables include industry type environmental uncertainty and market environment. Capital-related variables entail liquidity and capital intensity. According to Kaguri (2013), taking all firm characteristics into account; size, liquidity, leverage, age, diversification, claim experience and premium growth financial, the study found out that these variables are statistically significance to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients.

## **1.1.3 Financial Performance**

According to Nandan (2010) financial performance can be defined as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. Further this term is used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. Financial performance of companies can be measured by use of accounting information or stock market values in a financial management practices context.

When applying stock market values as a measure of performance, one is interested in analyzing the change in market value. Firm performance is measured over time by using the average stock market change per year. This value is usually obtained by calculating the yearly change in stock price. Maseko and Manyani (2011) aver that accounting systems provide a source of information to businesses operating in any industry for use in the measurement of financial performance. It is crucial therefore that the accounting practices of insurance companies supply complete and relevant financial information needed to improve economic decisions made by entrepreneurs. The ability of insurance companies to continue to cover risk in the economy hinges on their capacity to create profit or value for their shareholders. Indeed, a welldeveloped and evolved insurance industry is a boon for economic development as it provides long- term funds for infrastructure development of every economy (Charumathi, 2012). In the context of business entities, accounting information is important as it can help the firms manage their short-term financial problems in critical areas like costing, expenditure and cash flow, by providing information to support monitoring and control. At all levels of organizations, budgets are getting tighter and there is an increased need for financial management initiatives to directly contribute to providing timely, accurate, reliable financial information to support management decisions (Nandan, 2010).

Brealey, Myers and Marcus (2009) indicate that financial performance can be measured in terms of profitability, liquidity, solvency, financial efficiency and repayment capacity. Profitability is the measures of the profit generated by a firm through the use of its productive assets; liquidity measures the ability of a firm to meet its obligations when they fall due; solvency measures a firm ability to pay all its financial obligations if all of its assets are sold. When accounting information is used, accounting ratios are employed. Among the common accounting ratios used to measure profitability are; return on assets (ROA) and return on capital employed (ROCE). Return on assets is an indicator of how profitable a company is relative to its total assets. It gives an idea as to how efficient management is at using its assets to generate earnings. It is calculated by dividing a company's annual earnings by its total assets and it is shown as a percentage (Brealey & Myers, 2007). According to Firer et al. (2004), the goal of financial management is to maximize the wealth of the owners of the firm. The goal of the firm is to maximize its value to its shareholders.

Value is represented by the market price of the company's common stock, which, in turn, is a reflection of the firm's investment, financing, and dividend decisions. Padachi (2010) points out that the main factors that contribute to success or failure of businesses are categorized as internal and external financial management factors. The external factors include financing (such as the availability of attractive financing), economic conditions, competition, government regulations, technology and

environmental factors. Financial performance measurement generally looks at a firm's financial ratios which are usually calculated using the accounting figures obtained from financial statements of an organization such as liquidity ratios, activity ratios, profitability ratios, and debt ratios (Haber & Reichel, 2005).

Financial reports measure past performance but communicate little about long-term value creation. Kaplan and Norton (1996) came up with the Balanced Scorecard to assist in measuring performance for private sector organizations. Their new system retained financial measurements but complemented these with measures from three other perspectives: that of the customer, the internal process, and learning and growth. Financial ratios are categorized according to financial aspect of the business. Current ratio is a financial ratio that measures whether a company has the adequate resources to pay off short-term debt obligations as they fall due.

Another measurement of financial performance can be through Solvency ratio which measures the ability of a company to meet its long term fixed expenses and to accomplish long term-term expansion and growth. Financial performance can also be measured by return on assets which is a profitability ratio that measures how far a company is profitable in relation to its total assets. Leverage ratio can also be used to measure financial performance. Leverage ratio measures the extent to which a company utilizes its debt to finance the assets (Neelaveni, 2012).

#### **1.1.4 Financial Management Practices and Financial Performance**

Financial management practices directly contribute to the financial performance of any company. Bhattacharya (2006) states that for a business firm to be able to sustain its business operations and meet its goals and objectives it must manage its financial practices effectively and prudently. Financial management helps to improve the profitability position of business organizations with the help of strong financial control devices such as budgetary control, ratio analysis and CVP analysis (Paramasivan et al., 2009).

Capital budgeting decisions are critical to the success of any firm. Brigham and Ehrhardt (2008) observes that capital budgeting decision is vital to a firm's financial

wellbeing and are among the most important decisions that owners or managers of a firm must make. Their rationale for that belief is that capital budgeting decision often involves significant capital outlay to acquire fixed assets. Olawale and Garwe. (2010) observes that the use of sophisticated investment appraisal techniques such as NPV and IRR methods have a positive impact on the profitability of firms.

Better performance through improved measurement and accountability can be achieved through Risk Based Supervision. RBS helps reveal the sources of success and failures in regulatory decision making and evaluation can feed back into improvements to future decisions (Peterson & Fenslin, 2011). RBS ensures more information is required to make decisions and hence better decisions are achieved based on more accurate and complete assessment of its consequences (Njuguna, 2012). Therefore, adoption of RBS is expected to have a positive impact on the financial performance of insurance companies.

# 1.1.5 Global Perspective Financial Management practices and Financial Performance

McMahon, Holmes, Hutchinson and Forsaith (2013) and McMahon (2003) summarize their review of financial management practices in Australia, the UK and the USA. In their review the context of financial management practices includes the following areas: accounting information systems, financing decisions, investing decisions. However, these previous researchers though looked into financial management; they did not include other key areas like working capital management and accounts payable management financial practices.

Indian government allowed privatization of insurance industry in 1999 setting up Insurance Regulatory Development Authority (IRDA) to regulate and develop insurance industry. IRDA issued licenses and has opened life insurance market to private companies. As a result, insurance sector in India has grown at a rapid rate after liberalization in 1999 and private players have been allowed to enter in life insurance market in India. The Indian Life insurance industry expanded tremendously from 2000 onwards in terms of premium income, new business policies, number of offices, agents, products, riders (Mahmji, 2010).

According to Klammer (2003), despite the growing adoption of sophisticated capital budgeting methods, there was no consistent significant association between financial performance and capital budgeting techniques. Baker, Dutta, and Saadi (2010) observes that firms adopting sophisticated capital budgeting techniques had better than average firm financial performance. More specifically, firms using modern inventory management techniques and Internal Rate of Return (IRR) reported superior financial performance, unlike those firms using methods such as Payback method and Accounting Rate of Return (ARR), (Raheman & Nasr, 2007).

# 1.1.6 Local perspective on Financial Management practices and Financial Performance

Wanyugu (2001) did a research on financial management practices of micro and small enterprises in Kenya a case of Kibera and found out that the management of the financial practices is an important factor in the performance of SMEs. Siba (2012) did a study on the relationship between financial risk management practices and financial performance of commercial banks in Kenya. She found that bank managers are financial risk averse and avoid uncertain business ventures. Thus their performance relies on practices that they deem not risky.

Nyongesa (2011) looked at the relationship between financial performance and financial management practices of insurance companies in Kenya. The study revealed that there was a consistent, significant positive association between financial management practices and financial performance. However, the study did not establish reasons for this correlation. Mundu (2007) sought to review selected financial management practices adopted by small enterprises in Kenya. The study found out that 66% of the respondents did not undertake cash budgeting, 70% of the business owners kept surplus cash with themselves and over 56% of the business owners were handling cash personally as the security to their money.

#### **1.1.7 Insurance Companies and Financial Performance**

Insurance is an important growing part of the financial sector in virtually all the developed and developing countries (Das et al., 2003). A resilient and well regulated insurance industry can significantly contribute to economic growth and efficient resource allocation through transfer of risk and mobilization of savings. In addition, it can enhance financial system efficiency by reducing transaction costs, creating liquidity and facilitating economies of scale in investment (Bodla et al., 2003).

The insurance sector appears to have weathered the challenges of 2011 well. Despite losses caused by an exceptional series of natural catastrophes in the Asia and Pacific region, non-life insurers and reinsurers appear to have recovered most of their capital over the course of the years. At the same time, declining interest rates and a widespread recovery of equity markets benefited the year-end valuation of financial assets held by life and non-life insurers (Bodla et al., 2003)

According to Swiss Republic (2004) important factors that determine the growth of the insurance business are the distribution of wealth, legal systems and property rights, the availability of insurance products, regulation and supervision, trust and risk awareness. Other non-economic factors have an impact on the development of insurance: religion, culture and education. The focus on the determinants of financial performance and profitability measures for the insurance sector of a specific country is underscored by virtue of the fact that most countries have an intermediation-based financial system that have individual or firms such as agents that link customers with the organizations. The relation between financial management practices and performance becomes extremely important when considering the fundamental role in value generation and distribution. Insurance companies today find themselves juggling a variety of challenges as they work to improve profitability, growth, and compete (Insurance Regulatory Authority, 2013).

Kenya represents East Africa's best developed insurance market and the regions financial focal point. It is the market leader in the region with about 3% insurance penetration and a highly competitive market comprised of 49 licensed insurance companies in 2013 and comprising of 51 insurance companies as at 2017. In 2015/16

the insurance industry had gross premiums of \$1.75bn with General insurance business forming the bulk of it. Kenya's insurance regulatory system is also the most mature in the region for example the adoption of Risk Based Supervision (RBS) framework by IRA is being replicated in other regional countries.

In the recent past the country has major regulatory changes, there are major changes in International Financial Reporting Standards, Financial Services Authority (FSA) and conduct risks and solvency II (Mburu, 2017). Kenya's insurance sector as at year 2016 comprises of 52 registered companies, over 200 brokers and over 7700 active agents (Insurance Regulatory Authority, 2016). The supervision and regulation of this sector is the responsibility of Insurance Regulatory Authority (IRA). According to IRA a general insurance company must have a minimum capital of Kshs. 300 million whereas a life insurance company must have a minimum capital base of Kshs. 150 million (Turana, 2010). These regulations and laws contribute immensely to the growth of business and hence financial performance.

In addition to the challenge of liquidation and receivership, greater awareness of insurance and greater demand for products are driving changes; from mergers, consolidations and new entrants; alongside proposed new regulations. This is underpinned by changing distribution channels - how insurance is sold, driving greater financial inclusion (Njuguna, & Kimani, 2016). These regulations are designed to enhance the sustainability of the sector through greater protection for the customer. In its bid to be the leading financial center in Sub Saharan Africa, Kenya has introduced the Financial Services Authority Bill. The law ensures the creation of a super financial services regulator by combining the Insurance Regulatory Authority (IRA), Retirement Benefits Authority (RBA) and Capital Markets Authority (CMA).

With a centralized regulator, this is expected to strengthen the overall regulation and integration of the sector. In a move that favors policy holders, the government has reduced the maximum time in which an insurance claim should be settled from 90 days to 30 days. The government has properly housed Sharia compliant or Takaful insurance products in the Insurance Act which is the first Islamic insurer in East Africa (Mugisha, 2016).

The marketing and distribution channels of insurance in Kenya involve among others, agents and brokers. These are professionals trained in sales, marketing and finance and are engaged by insurance companies and agencies to sell the insurance products (Mudaki, 2011).

In Kenya, almost all the premium income generated is through intermediaries like agents and brokers. The sales made by these professionals' impact positively on the financial performance. On the other hand, the delay by these groups in remitting proceeds from sales made to the parent insurance company impact negatively on the financial performance. Feedbacks from these groups serve as a basis for innovation in product, business portfolio balance and formulation of organizational policies (Hayes, 2010).

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

Performance of the Kenyan Insurance Market has been declining during the period 2010-2015. Equity turnover has fallen significantly during 2015 to close at KES 7.11 billion compared to KES 16.87 billion at the end 2010 (IRA, 2016). Insurance premiums registered an average decline of 2.3% during the period. The general insurance business underwriters incurred claims amounting to KES 53.70 billion in 2015, an increase of 9.3% compared to KES 49.13 billion incurred during 2010. Investors' equity funds amounted to KES 140.29 billion as at the end of 2015. These had declined by 9.5% between 2010 and 2015 up from KES 178.17 billion (Muia, 2017). The total insurance industry's liabilities grew by 10.3% to KES 384.96 billion. Listed insurance companies have registered a 11.9 per cent dip in profits after tax during the period (Chemin, Haushofer, & Jang, 2016).

Eight insurance companies have either been liquidated or placed under official receivership since the year 2000 (Mudaki & Wanjere, 2012). Among them are: Blue shield placed under statutory management in 2011, Standard Assurance in 2009, Invesco Assurance Company which was placed under receivership in 2008 and Concord Insurance Company in 2013 (IRA, 2013). Other insurance companies that had experienced financial problems previously included: Kenya National Assurance Company, United Insurance Company, Lake Star Assurance Company, Access

Insurance Company and Stallion Insurance. These trend of liquidation and receivership is worrying for insurance companies which provide unique financial services to the growth and development of every economy.

The business world without insurance is unsustainable since risky business may not have the capacity to retain all kinds of risks in this ever changing and uncertain global economy (Ahmed, 2010). The contribution of insurance at 3.1% of the Gross Domestic Product in Kenya in the year 2012 compared to 2.9% in 2011 is very low compared to other countries like South Africa which has a contribution of about 14% (AKI, 2012). In Malaysia, it is estimated that 41% of the population have some form of life insurance in comparison to Kenya that has less than 3% of the population insured (Mburu, 2017). It is evident that Kenya insurance companies are poorly performing and this study seeks to establish whether financial management practices contributes to the current trend in performance.

Some of the past studies on financial management practices include Kieu (2004) study on small business in Vietnam, Klammer (2003) study of the relationship between sophisticated capital budgeting methods and financial performance in US. Moore and Reichert (2009) carried a study on multivariate study of firm performance and use of modern analytical tools and financial techniques study in 500 firms in US. Nguyen (2001), studied on relationship between financial management practices and profitability of small and medium enterprises in Australia, while McMahon, Holmes, Hutchinson and Forsaith (2013) and McMahon (2003) reviewed financial management practices in Australia, the UK and the USA. These studies were done in developed and emerging economies while the current study was carried in Kenya, a developing economy.

Mohammad, Neab, and Noriza (2010) worked on crafting the relationship between Working Capital Management (WCM) and performance of firms. This study focused on working capital management as the only variable influencing performance. Ssuuna (2008) examined the effects of internal control systems on financial performance in an institution of higher learning in Uganda. The finding from the study in Uganda was only limited to effect of internal control systems on financial performance. The current study looked at five variables and a moderating variable (firm characteristics) as possible determinants of financial performance. The study was done in Uganda. The current study was carried out in Kenya.

Ma and Elango (2008) investigated the relationship between property-liability insurers' international operations and their risk-adjusted returns using cross-section and time-series data for the years 1992 through 2000. Mwangi, and Kosimbei (2014) study applied panel data models (random effects), Feasible Generalised Least Square (FGLS) regression while Memon et al. (2012) applied the log-linear regression model on the data of 141 Pakistani textile companies for the period of 2004–2009. Muritala (2012) applied panel least square approach. The current study used correlational study design.

Locally Nyongesa (2011) looked at the relationship between financial performance and financial management practices of insurance companies in Kenya. The study focused on fixed asset management, accounting information systems, financial reporting analysis and capital structure management. The current study however focused on working capital, capital budgeting techniques, capital structure decisions, claims management policies, corporate governance and the moderating role of firm characteristics.

Olweny and Themba (2011) and Ravallion (2009) recommended for more detailed country specific studies on what influences profitability and performance. Based on previous research findings and recognition of these gaps, a study of the effect of financial management on profitability is justified and the effect of financial management practices and financial characteristics should be developed and tested by using empirical data from less developed economies (Kieu, 2004). Existing Studies cover developed and emerging countries while most of the studies done in Kenya did not address the effect of financial management practices on financial management practices.

Furthermore, there is no studies where jointly the effects of the five independent variables on performance have ever been done elsewhere. As outlined above, it is evident that financial performance continues to demand strategic approaches to manage financial practices. The extent empirical literature on the financial management practices and financial performance of insurance companies appears somewhat limited for the underdeveloped countries and this study will contribute to the existing literature in Kenya.

# 1.3 Objectives of the Study

# **1.3.1 General Objective**

The general objective of the study was to examine the effects of financial management practices on financial performance of insurance companies in Kenya.

# **1.3.2 Specific Objectives**

This study pursued the following specific objectives:

- i) To establish the effect of working capital management on financial performance of insurance companies in Kenya.
- ii) To find out the effect of capital budgeting techniques on financial performance of insurance companies in Kenya.
- iii) To determine the effect of capital structure decisions on financial performance of insurance companies in Kenya.
- iv) To assess the effect of claims management policies on financial performance of insurance companies in Kenya.
- v) To explore the effect of corporate governance on financial performance of insurance companies in Kenya.
- vi) To establish the moderating effect of Firm characteristics on the relationship between financial management practices and financial performance of insurance companies in Kenya.

#### **1.4 Research Hypotheses**

The hypotheses of the study were;

- H<sub>01</sub>: Working capital management has no effect on financial performance of insurance companies in Kenya.
- H<sub>02</sub>: Capital budgeting techniques has no effect on financial performance of insurance companies in Kenya.
- $H_{03}$ : Capital structure decisions does not affect financial performance of insurance companies in Kenya.
- $\mathbf{H}_{o4}$ : Claims management policies has no effect on financial performance of insurance companies in Kenya.
- H<sub>05</sub>: Corporate governance do not affect financial performance of insurance companies in Kenya.
- $H_{o6:}$  Firm characteristics does not have a significant moderating effect on the relationship between financial management practices and financial performance of insurance companies in Kenya.

## **1.5 Significance of the Study**

The study adds value to various parties specifically and mutually as discussed. Insurance firms now appreciate the impact of financial management practices on firm growth and profitability drawing from the study recommendations. The lessons brought out in the study can be used by management to improve operations. The findings of the study also enable management of other service industries to understand the financial management practices of their institutions and its effect on performance.

The finding is significant to the government to formulate policy that incorporates the insurance sector and how effectively to ensure its full participation. The suggestions from the study lead to new orientation in formulation and implementation of

financial management policies that could enhance insurance services in Kenya. Further the suggestions from the study lead to new formulation and implementation of policies by IRA that would enhance more effective financial management practices in insurance industry and other financial sectors. The study identifies policy gaps that can be fed to policy development for the betterment of financial management practices.

The recommendations of this study enable scholars to design more progressive and effective financial management practices aimed at ensuring better financial performance. Academicians who are also researchers in the area of financial management are be able to access this study from the public repository domains like libraries, magazines, journals and online open access academic sites once the findings of the study are published. They add value on the gaps identified by this study. It also contributes to the corpus of literature on financial management.

#### **1.6 Scope of the Study**

This study sought to establish the effect of financial management practices on financial performance of insurance companies in Kenya. Specifically, to establish the effect of working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance on financial performance of insurance companies in Kenya. The population of the research consisted the 49 licensed insurance companies in Kenya between 2011-2015 which constituted the units of analysis.

The study used both secondary and primary data. The primary information on financial management practices were obtained from senior management and middle management employees in the insurance firms. Data on gross premium, return on assets and return on equity were obtained from secondary sources. The study was conducted in year 2014- 2017, thus, primary data was collected during this period. Secondary data covered financial performance of these insurance companies between period 2011-2015.

# 1.7 Limitations of the study

Considering the sensitivity of the matters, most organizations keep their employee records as a secret. In most organizations, departments have instituted policies to treat with strict confidentiality access of such information. The researcher therefore encountered challenges in securing this vital information from the respondents.

The nature of the study calls for confidential information related to the insurance companies. Respondents felt intruded when they were requested to complete a questionnaire which required them to disclose such information. The challenge was mitigated by assuring the respondents of confidentiality and ethical handling of the information.

# **1.8 Delimitation of the Study**

Delimitations are set so that goals do not become impossibly large to complete. Setting delimitations and subsequent justification helped to maintain the objectivity of the study. They provide the scope within which researcher can conclude findings and determine the study's reliability or external validity.

The researcher guaranteed confidentiality to the respondents for the information supplied so that they can feel free to give all the information required. The respondents were also guaranteed that the information gathered shall only be used for this research purpose only. The researcher further gave the guarantee that the outcome and reports formulated from this study was not to be referenced to any individual in the company. These delimitation enabled the researcher to be obtain full cooperation from nearly all the respondents hence obtaining the required information with minimal challenges.

## **CHAPTER TWO**

## LITERATURE REVIEW

## **2.1 Introduction**

This chapter provides the theoretical foundation of the study and reviews selected conceptual and empirical literature relating to key variables with the aim of highlighting the research study gaps. Further, the empirical review of studies that best relate to the objectives of the study are also presented and discussed. The study's conceptual framework and definition of variables is also presented.

### 2.2 Theoretical Review

A theoretical framework consists of concepts, together with their definitions, and existing theory/theories that are used for a particular study (Van Ryan & Heaney, 1992). The theoretical framework presented herein demonstrates an understanding of theories and concepts that are relevant to the topic of the research.

### 2.2.1 Modern Portfolio Theory

Markowitz (1952) introduced the Modern Portfolio Theory (MPT) that explores how risk-averse investors can construct optimal portfolios taking into consideration the trade- off between market risk and expected returns. The theory quantifies the benefits of diversification, and shows that out of a universe of risky assets, an efficient frontier of optimal portfolios can be constructed. Each portfolio on the efficient frontier offers the maximum possible expected return for a given level of risk and Investors hold one of the optimal portfolios on the efficient frontier as they adjust their total market risk by leveraging or de leveraging that portfolio with positions in the risk-free asset such as government bonds.

According to Elton, Gruber, Brown, and Goetzmann (2009), the assumption of Modern Portfolio Theory are that investors consider each investment alternative as being represented by a probability distribution of expected returns over some holding period. Secondly investors maximize one-period expected utility and their utility curves demonstrate diminishing marginal utility of wealth. Thirdly investors estimate risk on basis of variability of expected returns. The other assumption is that investors base decisions solely on expected return and risk. Finally, investors prefer higher returns to lower risk and lower risk for the same level of return.

MPT provides a broad context for understanding the interactions of systematic risk and reward which has profoundly shaped how institutional portfolios are managed, and motivated the use of passive investment management strategies. Markowitz model is a single- period approach, which assumes that an investor has a given initial endowment to invest. The investment will be held for a specific length of time referred to as the investor's holding period. At the end of that period, the investor will liquidate his holdings and will either re-invest it or use it for his own consumption needs (or a combination of both) that's a fixed mix or a buy-and-hold strategy. Thus return (end of period accumulated wealth less starting period wealth) starting period wealth (Markowitz, 1952).

The modern portfolio theory demonstrates that organizations manage their businesses on a portfolio basis (Markowitz, 1952). A case pointed out for the insurance sector is how businesses are segregated in terms of portfolio like general businesses, life insurance, specialist and composite insurance which are distinct strategic units or portfolio for insurance companies. It is therefore important for insurance companies to deploy prudent financial management practices in order to instill control within the various portfolios with a target of maximizing returns on each portfolio. This theory is relevant to the study as diversification can be a form of financial management practices. The concept of diversification is important when an investor is faced by several types of securities or investment opportunities.

## 2.2.2 Pecking Order Theory

The Pecking Order Theory was developed by Myers (1984). According to this model firms prefer internal funding over external funding. In case firms require external funding they would prefer debt over equity and equity is generated as last resort. So the firms don't have predetermined or optimum debt to equity ratio due to

information asymmetry. The firms adopt conservative approach when it comes to dividends and use debt financing to maximize the value of firm.

Pecking order theory of capital structure states that firms have a preferred hierarchy for financing decisions. The highest preference is to use internal financing (retained earnings and the effects of depreciation) before resorting to any form of external funds. Internal funds incur no flotation costs and require no additional disclosure of proprietary financial information that could lead to more severe market discipline and a possible loss of competitive advantage.

If a firm must use external funds, the preference is to use the following order of financing sources: debt, convertible securities, preferred stock, and common stock, (Myers, 1984). This order reflects the motivations of the financial manager to retain control of the firm (since only common stock has a "voice" in management), reduce the agency costs of equity, and avoid the seemingly inevitable negative market reaction to an announcement of a new equity issue. (Hawawini & Viallet, 1999)

Implicit in pecking order theory are two key assumptions about financial managers. The first of these is asymmetric information, or the likelihood that a firm's managers know more about the company's current earnings and future growth opportunities than do outside investors. There is a strong desire to keep such information proprietary. The use of internal funds precludes managers from having to make public disclosures about the company's investment opportunities and potential profits to be realized from investing in them. The second assumption is that managers will act in the best interests of the company's existing shareholders. The managers may even forgo a positive-NPV project if it would require the issue of new equity, since this would give much of the project's value to new shareholders at the expense of the old, (Myers & Majluf, 1984).

The Pecking Order Theory is a capital structure theory that has been dominated by the search for optimal capital structure required for any firm Shyam-Sunder and Myers (1999). According to Myers (1984) firms tend to utilize them retain earnings for purpose of financing when it is financially feasible and adequate. The reason is simply the adverse selection. Shyam-Sunder and Myers (1999) proposed that when any firm requires funds from external sources the equity is rarely issued. The firms simply opt for debt given that information costs associated with debt is lower that equity. They also refined these ideas into key testable predictions.

De Medeiros and Daher (2004) test two models with the purpose of finding the best empirical explanation for the capital structure of Brazilian firms. The models tested were developed to represent the Static Tradeoff Theory and the Pecking Order Theory. The sample consists of firms listed in the Sao Paulo (Brazil) stock exchange from 1995 through 2002. By using panel data econometric methods, they aimed at establishing which of the two theories had the best explanatory power for Brazilian firms. The analysis of the outcomes led to the conclusion that the pecking order theory provides the best explanation for the capital structure of those firms.

Myers (1984) suggests that it is because the value of firm and wealth of shareholders associated with firm is disturbed by asymmetry of information. This argument is supported by Famma and Fench (2000) who found that profitable firms were less levered as compared to non-profitable firms. Frank and Goyal (2003) held that large firms tend to accumulate debts in order to support and keep up with the payments of dividends while small firms tend to behave in opposite behavior.

Pecking order theory, however, does not explain the influence of taxes, financial distress, security issuance costs, agency costs, or the set of investment opportunities available to a firm upon that firm's actual capital structure. It also ignores the problems that can arise when a firm's managers accumulate so much financial slack that they become immune to market discipline. In such a case it would be possible for a firm's management to preclude ever being penalized via a low security price and, if augmented with non-financial takeover defenses, immune to being removed in a hostile acquisition.

This theory was relevant to the study as it as it informs capital structure which is one of the independent variable in this study. Company financing decisions involve a wide range of policy issues. At the private, they have implications for capital market development, interest rate and security price determination, and regulation. At the private, such capital structure decisions affect corporate governance and company development (Green, Murinde & Suppakitjarak, 2002). The choice of financing has repercussion on financial management according to this theory which justifies the decision made among equity financing, debt financing and the mix ratio financing.

# 2.2.3 The Real Options Theory

Myers (1984) proposed the Real Option Theory. Since then, these notions have remained of great interest among financial experts and analysts. Chance and Peterson (2002) noted that real options deal with choices about the real investments like capital budgeting projects. Real options offer a more efficient way for managers to allocate capital and maximize shareholder value by leveraging uncertainty and limiting downside risk. Furthermore, it asserts that the presence of real options can make an investment worth more than its conventional discounted cash flow value.

The classic approach makes the standard replicating-portfolio assumption of financial option pricing. Specifically, this approach assumes that a portfolio of traded investments can be constructed to replicate the returns of the option in question, and therefore that the option can be valued based on standard no-arbitrage arguments and transparent manner (Amram & Kulatilaka, 1999). Although it is not emphasized, the classic approach also generally assumes that the traded replicating portfolio behaves in standard ways. In particular, the approach assumes that asset price movements can be described by geometric Brownian motion so that standard financial tools, such as Black-Scholes, can be applied.

Arnold and Shockley (2003) attributed increased interest in real options to forces of supply and demand. The supply side reflected a growing body of literature pertaining to the real options approach. The demand side for real options reflected management's need to position the firm to benefit from uncertainty and to communicate the firm's strategic flexibility. Increasingly, managers in industries characterized by large capital investments and considerable uncertainty and flexibility e.g. mining, oil and gas aerospace, pharmaceuticals as well as biotechnology, were contemplating the use of real options. Real options hold a considerable promise because they recognize that managers can obtain valuable information after commencement of the project.

This theory was relevant to the study as it as it informs capital budgeting decision which is one of the independent variable in this study. Capital budgeting decision often involves significant capital outlay to acquire fixed assets. Additionally, the acquisition of these assets often comes with long lasting and recurring financial obligation. Furthermore, efficient utilization and control and management of acquired fixed assets are also equally important. Olawale et al. (2010) found out that the use of sophisticated investment appraisal techniques such as Net Present Value (NPV) and Internal Rate of Return (IRR) methods have a positive impact on the profitability of firms.

#### 2.2.4 Stewardship Theory

Stewardship theory has its roots from psychology and sociology and is defined by Davis, Schoorman and Donaldson (1997) as "a steward protects and maximises shareholders' wealth through firm performance, because by so doing, the steward's utility functions are maximized". In this perspective, stewards are company executives and managers working for the shareholders, protects and make profits for the shareholders.

Unlike agency theory, stewardship theory stresses not on the perspective of individualism (Donaldson & Davis, 1991), but rather on the role of top management being as stewards, integrating their goals as part of the organization. The essential assumption underlying the prescriptions of Stewardship Theory is that the behaviors of the manager are aligned with the interests of the principals. Stewardship Theory places greater value on goal convergence among the parties involved in corporate governance than on the agent's self-interest (Van Slyke, 2006). The economic benefit for the principal in a principal-steward relationship results from lower transaction costs associated with the lower need for economic incentives and monitoring.

The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. Agyris (1973) argues agency theory looks at an employee or people as an economic being, which suppresses an individual's own aspirations. However, stewardship theory recognizes the importance of structures that empower the steward and offers maximum autonomy built on trust (Donaldson

& Davis, 1991). It stresses on the position of employees or executives to act more autonomously so that the shareholders' returns are maximized. Indeed, this can minimize the costs aimed at monitoring and controlling behaviours (Davis, Schoorman & Donaldson, 1997).

On the other end, Daly et al. (2003) argued that in order to protect their reputations as decision makers in organizations, executives and directors are inclined to operate the firm to maximize financial performance as well as shareholders' profits. In this sense, it is believed that the firm's performance can directly impact perceptions of their individual performance. Indeed, Fama (1980) contend that executives and directors are also managing their careers in order to be seen as effective stewards of their organization, whilst, Shleifer and Vishny (1997) insists that managers return finance to investors to establish a good reputation so that that can re-enter the market for future finance. Stewardship model can have linking or resemblance in countries like Japan, where the Japanese worker assumes the role of stewards and takes ownership of their jobs and work at them diligently.

This theory was relevant to the study as it as it informs corporate governance policy which is one of the independent variable in this study. Stewardship theory suggests unifying the role of the CEO and the chairman so as to reduce agency costs and to have greater role as stewards in the organization. It was evident that there would be better safeguarding of the interest of the shareholders. It was empirically found that the returns have improved by having both these theories combined rather than separated (Donaldson & Davis, 1991).

### 2.2.5 Walker's Three Propositions

Walker (1964) developed a theory of working capital management by empirically testing, though partially, three propositions based on risk-return-tradeoff of working capital management. Walker studied the effect of change on the level of working capital on the rate of return in nine industries for the year 1961 and found the relationship to be negative. Based on his observation, he developed three propositions: Proposition I- If the amount of working capital is to fixed capital, the amount of risk the firm assumes is also varied and the opportunities for gain or loss

are increased. He further stated that if a firm wants to achieve the lowest possible risk, it should use equity for financing working capital. But by doing so the firm reduces its opportunities for high returns on equity as it does not take advantage of leverage.

Proposition II- The type of capital (debt or equity) used to finance working capital directly affect the amount of risk the company assumes as well as the opportunities for gain or loss. He suggested that the debt-equity ratio and the maturity period for debt affects the risk-return-tradeoff. Long periods for debt translated to lower risk since management would have adequate time to raise funds to meet debt obligations. But long-term debt is very costly, and on the basis of this he developed the third proposition. Proposition III- The greater the disparity between the maturities of a firm's debt instruments and its flow of internally generated funds, the greater the risk and vice-versa. Thus Walker tried to build up a theory of working capital management by developing three propositions. But he only empirically tested the first proposition.

Weston and Brigham (1972) extended the second proposition suggested by Walker by dividing debt into long-term debt and short-term debt. They suggested that for cash management short-term debt should be used in place of long-term debt whenever their use would lower the average cost of capital to the firm. They suggested that a business would hold short-term marketable securities only if it had excess funds after meeting short-term debt obligations. They further suggested that current assets should expanded to the point where marginal increase in returns on these assets would just equal the cost of capital required to finance such increases.

This theory was relevant to the study as it linked working capital management variable to the study. Working capital being a key financial practice requires proper management. This study focused on cash management, refund and maturity management and current debt management. According to this theory the type of debt or equity used to finance working capital directly affect the amount of risk the company assumes as well as the opportunities for gain or loss.

#### **2.2.6 Contingency Theory**

Contingency theory is a behavioral theory based on the views that there is no "one best way" to lead an organization, organize a cooperation or to make a decision. Contingency theory states that these actions are dependent (contingent) to the internal and external factors. Thus Contingency theory states that there is no single theory of contingency management. Contingency theory therefore asserts that one thing depends on other things, and for organizations to be effective, there must be a "goodness of fit" between their structure and the conditions in their external environment. As such the correct management approach is contingent on the organization's situation (Daft, 2001).

The position of the organizational theorist is that "the best way to organize depends on the nature of the environment to which the organization relates." (Scott, 1992: 89) Contingency theory has two basic underlying assumptions: First, there is no one best way to organize and second, any way of organizing is not equally effective (Galbraith, 1973).

The study accepts the notion of contingency theory, which suggests that the selected performance measurement system (PMS) design and use must conform to its contextual factors. Contingency theory represents a rich blend of organizational theory such as organizational decision making perspectives and organizational structure (Pugh, Hickson, Hinnings & Turner 1969; Donaldson, 2001). The essence of the contingency theory paradigm is that organizational effectiveness results from fitting characteristics of the organization, (such as its cultures) to contingencies that reflect the situation of the organization (Burns & Stalker, 1961; Lawrence & Lorsch, 2004).

According to Donaldson (2001), organizations seek to attain the fit of organizational characteristics to contingencies which leads to high performance. Thus the organization becomes shaped by the contingencies (fit) to avoid loss of performance. Thus, there is an alignment between organization and its contingencies, creating an association between contingencies and organizational contextual characteristics (Burn & Stalker, 1961). The contingency theory offers a useful way of

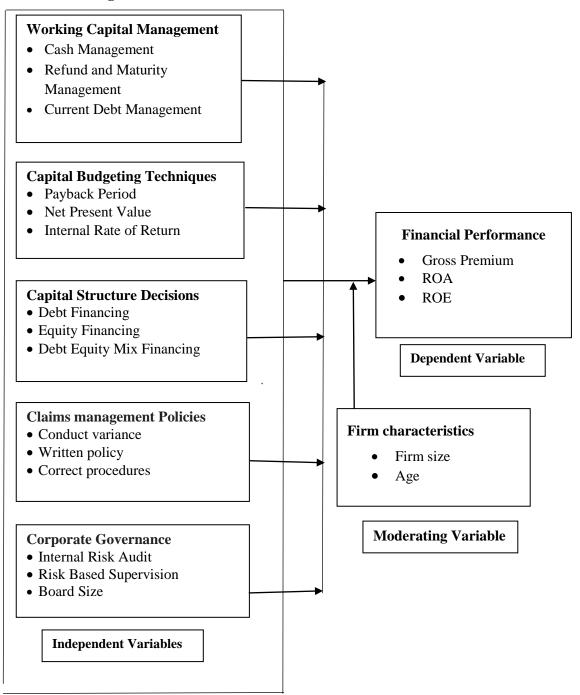
conceptualizing the relationship between certain contingency variables and organization structure for impressive performance. This theory was relevant to the study because organizational performance of a company depends on the financial management practices in place.

## **2.3 Conceptual Framework**

Kombo and Tromp (2009), define a concept as an abstract or general idea inferred or derived from specific instances. The scholars further define a conceptual framework as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. The goals of a conceptual framework are threefold. Firstly, to describe existing practice, secondly, to prescribe future practice; and thirdly, to define key terms and fundamental issues. A conceptual framework aims to broadly define a number of key terms and concepts that can be used in identifying and debating the issues.

The conceptual framework developed for this research is intended to assist the researcher to develop awareness and understanding of the effects of financial management practices on financial performance of Insurance companies in Kenya. The framework has been adopted for its potential usefulness as a tool to assist the researcher to make meaning of subsequent findings. The conceptual framework is therefore based on five explanatory variables, and one dependent variable as shown diagrammatically in Figure 2.1 that illustrates the conceptualized relationship between the explanatory and dependent variables. The conceptual framework shows how variables interact in a diagram format.

# **Financial Management Practices**



**Figure 2.1: Conceptual Framework** 

## 2.3.1 Working Capital Management

Working capital management was explained by use of cash management, refund and maturity management and current debt management indicators. Good management of debtors is key to having good profits for the company, creditors can be used to manage cash flow deficits and avoid loss of good performance (Appuhami, 2008). Jagongo and Makori (2013) study on the effects of working capital management on firm's profitability in Kenya adopted number of day's accounts receivable and cash conversion cycle.

According to Emery, Finnerty and Stowe (2004) the purpose of cash management is to determine the optimal level of cash needed for operation. They also indicate that the daunting task of cash management is to maintain an appropriate level of cash and marketable securities that reduce the risk of insufficient fund for operation. Thus, a company's competency to synchronize cash inflows with cash outflow, by using cash budgeting and forecasting in formulating a cash management strategy is important.

Similarly, according to Bagchi and Khamrui (2012) cash flow management is concerned with arranging cash, monitoring account receivable and account payable activities and proper maintaining of inventory. They further posit that an optimum cash flow management affects liquidity and profitability of a firm. Ross et al. (2011) asserts that reducing the time cash is tied up in the operating cycle improves a business's profitability and market value furthers the significance of efficient cash management practices in improving business performance.

Gakure, Cheluget, Onyango and Keraro (2012) study on the relationship between working capital management and performance of manufacturing firms used accounts collection period, average payment period, inventory holding period and cash conversion cycle as working capital constructs. Emery, Finnerty and Stowe (2004) adopted cash budgeting and forecasting in formulating a cash management strategy is important. Dong and Tay Su (2010) in his study adopted the cash conversion cycle. The current study adopted cash management, refund and maturity management and current debt ratio as working capital management constructs.

# 2.3.2 Capital Budgeting Techniques

Capital budgeting decisions are critical to the success of any firm. Brigham and Ehrhardt (2008) argued that capital budgeting decision is vital to a firm's financial well-being and are among the most important decisions that owners or managers of a firm must make. Their rationale for that belief is that capital budgeting decision often involves significant capital outlay to acquire fixed assets.

Kadondi (2002) study on capital budgeting techniques and financial performance found out that 85% carried out capital budgeting in stages, 31% used the payback method, 27% applied NPV while 23% were using the IRR technique. Capital budgeting determines the worthiness of a given project. In the determination of the worthiness of a project two basic techniques are used namely payback period (PBP) and accounting return rate (ARR). On the other hand, the most popular methods are net present value (NPV) and internal return rate (IRR).

The net present value (NPV) is defined as the present value of all the present and future projected positive cash flows. The discount rate that should equate the rate of return on the next best investment alternative of similar risk, is also known as the opportunity cost of capital. The NPV decision rule is to give further consideration to those projects whose NPV's are greater than zero. A positive NPV implies that the projected cash flows indicate a return in excess of the discount rate. Any project that provides returns in excess of the opportunity cost, certainly adds additional value of the company, thereby increasing shareholder wealth (Farragher et al., 2001).

Klammer (1973) study tested payback method and the discounting techniques. Gilbert (2005) study to determine the application of capital budgeting methods and their association with firm performance used payback method, accounting rate of return, net present value and the internal rate of return. Payback period is the expected length of time for aggregate positive cash flows to equal the initial cost, or the time it is expected to take to recover the initial investment (Linstrom 2005). Kadondi (2002) defines the accounting rate of return as the average after-tax profit divided by the initial cash outlay. Olawale, Olumuyiwa and George (2010) study compared traditional methods comprising the payback method and accounting rate with sophisticated investment appraisal techniques. The current study focused on payback period, net present value and internal rate of return as the only construct in capital budgeting decisions.

### 2.3.3 Capital Structure Decisions

The concept of capital structure can be defined as the proportional relation between a firm's debt capital and equity capital. Firms use capital structure usually to fund their business and expand. This decision is vital for a firm as it has a direct influence on the risk and return of a firm. Besley and Brigham (2008) conceptualized capital structure as the blend of long-term debt capital, preferred share capital and the net worth that is being used as a method of permanent financing by the firm. Describing capital structure as a method of long-term financing, Van Horne and Wachowicz (2008) stated that it is a combination of a firm's preferred share capital, equity capital and debt capital. Therefore, it could be said that, traditionally, capital structure has been conceptualized as a combination of long-term debt capital and equity capital, and thus ignored short-term debt capital.

Brigham (2004) referred to Capital structure as the way in which a firm finances its operations which can either, be through debt or equity capital or a combination of both. According to Myers (2001), there was no universal theory on the debt to equity choice but noted that there were some theories that attempted to explain the capital structure mix. He cited the tradeoff theory which states that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress.

Umar et al. (2012) adopted short-term debt obligations to total asset, long-term debt obligations to total asset (LTDTA), and total debt obligations to total asset (TDTA) as the capital structure variables. Salteh et al. (2012) adopted STDTA, LTDTA, TDTA, on the performance proxies by ROE and Tobin's Q. Arbabiyan and Safari (2009), used link of STDTA and TDTA with ROE while Ramadan and Ramadan (2015) used capital structure variables, TDTA, LTDTA, LTDTA, on the performance of Jordanian firms. The current study adopted debt financing, equity financing and a companied mix of both debt and equity.

#### **2.3.4 Claims Management Policies**

An insurer's total claims may be affected by various factors including underestimated liabilities from unpaid (expired) past policies or underpriced current business, incorrect or inaccurate underwriting, wrong or inaccurate assumptions on the frequency and severity of losses or from factors wholly beyond the underwriter's control. In addition, it may be that much of the total written premiums remain outstanding for long periods and turns out to be uncollectible (Shiu, 2004). For a P & C insurer, the ratio of claims to premiums (loss ratio) partly represents underwriting results and denotes the quality of business underwritten and is an important indicator of whether the pricing policy of the firm is correct. Loss ratio is at the centre of key claims management efforts of an insurer and is therefore very vital for the long term profitability of the firm (Yusuf & Dansu, 2012).

Optimal claims management practices also include accurately assessing the reserves associated with each claim as they represent liabilities and future financial obligations for the insurer. (Baranoff et al., 2009). Financially and legally, an insurer is expected to maintain a certain level of reserves to hedge against their unearned premiums. As premiums grow, so do the required reserves (Calandro & O'Brien, 2004).

The company therefore must estimate its future payments before it can determine losses, including an estimation of the payments for claims that have been incurred but not yet reported (IBNR) (Leverty & Grace, 2012). This calls for development and availability of skills in loss reserving and claim projection, together with optimal reinsurance arrangements that reduce the need for contingent increases of loss reserve (Baranoff et al., 2009).

Claims Management policies will be explained by production of monthly financial statements which is important in monitoring claims settlement, annual budgets are key in directing and monitoring fraudulent claims settlement. Insurance industry in Kenya has key organizational performance indicators which are used to gauge performance. The company's management should be particular about monthly targets for each department as guided by departmental targets (Ma & Elango, 2008).

#### **2.3.5 Corporate Governance**

This study adopted internal risk audit, risk based supervision and board size as constructs under corporate governance. Internal control systems including internal audits are intended primarily to enhance the reliability of financial performance, either directly or indirectly by increasing accountability among information providers in an organization (Jensen, 2003). Internal control therefore has a much broader purpose such that the organization level of control problems associated with lower revenues, which explore links between disclosure of material weakness and fraud, earnings management or restatements internal controls provide an independent appraisal of the quality of managerial performance in carrying out assigned responsibilities for better revenue generation (Beeler, 1999).

Fadzil et al. (2005) observes that an effective internal control system unequivocally correlates with organizational success in meeting its revenue target level. Effective internal control for revenue generation involves; regular a review of the reliability and integrity of financial and operating information, a review of the controls employed to safeguard assets, an assessment of employees' compliance with management policies, procedures and applicable laws and regulations, an evaluation of the efficiency and effectiveness with which management achieves its organizational objectives (Ittner, 2003). The set procedures in departments should be followed at all times during settling claims. The insurance companies should have an internal audit function and effective systems of detecting fraud and this will be appropriate and sufficient internal controls in place.

Risk based supervision provides companies with better assurance of an organisations capability to manage risk. Economic and social catastrophies such as Enron, the 2008 banking crises, Katrina which have resulted from poor governance in both private and public sectors and these governance failures can be attributed in large part to inadequate risk management and inadequate and ineffective monitoring by internal audits (Fraser & Simkims, 2010).

The two most important functions of the board of directors are those of advising and monitoring (Raheja, 2005). The advisory function involves the provision of expert advice to the CEO and access to critical information and resources (Adams & Ferriera, 2007). This is performed by both insiders and outsiders, although the importance of outside directors, who bring valuable expertise and potentially important connections.

The advantage of larger board size is the greater collective information that the board subsequently possesses and hence larger boards will lead to higher performance (Dalton et al., 2005). Secondly, the board has the responsibility to monitor, discipline, and remove ineffective management teams, to ensure that managers pursue the interests of shareholders.

#### 2.3.6 Firm Characteristics

Firm size is one of the most influential characteristics in organizational studies. Chen and Hambrick (2005), and Mintzberg (2009) provide a summary and overview of the importance of firm size. Firm size has also been shown to be related to industrysunk costs, concentration, vertical integration and overall industry profitability (Dean et al., 2008). Larger life insurance companies are more likely to have more layers of management, greater number of departments, increased specialization of skills and functions, greater centralization and greater bureaucracy than smaller life insurance companies (Daft, 2005).

There is an association between firm size and inertia defined as slow adaptation to change or resistance to fundamental changes in conducting business (Miller & Chen, 2004). Inertia can be caused by constraints on action associated with firm age and size (Miller & Chen, 2004). Starbuck (2005) argues that inertia can make change costlier and harder to achieve and maintain. Larger life insurance companies may also find it more difficult to maintain an atmosphere of continuous change than smaller life insurance companies (Starbuck, 2005). Structure-related firm characteristics include size, age and ownership. The size reflects how large an enterprise is in infrastructure and employment terms. McMahon (2001) found that enterprise size significantly linked to better business performance. Larger enterprises

were found to have higher level of success. The current study adopted firm size and age as part of firms characteristics constructs.

# 2.3.7 Financial Performance

Financial performance is a subjective measure of how well a firm can use its' assets from its' primary business to generate revenues. Erasmus (2008) noted that financial performance measures like profitability and liquidity among others provided a valuable tool to stakeholders to evaluate the past financial performance and the current position of a firm. Financial performance has implications to organization's health and ultimately its survival.

High performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large (Naser & Mokhtar, 2004). A firm's financial performance is a measure of how well a firm uses its assets from its core operations and generates revenues over a given period of time. This measure is thus compared to some given industrial average standard of similar firms in the same industry.

Premium is agreed upon fees paid for coverage of insurance benefits for a defined benefit period. Gross premiums written is the sum of both direct premiums written and assumed premiums written before the effect of ceded reinsurance. Direct premiums written represents the premiums on all policies the Company's insurance subsidiaries have issued during the year. Assumed premiums written represents the premiums that the insurance subsidiaries have received from an authorized statemandated pool or under previous fronting facilities (Munyao, Kalui, & Ngeta, 2010). Return on Equity focuses on return to the shareholders of the company. It is typically income before extra-ordinary expenses and discontinued operations divided by common equity (Philip, 2009).

Various studies consider return on equity as an important measure of financial performance involving organizational effectiveness in terms of management and governance practices (Davison, 2010; World Bank, 2014). It is also a metric that many investors give attention to while making investments decisions about a firm.

According Philip (2009), return on equity provides shareholders with a quick and easy way to understand metrics and has been used by many organizations across the globe to measure financial performance.

Return on Assets is an indicator of how profitable a company is in relation to its total assets and calculated by dividing a company's annual earnings by its total assets (Philip 2009). From corporate governance perspective, one could say that ROA provides an idea of how governance practices in relation to management uses a firm's assets to generate earnings. Return on Assets is widely used as a measure of financial performance in relation to corporate governance.

Gilchrist (1972) (as cited in Jiang, 2014) stresses that return on assets as the ultimate measure of managerial effectiveness and provides a levelled playing field when comparing financial performance of firms of varying sizes within an industry or sector since it normalizes profits with assets which are likely to vary with firm size. Many writers treat return on asset as an indicator of firm's financial performance whatever their objective may be. ROA is a key index of business success as it was one of the most popular indicators of financial performance with a widespread use in the empirical research.

# 2.4 Empirical Review

This section reviews general literature and empirical studies from other scholars. The empirical evidences regarding the effects of financial management practices on financial performance are discussed in sections 2.4.1 to 2.4.5 from various contexts as follows.

## 2.4.1 Working Capital Management and Financial performance

Mohammad, Neab, and Noriza (2010) worked on crafting the relationship between Working Capital Management (WCM) and performance of firms. For their analysis they chose the Malaysian listed companies. They administered the perspective of market valuation and profitability. They used total of 172 listed companies from the databases of Bloomberg. They randomly selected five-year data (2003-2007). This research likewise studied the impact of the dimensions of working capital component such as Cash Conversion Cycle (C.C.C.), current ratio (C.R.), current asset to total asset ratio (C.A.T.A.R), current Liabilities to total asset ratio (C.L.T.A.R.), and debt to asset ratio (D.T.A.R.) in effect to the firm's performance whereby firm's value dimension was taken as Tobin Q (T.Q.) and profitability such as return on asset (R.O.A.) and return on invested capital (R.O.I.C). They applied two different techniques for analyzing the data, that was multiple regression and correlations. They found out that there was a negative relationship between working capital variables and the firm's performance.

Gul et al. (2013) investigated the influence of working capital management (WCM) on performance of small medium enterprises (SMEs) in Pakistan. The duration of the study was seven years from 2006 to 2012. The data used in this study was taken from SMEDA, Karachi Stock Exchange, tax offices, company itself and Bloom burgee business week. The dependent variable of the study was Return on Assets (ROA) which was used as a proxy for profitability. Independent variables were number of days' account receivable, number of day's inventory, cash conversion cycle and number of days' account payable. In addition to these variables some other variables were used which included firm size, debit ratio and growth. Regression analysis was used to determine the relationship between WCM and performance of SMEs in Pakistan. Results suggested that accounts payable, growth and size, have positive association with Profitability whereas accounts receivable, day's inventory, cash conversion cycle and debt ratio have inverse relation with profitability.

Oladipupo and Okafor (2013) examined the implications of a firm's working capital management practice on its profitability and dividend payout ratio. The study focused on the extent of the effects of working capital management on the profitability and dividend payout ratio. Financial data were obtained from 12 manufacturing companies quoted on the Nigeria Stock Exchange over 5 years' period (2002 to 2006). Using both the Pearson product moment correlation technique and ordinary least square (OLS) regression technique, they observed that shorter net trade cycle and debt ratio promote high corporate profitability. While the level of leverage had negative significant impact on corporate profitability, the impacts of

working capital management on corporate profitability appeared to be statistically insignificant at 5% confidence level.

Jagongo and Makori (2013) analyzed the effects of working capital management on firm's profitability in Kenya for the period 2003 to 2012. Balanced panel data of five manufacturing and construction firms each which were listed on the Nairobi Securities Exchange (NSE) were used. Pearson's correlation and Ordinary Least Squares regression models were used to establish the relationship between working capital management and firm's profitability. The study found a negative relationship between profitability and number of day's accounts receivable and cash conversion cycle, but a positive relationship between profitability and number of days of inventory and number of day's payable. Moreover, the financial leverage, sales growth, current ratio and firm size also had significant effects on the firm's profitability.

Gakure, Cheluget, Onyango and Keraro (2012) analyzed the relationship between working capital management and performance of manufacturing firms listed at the Nairobi NSE from 2006 to 2010. They used secondary data from a sample of 18 companies at the NSE. A regression model was used to establish the relationship between the dependent variable and the independent variables. Pearson's correlation and regression analysis were used for the analysis.

The results indicated that there is a strong negative relationship between firm's performance and liquidity of the firm. The study also found that there was a negative coefficient relationship between accounts collection period, average payment period, inventory holding period and profitability while the cash conversion cycle was found to be positively correlated with profitability. However, the effects of the independent variables except the average payment period were no statistically significant though the overall model was statistically significant.

### 2.4.2 Capital Budgeting Techniques and Financial performance

Klammer (1973) sought to investigate the association of capital budgeting techniques and performance in American firms. Attention was directed at the relationship of performance and capital budgeting procedures because the future of the firm dependent largely on the investment decisions made today. A total of 369 manufacturing firms were sampled, of which 184 firms responded representing 48.9%. The study focused on the operating rate of return as a measure of the firms' performance. Capital budgeting techniques tested were payback method and the discounting techniques.

Gilbert (2005), carried out a study to determine the application of capital budgeting methods and their association with firm performance among South African manufacturing firms. A sample of 318 firms was surveyed, but only 118 firms representing 37% responded. The survey tested the application and impact of payback method, accounting rate of return, net present value and the internal rate of return. The ratio of the rate of return on assets was also used as a measure of firm performance. The results of the study indicated that 15% of the firms employed the payback method, 8% used purely the discounting methods while the rest employed a mixture of both non-discounting and discounting methods.

A study by Olawale, Olumuyiwa and George (2010) was conducted to investigate if companies make use of sophisticated investment appraisal techniques when making investment decisions, and the impact of sophisticated appraisal techniques on the profitability of the manufacturing firms in the Nelson Mandela Bay Metropolitan area, South Africa. The study had a sample of 124 firms out which 85 firms responded making 39% which were found to be using sophisticated investment appraisal techniques when making investment decisions.

The profitability of the firms was measured by the rate of return on assets (ROA) and was determined based on the calculation of the earnings after interest and taxes (EAIT) and total assets. The study used regression analysis to test the relationship of each independent variable on profitability. The traditional methods comprising the

payback method and accounting rate of return were also regressed against profitability to determine their significance and relationships to profitability.

The results of the study in Olawale, Olumuyiwa and George (2010) showed that the pay back method used by the respondents was not significant to profitability and did not have a positive relationship with profitability of the respondent firms. Accounting rate of return was also found insignificant to profitability and negatively related to profitability. However, the results indicated that the use of sophisticated investment appraisal techniques had a positive impact on profitability thus confirming the second objective of the study.

Maritim (2013) determine the effects of budgeting on the financial performance of manufacturing and commercial Parastatals in Kenya. A descriptive research design was adopted and data was collected by use a questionnaire. A regression was also carried out to establish the relationship between the ROA and the budgeting independent variables. The research findings were that the budgeting practices that are common among the firms are budget planning, budget participation, and budgetary sophistication.

Munyao (2010) investigated the relationship between Capital Budgeting Techniques and Financial Performance of Companies listed at the NSE. The study employed a census survey. Primary data was collected through questionnaires which were dropped and picked from the respondents. The study used multiple regression analysis to find the association between capital budgeting techniques and the financial performance of companies listed at the Nairobi Stock Exchange. Forecasting model was developed and tested for accuracy in obtaining predictions. The finding of the study indicated that model was significant. The study found out that all the four capital budgeting techniques; payback method, accounting rate of return internal rate of return and net present value were being used by the companies listed in the Nairobi stock exchange. Nyambura (2014) conducted a study on the relationship between capital budgeting techniques and financial performance of companies listed at the Nairobi Securities Exchange. The research adopted a correlation cross-sectional survey research design which was best suited for explaining or exploring the existence of two or more variables at a given point in time. The population of the study consisted of all companies listed at the Nairobi Securities Exchange. Data was collected from the primary sources which comprised of the questionnaires administered to the officers directly involved in capital budgeting as well the secondary sources which comprised of the data derived from the published accounts of the companies.

The data was analyzed using the regression analysis model to test the effect of the capital budgeting techniques on the financial performance of the companies. The study found out that all of the four capital budgeting techniques researched on; payback period, net present value, accounting rate of return and internal rate of return were being used by companies listed in the Nairobi Securities Exchange and results depicted that there was no correlation between the financial performance of banks and the capital budgeting techniques employed.

Chai (2011) examined the impact of capital budgeting techniques on the financial performance of courier companies in Kenya. The research adopted a causal research design. Capital budgeting techniques were evaluated for their relationship with the firm's financial performance i.e. Return on assets and findings showed that Profitability index was highly related to the measure compared to other techniques.

Methods used to assess risk analysis in capital budgeting were also evaluated including scenario analysis, sensitivity, decision tree and simulation and findings indicated that scenario analysis was used more often by managers in assessing the risk analysis. Managers also preferred using cost of equity in determining minimum rate of return for evaluating appropriate projects that the cost of debts or weighted average cost of capital. There was a significant relationship between the capital budgeting techniques and the financial performance of courier companies

#### 2.4.3 Capital Structure Decisions and Financial performance

Umar et al. (2012) used data on 100 listed firms over a period of 2006–2009 and observed a significant positive association between the performance of a firm and capital structure. They used ROA, Earnings Per Share (EPS) and net profit margin as proxies to measure the performance and short-term debt obligations to total asset (STDTA), long-term debt obligations to total asset (LTDTA), and total debt obligations to total asset (TDTA) as the capital structure variables. The authors claimed, on the basis of exponential generalised least squares approach, that their findings support the trade-off theory.

Salim and Yadav (2012) employed EPS, ROA, ROE and Tobin's Q as measures of performance. They used panel data of 237 Malaysian companies for 1995–2011 and observed a significant negative influence of TDTA, LTDTA and STDTA on EPS, ROA, ROE and Tobin's Q. Manawaduge et al. (2011), in the context of an emerging market, scanned the influence of leverage on Sri Lankan firms' profitability. An analysis of pooled panel data of 155 firms over the period of 2002–2008 indicated an inverse influence of leverage on the profitability of firms. In another study, Chakraborty (2010) also found an inverse relationship between leverage and the performance of firms where performance was considered by the relative amount of profit before interest and taxes.

Arbabiyan and Safari (2009), using the data of 100 firms for 2001–2007, reported a significant positive link of STDTA and TDTA with ROE. However, the authors observed an inverse association of LTDTA with ROE. The main drawback of this study was that they used only a single variable, ROE, to measure the performance. Abor (2005) attempted to explore the impacts of capital structure on the performance of the firms belonging to the Ghana stock exchanges and found a significant positive impact of STDTA and TDTA on ROE. Furthermore, the author also observed a negative association between LTDTA and ROE.

Salteh et al. (2012) inspected the influence of capital structure decisions on the profitability of 28 firms from the Tehran stock exchange. They, while considering the data for 2005–2009, observed positive impacts of capital structure variables, STDTA, LTDTA, TDTA, on the performance proxies by ROE and Tobin's Q. Ramadan and Ramadan (2015) analysed the data over the period of 2008–2012, with an aim to explore the impacts of capital structure variables, TDTA, LTDTA and STDTA, by applying the pooled OLS observed the significant negative effect of capital structure on ROA.

Memon et al. (2012) checked the relationship of a capital structure decisions with the performance of the Pakistani organisations, where the authors used ROA as a single measure of performance. They applied the log-linear regression model on the data of 141 Pakistani textile companies for the period of 2004–2009 and reported a significantly negative association between TDTA and ROA.

Muritala (2012) examined the influence of using leverage in the capital structure on the performance of Nigerian firms. They gathered data on ten firms over the period of 2006–2010 and, by applying panel least square approach, observed a negative influence of debt to total asset ratio on ROA. In a study investigating data of 76 firms over 2001–2006, Soumadi and Hayajneh (2012) reported a similar negative influence on ROE and Tobin's Q. Abdel-Jalil (2014), by employing multiple regression analysis, documented a significant inverse influence of debt ratio and the proportion of debt to equity on the rate of return generated from investment activities, ROI.

Karani (2015) studied the effect of capital structure decisions on financial performance of firms listed under energy and petroleum sector at the Nairobi Securities Exchange. The study used a descriptive survey design. Energy and petroleum firms listed in the NSE formed the population of the study and was considered as a representative of other firms in Kenya. The study population consisted of five firms listed in the NSE. Secondary data on capital structure decisions on financial performance of firms listed under energy and petroleum sector at the Nairobi securities exchange was collected for the study period of 2004 to 2014. The findings indicated that the independent variables Debt ratio, Liquidity and firm

size had an effect on the financial performance of the firms in the Energy and petroleum sector. Their effect was up to 81%. Debt ratio and firm size had a positive relationship whereas liquidity had a negative relationship to the firms in the Energy and petroleum sector listed in the NSE.

Musili (2000), used descriptive statistics to survey the capital structure among industrial firms listed at the NSE (which are also members of Kenya Association of Manufacturers) for unspecified period using a sample of fifty firms. The study found out that industrial firms followed hierarchy in financing decisions than target debt ratios. Also, since financing revealed aspects of asset performance, studies based on corporate and personal taxes, bankruptcy and leverage related costs were not important in determining capital structure.

Gachoki (2005) tested the relationship between internal funds deficits and the amount of new debt issued using regression model. The study did not find any relationship between financing deficit and new debt issued. The outcome of the study was not in line with the POT predictions. Mutsotso (2005), used regression analysis to study the influence of corporate tax rate on the capital structure of companies quoted on the NSE. The study found that corporate tax rate was positively related to capital structure in line with the theory.

Magara (2012) did a study on capital structure and its determinants at the Nairobi Securities Exchange. The study sought to find out the major determinants of capital structure. It was established that from the period 2007 to 2011, there was a positive significant relationship between the firm size, tangibility and growth rate and the degree of leverage of the firm.

Siro (2013) examined the effect of capital structure on financial performance of firms listed at the Nairobi securities exchange. The financial performance was measured in terms of return on equity while capital structure was measured in terms of debt ratio. The period of study was 2012. The population of study consisted of all the 61 listed firms duly registered with capital market authority of Kenya in 2012. Secondary data used was obtained from the Nairobi securities exchange handbook and also in firm's publications. Data analysis was done by use of regression analysis model with the

help of Statistical Package for Social Sciences Software. The results obtained reveal that there was an inverse relationship between capital structure and financial performance of listed firms in securities exchange in Kenya.

#### 2.4.4 Claims Management Policies and Financial performance

Eling and Luhnen (2010) conducted an efficiency comparison of 6,462 insurers from 36 countries. They found a steady technical and cost efficiency growth in international insurance markets from 2002 to 2006, with large differences across countries. Denmark and Japan had the highest average efficiency, whereas the Philippines had the least efficient. Regarding organizational form, the results were not consistent with the expense preference hypothesis, which claims that mutual's should be less efficient than stocks due to higher agency costs. Only minor variations were found when comparing different frontier efficiency methodologies (data envelopment analysis, stochastic frontier analysis).

Using a sample in US property-liability insurance companies that had an IPO during the period 1994 to 2005 and a benchmark sample of private insurers, Xie (2010) finds that the likelihood of an IPO significantly increases with size and premium growth. IPO firms experience no post-issue underperformance in efficiency, operating profitability, or stock returns; they register improvement in allocative and cost efficiency; and they reduce financial leverage and reinsurance usage. Moreover, IPO firms are active in follow-on SEO issues and acquisition activities. The findings were consistent with the theory that firms go public for easier access to capital and to ease capital constraints.

Liebenberg and Sommer (2008) developed and tested a model that explains insurers' performance as a function of line-of-business diversification and other variables using a sample of property-liability insurers over the period 1995-2004. The results indicated that undiversified insurers consistently outperform diversified insurers. In terms of accounting performance, the diversification penalty is at least 1 percent of return on assets or 2 percent of return on equity. Using a market-based performance measure (Tobin's Q) the authors found that the market applies a significant discount to diversified insurers. The existence of a diversification penalty (and diversification)

discount) provides strong support for the strategic focus hypothesis. The authors also found that insurance groups underperform unaffiliated insurers and that stock insurers outperform mutuals.

Ma and Elango (2008) investigated the relationship between property-liability insurers' international operations and their risk-adjusted returns using cross-section and time-series data for the years 1992 through 2000. The findings indicate that the relationship between international operations and performance is contingent upon the degree of product diversification. Insurance companies with focused operations in terms of product lines achieved higher risk-adjusted performance as they increase their exposures to international markets. However, insurers who are highly diversified across product lines faced declining returns with greater exposure to international markets.

Sayeed and Hogue (2009) studied the impact of assets and liability management on profitability; a study on public versus private commercial banks in Bangladesh. According to them, banks' profitability is almost concern in modern economy. Banks are in a business to receive deposits or claims and to issue debt securities on the one hand and create or invest in assets on the other hand. Thus commercial banks incur cost for their claims and earn income from their assets.

Thus profitability of banks is directly affected by management of their assets and liability. Their study examined how assets and liability management together with external variable such as degree of market concentration and inflation rate impact the profitability of selected commercial banks in Bangladesh. The study also dealt with the impact of Assets and Liability Management (ALM) on the profitability of the sixteen Bangladesh commercial banks classified into private and public.

Yusuf, and Ajemunigbohun, (2015) studied the effectiveness, efficiency, and promptness of claims handling process in the Nigerian insurance industry. The study employed a cross-sectional type of survey design. A judgmental sampling technique was employed and relevant data were gathered through the use of structured questionnaire. The sample population consisted of 107 respondents made up of some members of staff within claims department drawn from 33 insurance companies

which were selected from the directory of member companies. The major statistical technique employed for the study was a One Sample T-test. Two hypotheses were tested in this study. The hypotheses tested in the study found that managing claims effectively and efficiently had significantly affected operational process in claims management and thus, promptness in claims handling processes does essentially assisted in fraud detection and prevention.

Angima and Mwangi (2017) conducted a study effects of underwriting and claims management on performance of property and casualty insurance companies in East Africa. The study employed multiple linear regression analysis using primary and secondary data collected from 82 general insurers in Kenya, Uganda and Tanzania. The findings showed that there is a significant positive relationship between underwriting and claims management practices employed by the firms and nonfinancial performance, but the relationship with financial performance was insignificant.

Mwangi, and Iraya (2014) investigated the determinants of financial performance of general insurance underwriters in Kenya. The study sought to establish the relationship between selected factors (growth of premiums; size of insurer; retention ratio; earning assets; investment yield; loss ratio; and expense ratio) and financial performance of general insurance underwriters in Kenya. The study employed multiple linear regression analysis with data for 22, 23 and 25 underwriters for the 2010, 2011 and 2012 years respectively.

The results were that financial performance was positively related to earning assets and investment yield. Financial performance was negatively related to loss ratio and expense ratio. Growth of premiums, size of underwriter and retention ratio were not significantly related to financial performance.

## 2.4.5 Corporate Governance and Financial performance

Guest (2009) investigated the impact of board size on firm performance. The study found that board size had a strong negative impact on profitability, Tobin's Q and share returns. This result was robust across econometric models that control for different types of endogeneity. The study found no evidence that firm characteristics determine board size in the UK lead to a more positive board size firm performance relation. In contrast, the study found negative relation was strongest for large firms, which tend to have larger boards. Overall, the evidence supports the argument that problems of poor communication and decision-making undermine the effectiveness of large boards.

Bozec (2005) finds that board size has a significantly negative effect on sales margin but not profitability for 25 large Canadian firms. For the UK, Conyon and Peck (1998) examine 481 listed UK firms for 1992-1995 and find a significantly negative effect of board size on both market to book value and profitability, whilst Lasfer (2004) finds a significantly negative impact on Tobin's Q.

Ssuuna (2008) examined the effects of internal control systems on financial performance in an institution of higher learning in Uganda. Data was collected using questionnaires and interview guide as well as reviewed available documents and records targeting basically deans, associate deans, and heads of departments, management committee members and finance and accounts staff as respondents from a population of 270 Uganda Martyrs University staff. Data was analyzed using the Statistical Package for Social Scientists where conclusions were drawn from tables, figures from the Package. The finding of the study showed that management of the institution was committed to the control systems, actively participated in monitoring and supervision of the activities of the University, all the Institution's activities were initiated by the top level management and that the internal audit department was not efficient, it was understaffed. However, the study also found out that there was lack of information sharing and inadequate security measures to safeguard the assets of the University. The study established a significant relationship between internal control system and financial performance.

Ng'ang'a (2014) examined the effect of adopting risk based supervision on financial performance of insurance companies in Kenya. The study showed that risk based supervision affected total premium collected in the insurance companies where majority of the insurance company's highlighted changes in premium collected.

Total claims also were affected by the new risk based approach while growth of new policy holders was also influenced. Adoption of risk based supervision in an insurance company enables it to detect risks on time and concentrate on high risk areas leading to increased transparency and accountability, hence enhancing financial performance.

A study which was carried out in 2009 on 34 banks on the effectiveness and challenges that have faced the implementation of the risk based supervision as adopted by the central bank of Kenya identified that supervisors need to develop and implement robust risk techniques and criteria to avoid supervisory risk of failure to assess the risks accurately and timely (Barth, Caprio & Levine, 2002). The result from the above research indicated that bank supervisors considered the risk based methodology to have improved evaluation of risk which had an impact on the performance of the banks. However, the researchers identified various challenges during the implementation process. They found that the challenge of competing demand for scarce resources was the most prevalent followed by the human resource competence.

Wanjiru (2011) carried out a study on the relationship between internal risk audit and financial performance of microfinance institutions in Nairobi. The study showed that internal risk audit does encourage the institutions to focus clearly on its objectives therefore enhancing financial performance. She established that the risks faced by most of the respondents most frequently were liquidity and credit risk. The current study focused further on risk based supervision and board size as corporate governance constructs in insurance companies in Kenya therefore bridging conceptual gaps and contextual gaps.

Gitau (2010) conducted a study on strategies to improve pension fund efficiency in Kenya. He identified that risk based supervision was a key element of pension regulation and efficiency. He also cited that pension funds in the United Kingdom were more operationally efficient compared to Kenya as a result of adopting the risk based supervision approach that focuses more on the ability of the pension funds to abide by the trust documents and monitor their activities (Bloime et al., 2007) in a

communicative validation of his empirical findings using a focus group of 24 pension fund trustees to clarify the non-significant relationship among most of the investigated relationships, he sought to find out why the risk variables performed poorly. The focus group identified that the respondents suggested that there were no clear guidelines relating to risk management for Kenyan pension funds.

Owino (2009) examined the impact of internal control systems on the financial performance of private hospitals in Kenya. The study was carried out using survey design. The target population of the study was all the private hospitals accredited by National Hospital Insurance Fund (NHIF) operating within the County of Nairobi. The sample size was based on number of beds. Based on the researcher's judgment, a private hospital was included in the sample if it had a patient capacity of 20 beds and above. Regression analysis was used to find the relationship between monitoring, control activities, risk assessment, information and communication, control environment and financial performance of private hospitals in Kenya.

The findings of the study by Owino (2009) indicated that all the five components that is Monitoring, Control Activities, Risk Assessment, Information and Communication and Control Environment must be present for an internal control system to be considered effective. The findings also indicated that Monitoring had the highest influence on financial performance of private hospitals in Kenya followed by control environment, information and communication, risk assessment and control activities respectively. The current study used correlation analysis design and focused further on risk based supervision and board size as corporate governance constructs in insurance companies in Kenya therefore bridging methodological, conceptual gaps and contextual gaps.

#### 2.4.6 Firm characteristics and financial performance

Ahmed et al. (2011) also investigated the moderating impact of firm level characteristics on the performance of the life insurance sector of Pakistan over the period of seven years from 2001 to 2007. The results of the OLS regression analysis revealed that leverage was negatively and significantly related to the performance of life insurance companies. Growth of written premium and age of a firm had also

negative relation to performance of life insurance companies but they were statistically insignificant. The study also showed that firm size was positively and significantly related to the performance of life insurance companies. This indicates that performance of the large size life insurance companies is better than the small size life insurance companies. According to this study, tangibility of assets and liquidity also had a positive relation to performance of life insurance companies but they are statistically insignificant.

Another study by Malik (2011) examined the determinants of Pakistan's insurance companies' profitability proxied by return on total assets. The variables tested were age of company, size of the company, the volume of capital, leverage ratio and loss ratio. The result shows that there was no relationship between profitability and age of the company and there was a significant and positive relationship between profitability and size. On the other hand, the analysis suggested that leverage ratio and loss ratio had a negative impact on profitability of insurance companies in Pakistan.

Sidhu and Bhatia (1993) argue that younger firms will be outperformed by older ones. Older firms have the early mover advantage and may possess specific competencies and skills which younger firms may not have developed as yet. In doing so, they are able to grow faster to achieve higher profitability. Aside from age the current study focused on size as firm characteristic construct bridging both contextual and conceptual gaps.

Paradogonas (2007) wrote on the financial performance of large and small firms: evidence from Greece. The paper attempted to specify possible differences in the main factors that determine a firm's profitability, using data from Greek manufacturing sector for 1995- 1999 period. The analysis used regression models and was performed on a longitudinal sample of 3035 firms, classified by size of employment. The econometric results indicated that size, managerial efficiency, debt structure, investment in fixed assets and sales affected significantly a firm's profitability.

Using a sample in US property-liability insurance companies that had an IPO during the period 1994 to 2005 and a benchmark sample of private insurers, Xie (2010) finds that the likelihood of an IPO significantly increases with size and premium growth. IPO firms experience no post-issue underperformance in efficiency, operating profitability, or stock returns; they register improvement in allocative and cost efficiency; and they reduce financial leverage and reinsurance usage. Moreover, IPO firms were active in follow-on SEO issues and acquisition activities. The findings are mostly consistent with the theory that firms go public for easier access to capital and to ease capital constraints.

Katou and Budhwar (2009) argue that the intensity of the interface between firm characteristics and firm performance are dependent on the operational model of the organization. The model involved the business strategies and human management policies. The outcome of the interface can be affected by management style. Organizational culture and reverse causation which were controlled by size of the firm, age, staff, and the industry the firm belongs to. Namada (2013) proposes need for right configuration of strategic planning to improve performance. The study confirms firm size as one of the most influential characteristics in organizational studies.

Kaguri (2013) conducted a study on moderating effect of firm characteristics (size, diversification, leverage, liquidity, age, premium growth and claim experience) on financial performance of life insurance companies in Kenya. In order to carry out the study, secondary data of 17 life insurance companies over the period of 2008-2012 was obtained on the financial performance from the annual reports and audited financial statements. Data collected was analyzed using SPSS (Statistical Package for Social Scientists). Regression analysis was used to analyze the data. The study findings indicated that the variables were statistically significance to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients.

This implied that premium growth was relied upon to make conclusions about the financial performance of life insurance companies' as shown by its strong and positive correlation coefficients. Based on the findings, the study recommended that insurers must work towards improving the premiums earned to increase profits.

# 2.4.7 Financial Management Practices, Firm Characteristics and Financial Performance

Nguyen (2001), sought to assess the relationship between financial management practices and profitability of small and medium enterprises in Australia. He focused his attention at various financial management practices on SME's. The research study provided descriptive findings of financial management practices and financial characteristics and demonstrates the simultaneous impact of financial management practices and financial characteristics on SME profitability. In Addition, the research study provided a model of SME profitability, in which profitability was found to be related to financial management practices and financial management practices. With the 17 exception of debt ratios, all other variables including current ratio, total asset turnover, working capital management and short-term planning practices, fixed asset management and long-term planning practices, and financial and accounting information systems were found to be significantly related to SME profitability.

Kiganane, Bwisa, and Kihoro (2012) conducted a study on assessing the moderating influence of firm characteristics on the effect of mobile phone services on firm performance. The study was carried out in Thika town in Kenya. It adopted an exploratory design where a two-stage, Stratified and Simple random sampling, technique was employed. A total of 120 questionnaires were self- administered yielding a response rate of 100%. Data was subjected to detailed exploratory analysis through descriptive procedures. Results revealed that firm characteristics had no statistical significant influence on the effect of Mobile phone services on firm performance.

Kaguri (2013) conducted a study on relationship between firm characteristics and financial performance of life insurance companies in Kenya. The study used size, diversification, leverage, liquidity, age, premium growth and claim experience as the independent variables and financial performance as the dependent variable. The study findings indicated that the joint effect of variables are statistically significance to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients. This implied that premium growth is relied upon to make conclusions about the financial performance of life insurance companies.

# 2.5 Critique of Existing Literature

Butt, Hunjra and Rehman (2010) studied the relationship between financial performance and financial management practices like capital structure decisions, liabilities management policies, investment appraisal techniques, working capital management and financial performance assessment in Pakistani corporate sector. The results showed a positive and significant relationship between financial management practices and financial performance in Pakistani corporate sector. The finding from the study was only limited to effect of financial performance on financial management practices. The current study incorporated moderating effect of firm characteristics in insurance companies in Kenya. The above study was also done in Pakistani, which is a developed economy.

McMahon, Holmes, Hutchinson and Forsaith (2013) and McMahon (2003) summarize their review of financial management practices in Australia, the UK and the USA. In their review the context of financial management practices included the following areas: accounting information systems, financing decisions, investing decisions. The findings from this study though looked into financial management; did not include other key areas like working capital management which would include accounts receivable, inventory, cash management and accounts payable management financial practices. This study was also done in developed economy. The current study was done in Kenya, which is a developing economy.

Aboody, Barth and Kasznik (2009) carried out reevaluation of fixed assets on the future firm performance of companies in UK. Findings showed that revaluation balances also were significantly positively related to annual returns prices. Relations between revaluations and future performance and prices were weaker for higher debt-to-equity ratio firms, indicating motivation affects how revaluations reflect asset value changes. The relations also were weaker for cross-listed firms and in a more volatile economic time period. The findings showed that revaluation balances also are significantly positively related to annual returns prices. This was done in developed economy, UK, may need to be investigated further in developing economy.

Ssuuna (2008) examined the effects of internal control systems on financial performance in an institution of higher learning in Uganda. The study found that management of the institution was committed to the control systems, actively participates in monitoring and supervision of the activities of the University, all the activities of the Institution's activities were initiated by the top level management and that the internal audit department was not efficient, it was understaffed. However, the study also found out that there was lack of information sharing and inadequate security measures to safeguard the assets of the University. The study established a significant relationship between internal control system and financial performance. The finding from the study in Uganda was only limited to effect of internal control systems on financial performance. The study looked at five variables as possible determinants of financial performance. The study was done in Uganda. The current study was carried out in Kenya.

Olawale, Olumuyiwa and George (2010) results showed that the pay back method used by the respondents was not significant to profitability and did not have a positive relationship with profitability of the respondent firms. Accounting rate of return was also found insignificant to profitability and negatively related to profitability. However, the results indicated that the use of sophisticated investment appraisal techniques had a positive impact on profitability thus confirming the second objective of their study. The current study looked at the joint effects of PBP, NPV and IRR on the financial performance of insurance companies in Kenya. While Gilbert (2005), results indicated that 15% of the firms employed the payback method, 8% used purely the discounting methods while the rest employed a mixture of both non-discounting and discounting methods. Abor (2005) observed a negative association between LTDTA and ROE. Ramadan and Ramadan (2015) observed the significant negative effect of capital structure on ROA. Memon et al. (2012) reported a significantly negative association between TDTA and ROA by using the ratio of debt to the total asset as a single proxy of capital structure and ROA as a proxy to measure the performance of firms. The current study looked at the joint effects of debt, equity and debt-equity financing on gross premium, ROA and ROE of insurance companies in Kenya.

Ng'ang'a (2014) study showed that risk based supervision affected total premium collected in the insurance companies where majority of the insurance company's highlighted changes in premium collected while Wanjiru (2011) study showed that internal risk audit does encourage the institutions to focus clearly on its objectives therefore enhancing financial performance. The current study looked at the joint influence of internal audit risk, RBS and board size on financial performance of insurance companies in Kenya.

Jagongo and Makori (2013) analyzed the effects of working capital management on firm's profitability in Kenya for the period 2003 to 2012. The study found a negative relationship between profitability and number of day's accounts receivable and cash conversion cycle, but a positive relationship between profitability and number of days of inventory and number of day's payable. Moreover, the financial leverage, sales growth, current ratio and firm size also had significant effects on the firm's profitability. The findings further showed that highly levered firms respond faster to minimize implication of poor performance. This was done in Kenya on listed firms therefore the need to investigate the insurance companies. Furthermore, the current study looked at five variables as possible determinants of financial performance.

#### 2.6 Research Gaps

A critical review of past literature show that several conceptual, contextual and methodological research gaps existed in the effects of financial management practices on financial performance of insurance companies in Kenya.

## 2.6.1 Conceptual gaps

Mohammad, Neab and Noriza (2010) worked on crafting the relationship between Working Capital Management (WCM) and performance of firms. This study focused on working capital management as the only variable influencing performance thus presenting a conceptual gap. The current study used five variables with a moderator (firm characteristics). Sen (2009) examined the ISE (Istanbul Stock Exchange) listed firms and checked out the relationship with the working capital. This study concentrated on ISE (Istanbul Stock Exchange) listed firms thus presenting a contextual gap. The current study looked on Insurance firms in Kenya.

Gul et al. (2013) investigated the influence of working capital management (WCM) on performance of small medium enterprises (SMEs) in Pakistan. This study concentrated on small medium enterprises (SMEs) thus presenting a contextual gap. The current study concentrated on the insurance firms. Ssuuna (2008) examined the effects of internal control systems on financial performance in an institution of higher learning in Uganda. The finding from the study in Uganda was only limited to effect of internal control systems on financial performance. The current study looked at five variables and a moderating variable (firm characteristics) as possible determinants of financial performance. The study was done in Uganda. The current study was carried out in Kenya.

Jagongo and Makori (2013) analyzed the effects of working capital management on firm's profitability in Kenya for the period 2003 to 2012. This was done in Kenya on listed firms therefore the need to investigate the insurance companies. Furthermore, the current study looks at five variables as possible determinants of financial performance. Forsaith (2013) and McMahon (2003) summarize their review of financial management practices in Australia, the UK and the USA. In their review

the context of financial management practices included the following areas: accounting information systems, financing decisions, investing decisions. However, these previous researchers though looked into financial management; they did not include other key areas like working capital management, claims management policies and corporate governance as financial management practices.

Klammer (1973) sought to investigate the association of capital budgeting techniques and performance in American firms. Attention was directed at the relationship of performance and capital budgeting procedures because the future of the firm dependent largely on the investment decisions made today. A total of 369 manufacturing firms were sampled, of which 184 firms" responded representing 48.9%. The study focused on the operating rate of return as a measure of the firms' performance. The current study focused on gross premium, return on assets and return on equity as financial performance constructs in insurance companies in Kenya therefore bridging both conceptual gaps.

Umar et al. (2012) used data on 100 listed firms over a period of 2006–2009 and observed a significant positive association between the performance of a firm and capital structure. They used ROA, Earnings Per Share (EPS) and net profit margin as proxies to measure the performance and short-term debt obligations to total asset (STDTA), long-term debt obligations to total asset (LTDTA), and total debt obligations to total asset (TDTA) as the capital structure variables. The authors claimed, on the basis of exponential generalised least squares approach, that their findings support the trade-off theory. The current study focused on gross premium, return on assets and return on equity as a measure financial performance in insurance companies in Kenya

Ng'ang'a (2014) examined the effect of adopting risk based supervision on financial performance of insurance companies in Kenya. The study showed that risk based supervision affected total premium collected in the insurance companies where majority of the insurance company's highlighted changes in premium collected.

The current study focused further on internal risk audit and board size besides RBS as corporate governance constructs and return on assets and return on equity as financial performance constructs in insurance companies in Kenya therefore bridging conceptual gaps.

# 2.6.2 Contextual gaps

Butt, Hunjra and Rehman (2010) studied the relationship between financial performance and financial management practices in Pakistani corporate sector. The study concentrated on Pakistan economy. McMahon, Holmes, Hutchinson and Forsaith (2013) and McMahon (2003) summarize their review of financial management practices in Australia, the UK and the USA. This study was also done in developed economy. The current study was done in Kenya, which is a developing economy.

In addition, the study conducted by Chung and Chuang (2010) also revealed efficiency in capital structure management, working capital management, financial reporting and analysis; capital budgeting and accounting information system has a positive impact on profitability of business organizations. However, all the above studies were carried out in developed and emerging countries such as USA, Italy, Finland and Japan. It is therefore possible to argue that the effect of financial management practices on financial performance of insurance companies of developed and emerging economies are somewhat different from those of a developing economy like Kenya. It is due to this paucity of studies that this study intends to fill the research gap on effects of financial management practices on financial performance of insurance companies on

## 2.6.3 Methodological gaps

From the reviewed literature, all the studies looked on the direct relationship of independent variables with the dependent variables without moderation. This presents a methodological gap. The current study introduced firm characteristics as a moderator so as test if there was any significant moderating effect of firm characteristics between financial management practices and organization performance. Eling and Luhnen (2010) conducted an efficiency comparison of 6,462 insurers from 36 countries. They found a steady technical and cost efficiency growth in international insurance markets from 2002 to 2006, with large differences across countries. Only minor variations were found when comparing different frontier efficiency methodologies (data envelopment analysis, stochastic frontier analysis). The study used stochastic frontier analysis. The current study used linear regression model to link the dependent and the independent variables.

Ma and Elango (2008) investigated the relationship between property-liability insurers' international operations and their risk-adjusted returns using cross-section and time-series data for the years 1992 through 2000. The current study used correlational analysis design therefore bridging methodological gaps. Mwangi and Kosimbei (2014) study applied panel data models (random effects), Feasible Generalised Least Square (FGLS) regression while Memon et al. (2012) applied the log-linear regression model on the data of 141 Pakistani textile companies for the period of 2004–2009. Muritala (2012) applied panel least square approach in his study. The current study used correlational study design bridging methodological gap.

## 2.7 Chapter Summary

This chapter has reviewed available literature pertinent to financial management practices and financial performance and the conceptualized determinants thereof. It was established that various theoretical and empirical studies had been conducted to explore the effects of financial management practices and firm characteristics had on financial performance with reference to a myriad of corporate institutions and sectors.

The literature reviewed demonstrated a widespread concurrence regarding the influence of financial management practices and firm characteristics on financial performance of insurance industry in Kenya. It also presented various theories on financial management practices and financial performance of insurance industry namely Modern Portfolio Theory, Pecking Order Theory, The Real Option Theory, Stewardship Theory, Walker's Three Propositions and Contingency Theory. A

Conceptual Framework was developed with the independent variables working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance with the moderating variable being firm characteristics and the dependent variable being insurance companies financial Performance.

There were several empirical studies of financial management practices and financial performance. However, a significant portion of the studies have concentrated in developed countries and emerging countries especially the United States of America. There are just a handful of studies on effect of financial management practices on financial performance of companies in Africa and a serious paucity in Kenya. This study therefore comes in handy to cover this pertinent gap in literature. This study is unique due to its concentration on insurance companies which is an institution where so many financial transactions take place.

#### **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the methodology used to capture the data for the research. Research methodology is a related set of assumptions that reflect how a researcher views reality and how this reality is articulated through research. Choice of method is reflective of what the researcher wants to uncover. To concretize research methodology this chapter covers research design, research philosophy, and population, sampling technique, sample size, instruments, pilot test and data analysis.

## 3.2 Research Design

A research design is the structure of research. It is the glue that holds all the elements in a research process project together. A design is used to structure the research, to show how all of the major parts of the research project work together to try to address the central research questions (Orodho, 2003)

This study used correlational research design. In general, a correlational study is a quantitative method of research in which you have two or more quantitative variables from the same group of subjects, and you are trying to determine if there is a relationship (or covariation) between the variables. This research adopts the crorrectional design because the study aims at not only determining the direction relationships among variables but also relationships between different variables. Theoretically, any two quantitative variables can be correlated as long as you have scores on these variables from the same participants; however, it is probably a waste of time to collect and analyze data when there is little reason to think these two variables would be related to each other (Baumgartner, Strong & Hensley, 2002).

Mugenda and Mugenda (2003) and Kothari (2004) explain that a correlational research is used to explore the relationship between variables and this is consistent with this study which seeks to establish the relationship between financial management practices on financial performance of insurance companies.

# **3.3 Research Philosophy**

A research philosophy is a way of thinking about and conducting a research. It is not strictly a methodology, but more of a philosophy that guides how the research is to be conducted (Gliner & Morgan, 2000). Research philosophy comprises various factors such as individual's mental model, researcher's way of seeing thing, different perceptions, variety of beliefs towards reality. This concepts influences the beliefs and value of the researchers, so that one can provide valid arguments and terminology to give reliable results.

From a philosophical point of view, objectivism is the belief that certain things, especially moral truths, exist independently of human knowledge or perception of them (Anthony, 2005). Subjectivism on the other hand is that knowledge is merely subjective and that there is no external or objective truth. Subjectivism accords primacy to subjective experience as fundamental of all measure and law. This study exercises objectivity aspect. Further, two common variations are phenomenology and positivism. Phenomenology seeks to understand social contexts by focusing on the immediate experience (Ridenour & Newman, 2008). The underlying assumption of this philosophy is to uncover meanings and understanding of a phenomena being studied. It starts from a premise of no theory and observes evolving patterns from collected data to arrive at a theory.

This study adopted the concept of positivism research philosophy which is directly associated with idea of objectivism. In this kind of philosophical approach, researchers give their viewpoint to evaluate social world with the help of objectivity in place of subjectivity (cooper & Schindler, 2006). According to this philosophy, researchers collect general information and data from a large social sample instead of focusing details of research. According to this position, researcher's own belief has no value to influence the research study. The positivism philosophical approach is

mainly related with the observations and experiments to collect numeric data (Smith, 2006). This study adopted positivist as it aimed at testing hypotheses derived from a predetermined conceptual framework.

#### **3.4 Population of the Study**

Population is a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done (Castilo, 2009). A population also refers to an entire group of individuals, events or objects having a common observable characteristic. Hence it's an aggregate of all that conforms to a given specification (Mugenda & Mugenda, 2003; Hyndman, 2008). It is also known as a well-defined collection of individuals or objects known to have similar characteristics (Sekaran, 2006). Newing (2011) describes a population as the set of sampling units or cases that the researcher is interested in while Burns and Grove (2003) describe population as all the elements that meet the criteria for inclusion in a study.

This study comprised of 49 units of analysis which are the licensed insurance companies in Kenya (IRA, 2013) from which the target and accessible population was drawn as indicated in Appendix III. The study population which represent unit of observation comprised of 316 senior management employees and 749 middle management employees both totaling to 1065 as presented on appendix IV. Saleemi (2007) defines senior management as those managers responsible for the efficient and coordinated functioning of their department in accordance with the basic objectives and policies laid down by the top management while middle level management are those managers whose main duty is to interpret and explain the policies framed by top and senior management. The information was obtained from human resource departments of the insurance firms.

#### 3.5 Sampling Frame

A sampling frame is a list of population from which a sample will be drawn (Leary, 2001). It is the source material or device from which list of all elements within a population that can be sampled is drawn (Sarndal, Swensson & Wretman, 1992) and may include individuals, households or institutions. It's a published list in which or a set of directions for identifying a population (Gall, Gall & Borg, 2007).

Jessen (1978) highlights its importance based on features such as single representation of each and every element, numerical identifiers, contact information, maps, location and other relevant information presented in a logical and systematic fashion and exclusion of elements outside the population of interest (Sapsford & Jupp, 2006). Examples in real life would be electoral registers, attendance registers and so on.

A sampling frame facilitates formation of a sampling unit that refers to one member of a set of entities being studied which is the material source of the random variable (Bailey, 2008; Klaus & Oscar, 2008; Sarndal, Swensson & Wretman, 1992). Common examples of a unit would be a single person, animal, plant, or manufactured item that belongs to a larger collection of such entities being studied.

For the purpose of this study, the sampling frame for the target population was the employees' data base for senior management and middle level managers of all the 49 licensed insurance companies operating in Kenya as at December 2015 as they appear in the IRA of Kenya website and database as indicated in Appendix IV. The employee data was derived from human resource records of the insurance companies in liaison with the human resource departments and also returns to IRA.

## 3.6 Sampling Design

A sample design is the architecture or the strategy used to select study participants or respondents (Kothari, 2004). Sampling refers to the systematic selection of a limited number of elements out of a theoretically specified population of elements. The rationale is to draw conclusions about the entire population. According to Kothari (2004), the ultimate test of a sample design is how well it represents the characteristics of the population it purports to.

This study used a combination of stratified and simple random sampling method on all the insurance companies. Stratified random sampling was used in each insurance company to group respondents into two strata. The stratas were that of senior management and middle management employees. Within each of the two strata simple random sampling was done to identify individual respondents who were issued with a questionnaire to respond to research statements. Kothari (2004) supports random sampling as it satisfies the law of statistical regularity if a sample is chosen at random, on average it has the same characteristics and composition as the population'.

#### 3.7 Sample Size

Kombo and Tromp (2009) and Kothari (2004) describe a sample as a collection of units chosen from the universe to represent it. Marczyk, Dematteo, Festinger (2005) and Yang (2008) defined a sample as subset of the population to be studied. Sampling is the selection of a subset of individuals from within a population to yield some knowledge about the whole population, especially for the purposes of making predictions based on statistical inference (Black, 2004; 2011). The advantages of sampling are cost, speed, accuracy and quality of the data (Ader, Mellenbergh, & Hand, 2008). The sampling process comprises of defining the population, sampling frame, sampling method, sample size and sample plan (Lavrakas, 2008).

Cooper and Schindler (2007) asserts that a sample can be drawn from a sampling frame. The study population comprise of 1065 employees from senior and middle management. According to Mugenda and Mugenda (2003), a population of less than

ten thousand elements is defined as a small population. They recommend a formula for determining appropriate sample from a small population as demonstrated by equation 1 below.

# **Equation 1**

 $n=Z^{2*}p^{*}(1-p)/d^{2}$  where;

n desired sample size of a big population i.e more than 10,000

Z standard normal deviate at the required confidence level, Z value score, (1.96)

p Proportion of units in the target population estimated to have characteristics being measured. For this study it is set at 50% (0.5)

d Precision level desired for the study (0.05)

N 1065 subjects

Based on the equation 1, the sample of a big population size can be established as;

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384$$

According to Mugenda and Muganda (2003), with a small population of less than 10,000, the required sample size was smaller. In such cases the researcher was required to calculate the final sample estimate using equation 2 below.

# **Equation 2**

$$n_0 = \underline{n}$$

$$1 + \underline{(n-1)}$$
N

Where:  $n_0$  = the desired sample size (when the population is less than 10,000)

n = the desired sample size (when the population is more than 10,000)

N = the estimate of the population size

Based on the equation 2, the reduced sample size can be established as;

384/ (1+((384-1)/1065 = 282

The target sample size of 282 constitutes 26% of the target population which was adequate based on the recommendation by Kothari (2004) and Creswell (2007) who assert that a sample of at least 10% to 15% is able to lead to meaningful generalizations about the general characteristics of a study population. The target sample size was distributed within the 49 licensed insurance companies in the two strata using the study population ratio representation. This ensured that sample distribution is unbiased and balanced. The detailed sample distribution is laid on appendix V.

## **3.8 Data Collection Instrument**

This study used both primary and secondary data. Data collection tools used are questionnaires and secondary data collection sheet. Secondary data on gross premium, return on assets, return on equity, number of branches and age were collected from the firms Website, RBA, IRA and NSE data. The primary data was collected using semi-structured questionnaire which comprised of both open and closed ended questions. The use of structured questionnaire ensures consistency of questions and answers from the respondents. A questionnaire is more preferred by respondents due to anonymity.

In the current study, the questionnaire was based on a 5-point Likert scale. This scale was used to quantify responses on items in the questionnaires. The 5-point Likert scale was thus adopted for the predictor and the predicted variables. This scale was

selected so as to ensure that respondents make a definite choice rather than an inclination to a neutral response.

Data was analyzed quantitatively and qualitatively and presented descriptively and illustrated by use of tables and charts. Kothari (2004) defines a questionnaire as a document that consists of a number of questions printed or typed in a definite order on a form or set of forms. According to Dawson (2002), there are three basic types of questionnaires; closed ended, open-ended or a combination of both. Closed-ended questionnaires are used to generate statistics in quantitative research while open-ended questionnaires are used in qualitative research, although some researchers will quantify the answers during the analysis stage. Obtaining data from participants with different methods and experience will help prevent information bias and thus increasing credibility regarding the information collection (Louis, Lawrence & Morrison, 2007).

This study also utilized secondary data of the licensed insurance companies using secondary data collection sheet in Appendix III. The financial performance indicators data and firm characteristics data were gathered from the annual financial statements of the insurance firms for the years 2011 to 2015.

# 3.9 Pilot Test

A pilot test is an evaluation of the specific questions, format, question sequence and instructions prior to use in the main survey. Questions answered by the pilot test include: Is each of the questions measuring what it is intended to measure? Are questions interpreted in a similar way by all respondents? Do close-ended questions have a response which applies to all respondents? Are the questions clear and understandable? Is the questionnaire too long? How long does the questionnaire take to complete? Are the questions obtaining responses for all the different response categories or does everyone respond the same? (Polit & Beck, 2003).

Pilot testing is a crucial step in conducting a research. Even modest pretesting can avoid costly errors. According to Mugenda and Mugenda (2003), once the questionnaire has been finalized, it should be tried out on the field. This is called pretesting the questionnaire. The questionnaire should be pretested to a selected sample which is similar to the actual sample which the researcher plans to use in the study.

Procedures used in pre-testing the questionnaire should be identical to those which will be used during the actual data collection. The practice of pre-testing the questionnaire is very important because of the following reasons; Comments and suggestions made by respondents during the pre-testing should be seriously considered and incorporated. Such comments help to improve the questionnaire. Questions which are vague will be revealed in the sense that the respondents will interpret them differently. When this happens, the researcher should rephrase the questions until they convey the same meaning to all subjects (Mugenda & Mugenda, 2003).

## 3.9.1 Validity Test

According to Mugenda and Mugenda (2003), validity is the accuracy and meaningfulness of inferences, which are based on the research results. In other words, validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. This study used both construct validity and content validity.

For construct validity, the questionnaire is divided into several sections to ensure that each section assesses information for a specific objective, and also ensures the same close ties to the conceptual framework for the study. Factor analysis was used for this study. Validity of the questionnaire was initially tested by reviewing it with my lead supervisor. The questionnaire was also validated by discussing it with two randomly selected managers of the target insurance companies and other resource people including my other supervisors. Their views were evaluated and incorporated to enhance content validity of the questionnaire.

#### **3.9.2 Reliability Test**

Reliability refers to the repeatability, stability or internal consistency of a questionnaire (Jack & Clarke, 1998). Cronbach's alpha was used to test the reliability of the measures in the questionnaire (Cronbach, 1951). According to Sekaran (2006), Cooper and Schindler (2003), Cronbach's alpha has the most utility for multi-item scales at the interval level of measurement, requires only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale. Baker et al. (2001) states that the size of a sample to be used for piloting testing varies depending on time, costs and practicality, but the same would tend to be 5- 10 per cent of the main survey. According to Cooper and Schindler (2006) the respondents in a pilot test do not have to be statistically selected when testing the validity and reliability of the instruments.

In this study, data collection instrument which was a questionnaire was tested on 10% of the sample as recommended by researchers like Sekaran (2003) and Kothari (2004) who stated that 5% to 10% of the sample can be adequate for running reliability tests. The reliability of the questionnaire was tested using the Cronbach's Alpha correlation coefficient with the aid of Statistical Package for Social Sciences (SPSS) software. According to Cronbach (1951) and Sekaran (2003) the closer Cronbach's alpha coefficient is to 1, the higher the internal consistency reliability. Cronbach (1951) as cited in Sekaran (2003) recommend cronbach coefficient of 0.7 for a newly developed questionnaire.

#### **3.10 Data Processing and Analysis**

According to Zikmund et al. (2010), data analysis refers to the application of reasoning to understand the data that has been gathered with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation. To determine the patterns revealed in the data collected regarding the selected variables, data analysis was guided by the aims and objectives of the research and the measurement of the data collected. During data analysis, statistical techniques such as Correlation Analysis and ANOVA were used. Statistical Package for Social Sciences (SPSS) version 20 was also used to facilitate analysis as it has an in-build

formula. The software is a comprehensive system for data analysis and can take data from any type of file and use it to generate tabulated reports, charts, compare means, correlation and many other techniques of data analysis (Microsoft Corporation, 2003).

Correlation measures the extent of interdependence where two variables are linearly related (Lucy, 1996). If variables are correlated, then a change in one variable is accompanied by a proportionate change in another variable. Correlation coefficient (R) is a measure of correlation between two variables. If variables are independent, r = 0, if dependent, then r = 1. If the value of R is close to one, then it shows there is a strong correlation between the variables. If the value of R is close to zero, then the association is weak. Pearson's product-moment correlation coefficient (r) was used to explore relationships between the variables, specifically to assess both the direction and strength. This was crucial to assess the nature of relationships existing between the variables before carrying out further analysis.

Analysis of Variance (ANOVA) is a statistical technique specially designed to test whether the means of more than two quantitative populations are equal (Levin & Rubin, 1994). This is done via the mechanism of the F test for testing for the significance of the difference between two variances. This study used this test because it allows one to analyze two or more groups and thus test for significant difference between means. Compared with using multiple *t*-tests, ANOVA require fewer measurements to discover significant effects. ANOVA is a powerful tool for determining if there is a statistically significant difference between two or more sets of data (Pattern, 2002). ANOVA test is also useful in measuring variations within group. However, with the help of the SPSS software results for the above statistical tests will automatically be computed and displayed in tabular form.

Faraway (2002), states that multiple linear regressions are used in situations where the number of independent variables is more than one. Regression analysis is also valuable for quantifying the effect of various simultaneous influences upon a single dependent variable. Further, because of omitted variables bias with simple regression, multiple regression is often essential even when the researcher is only interested in the effects of one of the independent variables. Faraway posits that multiple regression analysis involves combining several predictor variables in a single regression equation. With multiple regression analysis, we can assess the effects of multiple predictor variables (rather than a single predictor variable) on the dependent measure.

Information was sorted, coded and input into the statistical package for social sciences (SPSS) for production of graphs, tables, descriptive statistics and inferential statistics. A multiple regression model was used to test the significance of the effect of the independent variables on the dependent variable. The multiple regression model was as laid below.

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

Where:

Y = Financial performance

 $\{\beta_i; i=1,2,3,4,5\}$  = The coefficients representing the various independent variables.

 $B_0 =$  the Y intercept

 $\{X_i; i=1,2,3,4,5\}$  = Values of the various independent (covariates) variables.

e = the error term which is assumed to be normally distributed with mean zero and constant variance.

Y = Financial performance of insurance companies

 $X_1$  = Working capital management

 $X_2$  = Capital budgeting techniques

 $X_3$  = Capital structure decisions

 $X_4$  = Claim Management Policies

 $X_5$  = Corporate Governance

Analysis of data using regression model has been used previously by Aduda (2011) in a study which investigated the relationship between executive compensation and firm performance in the Kenyan banking sector. Also Ngugi (2001) used a regression analysis in a study on the empirical analysis of interest rates spread in Kenya while Khawaja and Mulesh (2007) used regression analysis to identify the determinants of interest rates spread in Pakistan. These studies are similar to the current study because banking and insurance are related sectors. The study variables also exhibited a linear relationship which is also expected in the current study. Before running the multiple linear regression model for all the study variables, classical or univariate regressions were conducted to test the effect of each predictor variable on the dependent variable as follows.

Objective 1: To establish the effects of working capital management on financial performance of insurance companies in Kenya.

$$\mathbf{Y} = \beta_0 + \beta_1 X_1 + e$$

Objective 2: To find how capital budgeting techniques influences financial performance of insurance companies in Kenya.

$$\mathbf{Y} = \beta_0 + \beta_2 X_2 + e$$

Objective 3: To determine the effect of capital structure decisionss on financial performance of insurance companies in Kenya.

$$\mathbf{Y} = \beta_0 + \beta_3 X_3 + e$$

Objective 4: To find out how claims management policies affect financial performance of insurance companies in Kenya.

$$\mathbf{Y} = \beta_0 + \beta_4 X_4 + e$$

Objective 5: To explore the effect of corporate governance on financial performance of insurance companies in Kenya.

$$\mathbf{Y} = \beta_0 + \beta_5 X_5 + e$$

### Testing for the moderating effect of firm characteristics

Step 1: Run the multivariate regression without the moderator

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + e$$

Step 2: Run the multivariate regression with interaction of independent variables and the moderator (Firm characteristics)

$$y = \beta_0 + \beta_1 x_{1*} x_6 + \beta_2 x_{2*} x_6 + \beta_3 x_{3*} x_6 + \beta_4 x_{4*} x_6 + \beta_5 x_{5*} x_6 + e$$

To answer objective 6 the moderated regression equations was as above.

Y = Financial performance of insurance companies

- $X_1$  = Working capital management
- $X_2$  = Capital budgeting techniques
- $X_3$  = Capital structure decisions
- $X_4$  = Claims Management Policies

 $X_5 = Corporate Governance$ 

 $X_6$  = Firm characteristics (moderator)

Using SPSS, the regression models were tested on how well they fit the data. The model fitness was estimated using the coefficient of determination which helps to explain how closely the predictor variables explain the variations in the dependent variable. The significance of each independent variable was also tested. The t-test statistic was used to test the significance of each individual predictor or independent variable and hypothesis. The p-value for each t-test was used to make conclusions on whether to reject or accept the null hypotheses.

The benchmark for this study for accepting or rejecting the null hypothesis was a level of significance of 5 percent. If the p-value was less than five percent, the null hypothesis was rejected and the alternate hypothesis was accepted. Also if the p-value was greater than 5 percent the null hypothesis was accepted and the alternate hypothesis was rejected.

Similarly, Fischer distribution test called F-test was applied. It refers to the ratio between the model mean square divided by the error mean square. F-test was used to test the significance of the overall model at a 95 percent confidence level. The p-value for the F-statistic was applied in determining the robustness of the model.

The conclusion was based on the basis of p- value where if the null hypothesis of the beta was rejected then the overall model was significant and if null hypothesis was accepted the overall model was insignificant. In other words, if the p-value was less than 0.05 then it was concluded that the model was significant and has good predictors of the dependent variable and that the results are not based on chance. If the p-value was greater than 0.05 then the model was not significant and cannot be used to explain the variations in the dependent variable.

## 3.11 Diagnostic Tests

It was essential to ensure non-violations of the assumptions of the classical linear regression model (CLRM) before attempting to estimate equation. Estimating these equations when the assumptions of the linear regression are violated runs the risk of obtaining biased, inefficient, and inconsistent parameter estimates (Brooks, 2008). Consequently, linearity test, the multicollinearity, autocorrelation and heteroscedasticity were conducted to ensure proper specification of equations given above

#### **3.11.1 Linearity Test**

Linearity means that two variables, "x" and "y," are related by a mathematical equation "y = cx," where "c" is any constant number. The importance of testing for linearity lies in the fact that many statistical methods require an assumption of linearity of data. This occurs when data is sampled from a population that relates the variables of interest in a linear fashion. This means that before using common methods like linear regression, tests for linearity must be performed (Jin, Parthasarathy, Kuyel, Geiger, and Chen, 2005). Linearity test was conducted for each variable. SPSS, statistical software tool through scatter graph graphical method was used to observe with ease the possibility of the data arriving from a linear population.

#### **3.11.2 Normality Tests**

Parametric tests such as correlation and multiple regression analysis require normal data. When data is not normally distributed it can distort the results of any further analysis. Preliminary analysis to assess if the data fits a normal distribution was performed. To assess the normality of the distribution of scores, Kolmogorov-Smirnov test and graphical method approach were used. When non-significant results (> 0.05) are obtained for a score it shows the data fits a normal distribution (Tabachnik & Fidell, 2007).

#### **3.11.3 Multicollinearity**

Tests for multi-collinearity were carried out because in severe cases of perfect correlations between predictor variables, multi-collinearity can imply that a unique least squares solution to a regression analysis cannot be computed Field, (2009). Multi-collinearity inflates the standard errors and confidence intervals leading to unstable estimates of the coefficients for individual predictors. Multi-collinearity was assessed in this study using the Variance Inflation Factor and tolerance.

## **3.11.4 Heteroscedasticity**

Since the data for this research is a cross-section of firms, this raises concerns about the existence of heteroscedasticity. The Classical Linear Regression Models (CLRM) assumes that the error term is homoscedastic, that is, it has constant variance. If the error variance is not constant, then there is heteroscedasticity in the data. Running a regression model without accounting for heteroscedasticity would lead to biased parameter estimates. To test for heteroscedasticity, the Breusch-Pagan/Godfrey test (1979) was used. The null hypothesis of this study was that the error variance is homoscedastic. If the null hypothesis is rejected and a conclusion made that heteroscedasticity is present in the panel data, then this would be accounted for by running a Feasible Generalized Least Squares (FGLS) model.

## **CHAPTER FOUR**

## **RESEARCH FINDINGS AND DISCUSSION**

#### 4.1 Introduction

This chapter presents the data analysis, interpretation, discussion and summary of findings. The data analysis is in harmony with the specific objectives where patterns were investigated, interpreted and inferences drawn on them. These presentations are organized as follows: response rate, pilot results presentations, and demographic information on the respondents, descriptive statistics and inferential statistics. The results form the basis for discussion on how each of the variables on financial management practices affects financial performance of insurance companies in Kenya.

#### 4.2 Response Rate

The number of questionnaires, administered to all the respondents, was 282. The questionnaires were distributed to the respondents in the 49 unit of analysis which are the insurance companies. A total of 221 questionnaires were properly filled and returned from the insurance company employees while 61 questionnaires were not returned as indicated in Table 4.1.

Response Rate	Frequency	Percent
Returned	221	78%
Unreturned	61	22%
Total	282	100%

#### **Table 4.1: Response Rate**

All the 49 insurance companies were represented in the 221 filled and returned questionnaires. This represented an overall successful response rate of 78%. According to Mugenda and Mugenda (2003), a response rate of 50% or more is adequate. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good.

## 4.3 Pilot Test Results

A pilot test is an evaluation of the specific questions, format, question sequence and instructions prior to use in the main survey. Reliability and Validity tests were carried out before the actual study was conducted.

## 4.3.1 Test of Reliability

The reliability of an instrument refers to its ability to produce consistent and stable measurements. Bagozzi (1994), explains that reliability can be seen from two sides: reliability (the extent of accuracy) and unreliability (the extent of inaccuracy). The most common reliability coefficient is Cronbach's Alpha which estimates internal consistency by determining how all items on a test relate thus testing the internal coherence of data. According to Sekaran (2006), Cooper and Schindler (2003), Cronbach's alpha has the most utility for multi-item scales at the interval level of measurement, it requires only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale. The reliability is expressed as a coefficient between 0 and. The higher the coefficient, the more reliable the test is.

Reliability of this instrument was evaluated using Cronbach Alpha which measures the internal consistency. Baker et al. (2001) states that the size of a sample to be used for piloting testing varies depending on time, costs and practicality, but the same would tend to be 5- 10 per cent of the main survey. According to Cooper and Schindler (2006) the respondents in a pilot test do not have to be statistically selected when testing the reliability of the instruments. In this study, data collection instrument which is a questionnaire was tested on 10% of the sample of the questionnaires to ensure that it is relevant and effective. Reliability was tested using questionnaire duly completed by twenty-eight (28) randomly selected respondents.

The questionnaire responses were input into statistical package for social sciences (SPSS) and Cronbach's alpha coefficient generated to assess reliability. The closer Cronbach's alpha coefficient is to 1, the higher the internal consistency reliability (Sekaran, 2003). A Cronbach Alpha of 0.7 and above indicates the presence of

internal consistency and that the instrument is reliable for use in the study (Babbie & Mouton, 2009). Internal consistency means that the questions or item measures included for a construct actually belong to that construct (Babbie & Mouton, 2009). Table 4.2 shows that all the variables had a Cronbach Alpha above 0.7 and thus were accepted. These represented a high level of reliability and on this basis, it was supposed that scales used in this study were reliable to capture the variables.

Tables 4.2 indicates the statistical reliability for the various variables. All the variables were quite reliable with a Cronbach's alpha reliability coefficient greater than 0.7. Working capital management had a reliability of ( $\alpha$ =0.799), capital budgeting techniques ( $\alpha$ =0.878) capital structure decisions, ( $\alpha$ =0. 0.921) claims management policies ( $\alpha$ =0.802) corporate governance ( $\alpha$ =0.738) firm characteristics ( $\alpha$ =0.726), financial performance ( $\alpha$ =0. .891). The study thus found that the instrument used was reliable and could be used for further analysis.

Variable	Cronbach's Alpha	No. of Items	Comments
Working Capital Management	0.799	6	Accepted
Capital Budgeting Techniques	0.878	7	Accepted
Capital Structure Decisions	0.921	5	Accepted
Claims Management Policies	0.802	6	Accepted
Corporate Governance	0.738	7	Accepted
Firm Characteristics	0.726	6	Accepted
Financial Performance	0.891	8	Accepted

#### Table 4.2: Reliability Results

Source: Survey Pilot Data, 2016

## 4.3.2 Test of Validity

Validity test is done to show the degree to which a research instrument measures what it is expected to measure (Kothari, 2004). Validity is the accuracy and meaningfulness of inferences, which are based on the research results. Validity refers to whether a questionnaire is measuring what it purports to measure (Bryman & Cramer, 1997).

It describes validity as the degree of congruence between the explanations of the phenomena and the realities of the world. While absolute validity is difficult to establish, demonstrating the validity of a developing measure is very important in research (Bowling, 1997). According to Mugenda and Mugenda (2003), validity is the accuracy and meaningfulness of inferences, which are based on the research results. In other words, validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. This study used both construct validity and content validity.

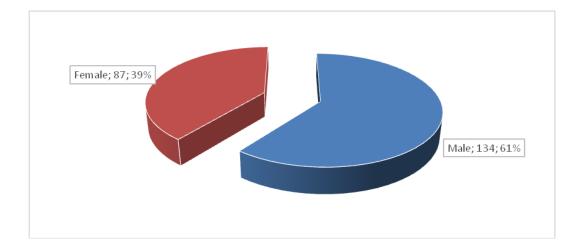
For construct validity, the questionnaire was divided into several sections to ensure that each section assesses information for a specific objective, and also ensures the same close ties to the conceptual framework for this study factor analysis was used. Validity of the questionnaire was initially tested by reviewing it by lead supervisor. The questionnaire was also validated by discussing it with two randomly selected managers of the target insurance companies and other resource people including my other supervisors. Their views were evaluated and incorporated by adding missing links, deleting unclear and general statement or replacing with wordings that were clearly understood to enhance content validity of the questionnaire.

# **4.4 Demographic Information**

This section consists of information that describes basic characteristics; gender, age of the respondent, level of education and management position held. Each respondent's demographic characteristics were important for the study since it helped to understand the background of the respondents before embarking on obtaining the responses which were aimed to achieve the specific objectives.

#### 4.4.1 Gender of the Respondents

The respondents were asked to indicate their gender. Results were presented in Figure 4.1.



**Figure 4.1: Gender of Respondents** 

From Figure 4.1, majority (61%) of the respondents were male and 39% were female. The findings imply that insurance industry sector is a male dominated field at management level. According to Ellis et al. (2007), in a study on Gender and Economic Growth in Kenya: Unleashing the Power of Women found that in spite of women being major actors in Kenya's economy, and notably in agriculture and the informal business sector, men dominate in the formal sector citing the ratio of men to women in formal sector as 0.74: 0.26 which is being replicated in the insurance sector.

# 4.4.2 Level of Education

The respondents were asked to indicate their highest level of education. This was to ascertain if they were equipped with relevant knowledge, attitude, skills and competences as appertains their work as represented in Table 4.3. The Insurance Regulatory Authority equally demands certain minimum qualifications for one to hold a particular position in an Insurance company.

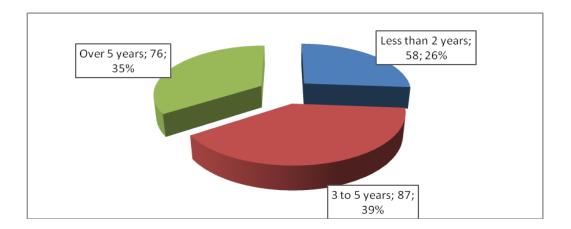
**Table 4.3: Level of Education** 

Level of Education	Frequency	Percent
Secondary level	12	5.4
College level	93	42.1
University level	86	38.9
Post graduate level	30	13.6
Total	221	100

The findings in Table 4.3 illustrates that 42.1% of the respondents had reached college level, while 38.9% of the respondents had reached university level and 13.6% had attained post graduate level. The findings imply that most of the respondents had high level of education which could have contributed to accurate responses. The high level of education of respondent indicates that many managers in the insurance sector have attained a given level of education hence more knowledge on financial management practices in the organizations.

# 4.4.3 Years worked in the Firm

The study sought to find out the years the respondents had worked in their insurance Company. This was to ascertain to what extend their responses could be relied upon to make conclusions for the study based on their working experience as represented in Figure 4.2.



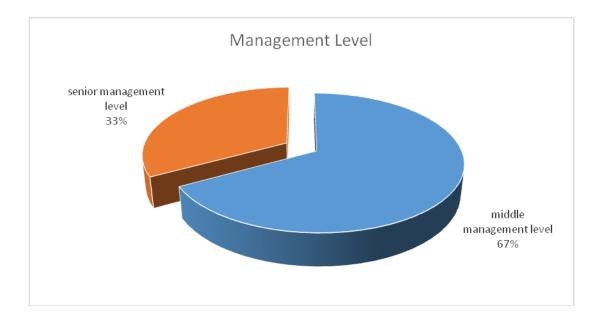
**Figure 4.2: Length of Employment** 

From Figure 4.2, it shows that 74% of the respondents cumulatively indicated they had worked for their insurance companies for 3 years and above and 26% indicated to have worked for less than 2 years.

The findings imply that the respondents having worked for over 3 years in the insurance companies, had knowledge and understood the information the researcher was looking for. This was in agreement with the findings by Braxton (2008) who asserts that respondents with a high working experience assist in providing reliable data on the sought problem since they have technical experience on the problem being studied.

#### 4.4.4 Management Level

The respondents were asked to indicate their management level in the organization. Figure 4.3 show that 67% of the respondents were in middle management level while 33% were in senior management level. The findings imply that the respondents were well represented among the departments which could have contributed to accurate responses.



**Figure 4.3: Management Level** 

# **4.5 Financial Performance**

Financial performance is a subjective measure of how well a firm can use its' assets from its' primary business to generate revenues.

#### 4.5.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on financial performance, a coefficient of 0.891 was found as shown in Table 4.4. These results corroborate findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the organization performance variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

#### **Table 4.4: Reliability Test for Financial Performance**

Statement	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Our firm financial leverage has increased over the last five years	0.729	0.871
Our firm has experienced an increase in gross premiums collected over the last 5 years	0.55	0.887
Our firm has experienced an increase in assets over the last 5 years	0.604	0.882
Our firm has a higher market value	0.669	0.876
The interest expense to total operating revenue ratio is low (meaning the firm may be less reliant on overdraft)	0.676	0.876
The insurance company is more inclined to decisions that enhance returns on its physical capital rather than relational capital	0.741	0.87
We have competitive advantage and superior firm performance	0.742	0.869
The firm budget outrun ratio is low (meaning the firm always spent less than it had budgeted)	0.636	0.882
Number of items	8	
Cronbach's Alpha	0.891	

#### 4.5.2 Sampling Adequacy

To examine the adequacy of data and appropriateness for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, the main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000) as summarized in Table 4.5. The findings showed that the KMO statistic was 0.762 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 1021.3 with 28 degree of freedom, at p < 0.05). These results provide an excellent justification for further statistical analysis to be conducted.

#### **Table 4.5: KMO Sampling Adequacy and Bartlett's Sphericity Tests**

Kaiser-Meyer-Olkin Measure	0.762
Bartlett's Chi- Square	1021.3
Bartlett's df	28
Bartlett's Sig.	0.000

#### 4.5.3 Factor Analysis

Factor analysis was conducted after successful testing of sampling adequacy and reliability using KMO coefficient and cronbach alpha results. The essence of conducting factor analysis per variable is to generate factor loadings for every statement. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 8 statements on organization performance can be factored into 1 factor. The total variance explained by the extracted factor was 57.19% as shown in Table 4.6.

Component	Initial E	ligen values		Extra	ction Sums of Loading	-
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.575	57.192	57.192	4.575	57.192	57.192
2	1.565	19.564	76.756			
3	0.696	8.704	85.46			
4	0.355	4.432	89.892			
5	0.266	3.324	93.216			
6	0.224	2.803	96.019			
7	0.175	2.184	98.203			
8	0.144	1.797	100			

**Table 4.6: Financial Performance Total Variance Explained** 

Extraction Method: Principal Component Analysis.

Table 4.7 below shows the factor loadings for financial performance statements. All the eight factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

# **Table 4.7: Financial Performance Factor Analysis Component Matrix**

Statement	Component Matrix
Our firm financial leverage has increased over the last five years	0.741
Our firm has experienced an increase in gross premiums collected over the last 5 years	0.523
Our firm has experienced an increase in assets over the last 5 years	0.724
Our firm has a higher market value	0.45
The interest expense to total operating revenue ratio is low (meaning the firm may be less reliant on overdraft)	0.513
The insurance company is more inclined to decisions that enhance returns on its physical capital rather than relational capital	0.653
We have competitive advantage and superior firm performance	0.466
The firm budget outrun ratio is low (meaning the firm always spent less than it had budgeted)	0.614

Extraction Method: Principal Component Analysis.

#### 4.5.4 Descriptive Analysis

The study sought to determine the financial performance of insurance companies in Kenya as shown in Table 4.8 which shows that 84.6% of the respondents agreed that their firm financial leverage had increased over the last five years, 83.2% agreed that their firm had experienced an increase in gross premium collected over the last 5 years and 72.8% agreed that their firm had experienced an increase in assets over the last 5 years. In addition, 74.2% of the respondents agreed that their firm had a higher market value, 67% agreed that the interest expense to total operating revenue ratio was low (meaning the firm may be less reliant on overdraft) and 73.3% agreed that the insurance company was more inclined to decisions that enhance returns on its physical capital rather than relational capital.

<b>Table 4.8</b> :	Financial	Performance	Descriptive
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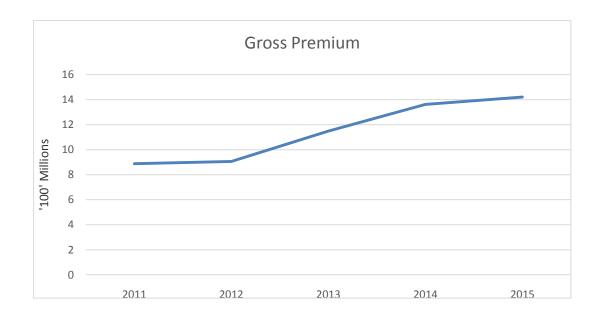
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Likert Mean
Our firm financial leverage has increased over the last five years	2.3%	6.8%	6.3%	44.3%	40.3%	4.14
Our firm has experienced an increase in gross premiums collected over the last 5 years	1.8%	5.9%	9.0%	51.1%	32.1%	4.06
Our firm has experienced an increase in assets over the last 5 years	1.8%	5.9%	19.5%	42.5%	30.3%	3.94
Our firm has a higher market value	2.7%	11.3%	11.8%	49.3%	24.9%	3.82
The interest expense to total operating revenue ratio is low (meaning the firm may be less reliant on overdraft)	2.7%	12.7%	17.6%	45.7%	21.3%	3.70
The insurance company is more inclined to decisions that enhance returns on its physical capital rather than relational capital	1.4%	10.4%	14.9%	49.8%	23.5%	3.84
We have competitive advantage and superior firm performance	1.8%	14.0%	9.5%	43.4%	31.2%	3.88
The firm budget outrun ratio is low (meaning the firm always spent less than it had budgeted)	4.1%	15.8%	12.7%	29.4%	38.0%	3.81
Average	2.3%	10.4%	12.7%	44.4%	30.2%	3.90

Finally, in the Table 4.8 above indicated 74.6% of the respondents agreed that they had competitive advantage and superior firm performance and 67.4% agreed that the firm budget outrun ratio was low (meaning the firm always spent less than it had budgeted). The mean score for the responses was 3.90 which indicate that many employees agreed to the statements regarding organization performance of insurance companies in Kenya. On average 74.6% of the respondents agreed while 12.7% disagreed and 12.7% were neutral on the statements regarding organization performance of insurance companies in Kenya.

#### 4.5.4.1 Secondary Data Descriptive

The study sought that to find out the gross premium for insurance companies in Kenya for a period of five years. Figure 4.4 shows that there was gradual increase over the years. The study findings implied that the insurance companies were doing actually well and hence experienced the growth in the gross premium over the years of study except 2011. This could be attributed to stringent supervision and regulation by Insurance Regulatory Authority which may have included Risk Based Supervision (RBS) and Electronic Regulatory System (ERS) aimed at ensuring data analysis, preventive and corrective measures are effected in a timely manner (IRA, 2012).

Other reasons for steady increase in premium could be the issued guidelines that included Crime and anti-money laundering Guideline, Group life (Listed Risks) Guideline, recognition of Micro insurance as a class of insurance business, standardization of some insurance contracts and the establishment of Insurance Fraud Investigation Unit (IFIU) with the mandate to investigate and prosecute insurance related offences (IRA, 2012).



# Figure 4.4: Trend Analysis for Gross Premium

Figure 4.5 showed a constant gentle increase in ROA between 2011 to the end of 2013 before a decreasing in the year 2014. In 2011 to 2014 the growth in return in assets could have risen due to growth in premium which made cash available for investments.

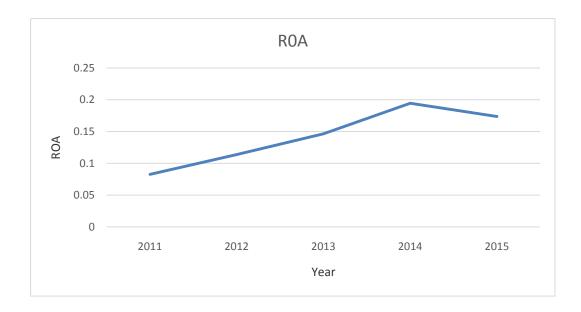
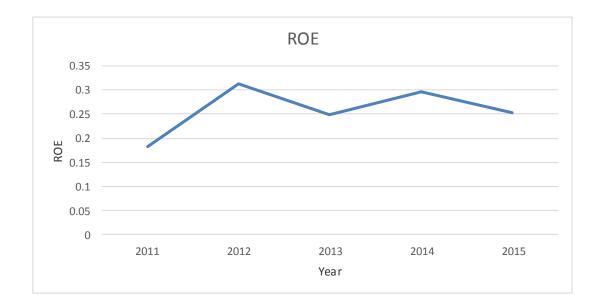


Figure 4.5: Insurance Companies ROA

In 2014 to 2015 there was a slight decline in ROA reasons likely to be claims arisen in the previous years were due for payment and hence need for some assets to be liquidated that could enable the insurance companies meet their claims as they feel due.

Figure 4.6 showed a constant increase in ROE between 2011 and 2012. There was a decline in ROE between 2012 and 2013 before a gentle increase in 2014 and gentle decline in 2015. Increases in ROE indicated how well the insurance companies used the owners' resources hence increased profitability and vice versa when it decreases.



#### Figure 4.6: Return on Equity (ROE)

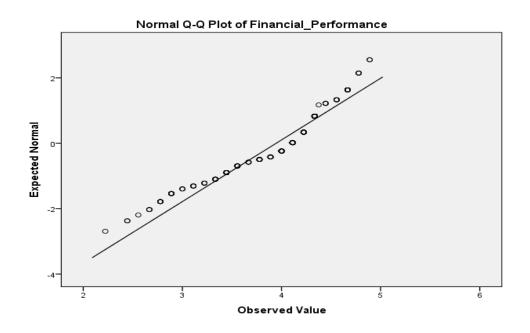
#### 4.5.5 Statistical Assumption Test

Linear regression makes assumptions about the data used including that it is normally distributed, there is linearity, and there is no multi-collinearity and no heteroscedasticity. If these assumptions are not met by the data used statistical results may yield inappropriate results. Use of data which does not conform to these assumptions may lead to type I or type II errors or may lead to over or underestimation of statistical significance (Osborne & Waters, 2002). The results of the tests for normality, linearity, heteroscedasticity and multi-collinearity are presented below.

#### 4.5.5.1 Normality Test for Financial Performance

It was necessary to carry out the normality test as many of the statistical procedures used in the study including correlation, regression and t- test were based on the assumption that the data follows a normal distribution. This assumes that the population from which the sample was drawn was normally distributed (Ghasemi & Zahedias, 2012).

Graphical interpretation was used as it has the advantage of allowing good judgment to assess normality in situations where statistical methods lack objectivity. The test for normality of data was performed using both Q-Q plot and Kolmogorov-Smirnov test. According to figure 4.7 the graphical finding depicts that data is normally distributed hence not significantly different from a normal distribution. It was thus concluded that the financial performance data was normally distributed.



# Figure 4.7: Q-Q Plot

To test for normality of data using Kolmogorov-Smirnov, the null hypothesis posits that the data is normally distributed that is, not significantly different from a normal distribution. The results presented in the table 4.9 shows that the variables had pvalue which were greater than 0.05 and thus the null hypothesis were not rejected. It was thus concluded that the variables were normally distributed.

Variable	K-S Test Statistic	Sig.
Working Capital Management	2.191	0.077
Capital Budgeting Techniques	2.167	0.057
Capital Structure Decisions	3.168	0.063
Claims Management Policies	4.242	0.076
Corporate Governance	2.139	0.096
Firm Characteristics	3.171	0.083
Financial Performance	2.225	0.073

Table 4.9: Results of Kolmogorov-Smirnov Test for Normality

#### 4.5.5.2 Test for Multi-collinearity

Tests for multi-collinearity were carried out because in severe cases of perfect correlations between predictor variables, multi-collinearity can imply that a unique least squares solution to a regression analysis cannot be computed (Field, 2009). Multi-collinearity inflates the standard errors and confidence intervals leading to unstable estimates of the coefficients for individual predictors. Multi-collinearity was assessed in this study using the Variance Inflation Factor and tolerance. The results of the tests of multi-collinearity are presented in Table 4.10. Collinearity statistics indicated a Variance Inflation Factor (VIF) < 5 and Tolerance > 0.2, an indication that the variables were not highly correlated, hence no existence of Multi-collinearity. This is an indication of the suitability of the variables for multiple regression. The cut off for VIF is 10 and should a variable have had anything over and above 10 it should have been dropped.

Variables	Tolerance	VIF
Working Capital Management	0.710	1.099
Capital Budgeting Techniques	0.768	1.760
Capital Structure Decisions	0.625	1.212
Claims Management Policies	0.883	2.072
Corporate Governance	0.733	1.609
Firm Characteristics	0.675	2.413

#### **Table 4.10: Multi-collinearity Test Results**

#### 4.5.5.3 Test for Heteroscedasticity

Since the data for this research is obtained from a cross-section of firms, it could raise concerns about the existence of heteroscedasticity. The Breusch-Pagan/Cook-Weisberg test was carried out to confirm if the error variance was not constant in which case there could have been heteroscedasticity in the data. Running a regression model without accounting for heteroscedasticity may lead to biased parameter estimates. To test for heteroscedasticity was necessary to make a hypothesis in respect to the error variance and test the error variances to confirm or reject the hypothesis.

For the purposes of applying the Breusch-Pagan/Cook-Weisberg test, a null hypothesis (H<sub>0</sub>) of this was formulated that the error variance is not heteroscedastic while the alternative hypothesis (H<sub>1</sub>) was that the error variance is heteroscedastic. The Breusch-Pagan/Cook-Weisberg test models the error variance as  $\sigma 2i=\sigma 2h(zi\alpha)$  where zi is a vector of the independent variables. It tests H<sub>0</sub>: $\alpha=0$  versus H<sub>1</sub>: $\alpha\neq 0$ . Table 4.11 shows the results obtained when the Breusch-Pagan/Cook-Weisberg test was conducted. The results in Table 4.11 indicate that the p value is greater than 0.05 (0.1030) and so the null hypothesis set up for this test was supported. It was found that the variables under this study did not suffer from heteroscedasticity.

Table4.11:Results ofBreusch-Pagan/Cook-WeisbergTestforHeteroscedasticity

**Breusch-Pagan / Cook-Weisberg test for heteroscedasticity** chi2(1) = 3.74

Prob > chi2 = 0.1030

#### 4.5.5.4 Test for Independence

This study used the Wooldridge test for serial correlation to test for the presence of autocorrelation in the linear panel data. Serial autocorrelation is a common problem experienced in panel data analysis and has to be accounted for in order to achieve the correct model specification. According to Wooldridge (2002), failure to identify and account for serial correlation in the idiosyncratic error term in a panel model would result into biased standard errors and inefficient parameter estimates. The null hypothesis of this test was that the data had no serial autocorrelation. If serial autocorrelation was detected in the study data, then the feasible generalized least square (FGLS) estimation procedure would be adopted.

The test for autocorrelation was made using Durbin and Watson (1951) test. Durbin-Watson (DW) is a test for first order autocorrelation that is it tests only for a relationship between an error and its immediately previous value. This study used Durbin-Watson (DW) test to check that the residuals of the models were not auto correlated since independence of the residuals is one of the basic hypotheses of regression analysis. The Durbin-Watson statistic ranges in value from 0 to 4. A value above 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. Results indicate that the overall statistic was 2.38 as shown in Table 4.12. Therefore, the null hypothesis was not rejected and therefore the data was not auto correlated.

#### **Table 4.12: Durbin-Watson Results**

Variable	Durbin-Watson	<b>P-Value</b>
Working Capital Management	2.552	0.00
Capital Budgeting Techniques	2.332	0.00
Capital Structure Decisions	2.231	0.00
Claims Management Policies	2.402	0.00
Corporate Governance	2.721	0.00
Firm Characteristics	2.312	0.00
Financial Performance	2.134	0.00
Overall	2.38	0.00

# 4.6 Working Capital Management

Working capital management was explained by use of cash management, refund and maturity management and current debt management indicators.

# 4.6.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on working capital management, a coefficient of 0.799 was found as shown in Table 4.13. These results corroborate findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the working capital management variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

Statement	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Good management of premium in arrears is key to having increased gross premiums for the company	0.471	0.798
Creditors are used to manage cash flow deficits and avoid loss of good performance	0.51	0.778
Optimal cash balances are maintained by the company at all times	0.364	0.806
Prepares cash flow forecasts to identify future surpluses and deficits	0.556	0.769
Working capital is key to achieving high profits	0.799	0.704
Our institution has enough cash to meet its obligations effectively as and when they fall due	0.676	0.741
Number of items	6	
Cronbach's Alpha	0.799	

#### Table 4.13: Reliability Test for Working Capital Management

### 4.6.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000) as summarized in Table 4.10.

Findings in Table 4.14 showed that the KMO statistic was 0.625 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 922.454 with 15 degree of

freedom, at p < 0.05). These results provide an excellent justification for further statistical analysis to be conducted.

Table 4.14: KMO Sam	pling Adequacy and Bart	lett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.625
Bartlett's Chi- Square	925.454
Bartlett's df	15
Bartlett's Sig.	0.000

#### 4.6.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results as shown in Table 4.15.

Component	Initial Eigenvalues			Extr	action Sums Loading	-
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.092	51.541	51.541	3.092	51.541	51.541
2	1.721	28.677	80.218			
3	0.393	6.555	86.772			
4	0.357	5.943	92.715			
5	0.265	4.423	97.139			
6	0.172	2.861	100			

 Table 4.15: Working Capital Management Total Variance Explained

Extraction Method: Principal Component Analysis.

The essence of conducting factor analysis per variable is to generate factor loadings for every statement. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 6 statements on working capital management can be factored into 1 factor. The total variance explained by the extracted factor is 51.54% as shown in Table 4.15 above. Table 4.16 below shows the factor loadings for working capital management statements.

Table 4.16: Working Capital Management Factor Analysis Component Matrix	Table 4.16: Working	Capital Management Factor	or Analysis Component Matrix
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Statement	Component Matrix
Good management of premium in arrears is key to having increased gross premiums for the company	0.652
Creditors are used to manage cash flow deficits and avoid loss of good performance	0.479
Optimal cash balances are maintained by the company at all times	0.402
Prepares cash flow forecasts to identify future surpluses and deficits	0.426
Working capital is key to achieving high profits	0.406
Our institution has enough cash to meet its obligations effectively as and when they fall due	0.704

Extraction Method: Principal Component Analysis.

All the six factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

# 4.6.4 Descriptive Analysis

The first objective of the study was to establish the effect of working capital management on financial performance of insurance companies in Kenya as shown in Table 4.17. The table shows that 61.1% of the respondents agreed that good management of premium was key to having increased profits for the company, 76.5% agreed that creditors can be used to manage cash flow deficits and avoid loss of good performance and 84.6% agreed that optimal cash balances were maintained by the company at all times. In addition, 84.2% of the respondents agreed that the firm prepares cash flow forecasts to identify future surpluses and deficits, 67% agreed that working capital was key to achieving high profits and 79.6% agreed that

their institution had enough cash to meet its obligations effectively as and when they fall due. The mean score for responses for this section was 3.82 which indicates that majority of the respondents agreed that working capital management was a key determinant of organization performance of insurance companies. On average 75.6% of the respondents agreed while 17.5% disagreed and 6.9% were neutral that working capital has an influence on financial performance.

	Strongly Disagree	Disagree	Neutral	Agree	trongly Agree	Likert mean
Statement	S Q	Â	Z	7	S.	
Good management of						
premium in arrears is key to						
having increased gross	16.70	11.30	10.90			
premiums for the company	%	%	%	24.00%	37.10%	3.53
Creditors are used to manage						
cash flow deficits and avoid						
loss of good performance	7.70%	6.80%	9.00%	51.60%	24.90%	3.79
Optimal cash balances are						
maintained by the company						
at all times	5.40%	4.50%	5.40%	50.20%	34.40%	4.04
Prepares cash flow forecasts						
to identify future surpluses						
and deficits	6.80%	5.00%	4.10%	53.40%	30.80%	3.96
Working capital is key to		17.20				
achieving high profits	8.60%	%	7.20%	37.60%	29.40%	3.62
Our institution has enough						
cash to meet its obligations						
effectively as and when they		10.00				
fall due	5.40%	%	5.00%	43.90%	35.70%	3.95
Average	8.40%	9.10%	6.90%	43.50%	32.10%	3.82

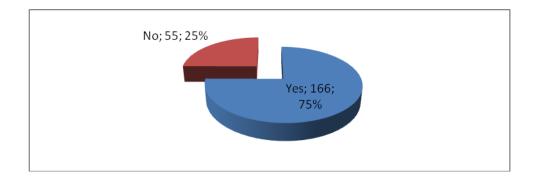
#### Table 4.17: Working Capital Management Descriptive

The findings are consistent with in Jagongo and Makori (2013) who established the relationship between working capital management and firm's profitability. The study found a negative relationship between profitability and number of day's accounts receivable and cash conversion cycle, but a positive relationship between profitability and number of day's payable. Moreover, the financial leverage, sales growth, current ratio and firm size also had significant effects on the firm's profitability. The findings implies that working

capital management was a key driver of financial performance that is to say that there were efficient and sound management policies on cash management flows. This was primarily through assessment of corporate governance framework, reviews of individual systems and processes, accounting information and communication, provide financial controls and control information within the organization.

#### 4.6.4.1 Effect of Working Capital on Financial Performance

The respondents were asked to indicate whether in their view good working capital management affects the performance of their insurance firm.

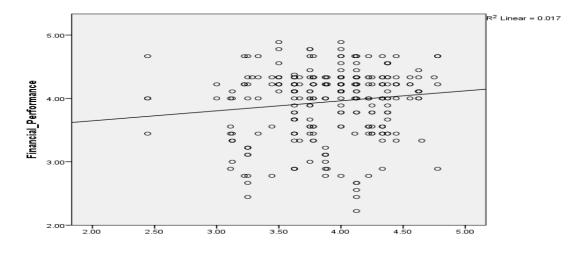


# Figure 4.8: Effect of working Capital Management on Performance

Figure 4.8 indicates that 75% of the respondents indicated that working capital management affects organizational performance while 25% indicated that working capital management does not affect organization performance.

# 4.6.5: Relationship between Working Capital Management and Financial Performance

The findings on Figure 4.9 show the relationship between working capital management and financial performance of insurance companies. The figure below indicates that a positive relationship exists between working capital management and financial performance of insurance companies.



**Working Capital Management** 

#### Figure 4.9: Working Capital Management and Financial Performance

Ordinary least squares regression was carried out to determine the relationship between working capital and financial performance. The regression model  $Y = \beta_0 + \beta_1 X_1 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.18, the value of R and R<sup>2</sup> were 0.414 and 0.171 respectively. The R value of 0.414 showed that there was a positive linear relationship between working capital management and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.171. This means that 17.1% of the variation in financial performance was explained by the model Y=  $\beta_0 + \beta_1 X_1 + \epsilon$ .

**Table 4.18: Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	0.414	0.171	.014	.52635		
a. Predictors: (Constant), Working Capital Management						

Table 4.19 provided the results on the analysis of the variance (ANOVA). An F statistic of 4.891 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of

significance. The reported p value of 0.028 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, working capital management had an effect on financial performance.

Mod	lel	Sum of	m of Df Mean		F	Sig.
		Squares		Square		
	Regression	1.355	1	1.355	4.891	.028
1	Residual	77.574	219	.277		
	Total	78.929	220			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Working Capital Management						

#### Table 4.19: Analysis of Variance (ANOVA)

The results of coefficients to the model  $Y= 3.332 + 0.158 X_1$  estimates were both significant at the 0.05 level of significance as shown on Table 4.20. This was because the significance was 0.028, which was less than 0.05. The constant term implied that at zero working capital management, the financial performance of insurance companies in Kenya performs at 3.332 units. The coefficient 0.158 implies that improvement in working capital management by one unit increases financial performance by 0.158 units.

# Table 4.20: Regression Analysis for Working Capital Management andFinancial Performance

		Unstandardized Coefficients		Т	Sig.
	В	Std. Error	Beta		
(Constant)	3.332	0.279		11.925	0.000
Working Capital					
Management	0.158	0.071	0.131	2.212	0.028
Dependent Variable: Fir	ancial Perfo	ormance			

#### 4.6.6 Relationship between Working Capital Management and Gross Premium

Simple regression was carried out to determine the relationship between working capital and gross premium. The regression model  $Y = \beta_0 + \beta_1 X_1 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.21, the value of R and R<sup>2</sup> were 0.301 and 0.091 respectively. The R value of 0.301 showed that there was a positive linear relationship between working capital management and gross premium of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.091. This means that 9.1% of the variation in gross premium was explained by the model Y=  $\beta_0 + \beta_1 X_1 + \epsilon$ .

# Table 4.21: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	0.301	0.091	.017	.45315		
a. Predictors: (Constant), Working Capital Management						

Table 4.23 provided the results on the analysis of the variance (ANOVA). An F statistic of 6.755 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.004 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, working capital management had an effect on gross premium.

# Table 4.23: ANOVA

Mode	el	Sum of	Df Mean		F	Sig.
		Squares		Square		
	Regression	1.355	1	1.355	6.755	. 0.004
1	Residual	77.574	219	.354		
	Total	78.929	220			
a. Dependent Variable: Gross Premium						
b. Predictors: (Constant), Working Capital Management						

The results of coefficients to the model  $Y= 1.521+ 0.328X_1$  estimates were both significant at the 0.05 level of significance as shown on Table 4.24. This was because the significance was 0.004, which was less than 0.05. The constant term implied that at zero working capital management, the gross premium of insurance companies in Kenya performs at 1.521 units. The coefficient 0.328 implies that improvement in working capital management by one unit increases gross premium by 0.328 units.

	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	1.521	0.2276		8.141	0.000
Working Capital					
Management	0.328	0.014	0.097	2.747	0.004
Dependent Variable: Gro	ss Premium	1			

 Table 4.24: Regression Analysis for Working Capital Management and Gross

 Premium

# 4.6.7 Relationship between Working Capital Management and Return on Asset (ROA)

Simple regression was carried out to determine the relationship between working capital and ROA. The regression model  $Y = \beta_0 + \beta_1 X_1 + \varepsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.25, the value of R and R<sup>2</sup> were 0.160 and 0.025 respectively. The R value of 0.160 showed that there was a positive linear relationship between working capital management and ROA of insurance firms.

The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.025. This means that 2.5% of the variation in ROA was explained by the model Y=  $\beta_0 + \beta_1 X_1 + \epsilon$ .

#### Table 4.25: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	0.160	0.025	.013	.4715		
a. Predictors: (Constant), Working Capital Management						

Table 4.26 provided the results on the analysis of the variance (ANOVA). An F statistic of 14.456 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.007 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, working capital management had an effect on ROA.

<b>Table 4.26</b>	6: ANOVA
-------------------	----------

Mod	el	Sum of	Df	Mean Square	F	Sig.
_		Squares				
	Regression	1.355	1	1.355	14.456	. 0.007
1	Residual	77.574	219	.354		
	Total	78.929	220			
a. De	ependent Variable	e: ROA				
b. Pr	edictors: (Consta	nt), Working Cap	oital Man	agement		

The results of coefficients to the model  $Y= 0.423+ 0.0.160X_1$  estimates were both significant at the 0.05 level of significance as shown on Table 4.27. This was because the significance was 0.007, which was less than 0.05. The constant term implied that at zero working capital management, ROA of insurance companies in Kenya performs at 0.423 units. The coefficient 0.162 implies that improvement in working capital management by one unit increases ROA by 0.162 units.

	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	0.423	.235		12.460	0.000
Working Capital					
Management	0.162	0.060	0.160	2.705	0.007
Dependent Variable: ROA	A				

Table 4.27: Regression Analysis for Working Capital Management and ROA

# 4.6.8 Relationship between Working Capital Management and Return on Equity (ROE)

Simple regression was carried out to determine the relationship between working capital and ROE. The regression model  $Y = \beta_0 + \beta_1 X_1 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.28, the value of R and R<sup>2</sup> were 0.092 and 0.008 respectively. The R value of 0.092 showed that there was a positive linear relationship between working capital management and ROE of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.008. This means that 0.08% of the variation in ROE was explained by the model Y=  $\beta_0 + \beta_1 X_1 + \epsilon$ .

#### **Table 4.28: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	0.092	0.008	.0147	.43315
a. Predictor	s: (Constant), W	Vorking Capita	l Management	

Further the results from Table 4.29 showed the F statistic that had a p value of 0.123. Since the p value of the F-statistic was more than 0.05 it showed that the coefficient in the equation fitted was not equal to zero implying a good fit. This implied that considering the simple regression fitted, working capital management had a little effect on ROE.

Table 4.29 provided the results on the analysis of the variance (ANOVA). An F statistic of 2.396 indicated that the overall model was not significant as it was less

than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.123 was more than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit but considering the simple regression fitted, working capital management had insignificant effect on ROE.

# Table 4.29: ANOVA

Mode	el	Sum of	df	Mean Square	F	Sig.
		Squares				
	Regression	1.355	1	1.355	2.396	. 0.123
1	Residual	77.574	219	.354		
	Total	78.929	220			
a. De	pendent Variable	e: ROE				
b. Pre	edictors: (Consta	nt), Working Cap	ital Man	agement		

The results of coefficients to the model  $Y= 0.810+ 0.828X_1$  estimate was not significant at the 0.05 level of significance as shown on Table 4.30 This was because the significance was 0.123, which was more than 0.05. The constant term implied that at zero working capital management, ROE of insurance companies in Kenya performs at 0.810 units. The coefficient 0.828 implies that improvement in working capital management by one unit increases ROE by 0.828 units.

Table 4.30: Regression Analysis for Working Capital Management and ROE

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	0.810	0.209		4.678	0.000
Working Capital					
Management	0.828	0.535	0.092	1.548	0.123
Dependent Variable: ROE					

# 4.6.9 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.20) The acceptance/rejection criteria were that, if the p value is greater than 0.05, the  $H_0$  is not rejected but if it's less than 0.05, the  $H_0$  fails to be accepted.

Based on this objective and literature review, the following null hypothesis was formulated for testing;

 $H_{01}$ : Working capital management had no effect on financial performance of insurance companies in Kenya

Results in Table 4.20 above showed that the p-value was 0.028<0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between working capital management and financial performance of insurance companies in Kenya.

This study is consistent with that Dong (2010) who reported that the firms' profitability and liquidity are affected by working capital management in his research analysis. From the research it was found that the relationships among these variables are strongly negative. This denoted that decrease in the profitability occurred due to increase in cash conversion cycle. It is also found that if the number of days of account receivable and inventories are diminished then the profitability increased numbers of days of accounts receivable and inventories.

# 4.7 Capital Budgeting Techniques

Capital budgeting is used to evaluate whether investments in fixed assets such as new machinery, new plants, new products, and research development projects are worth pursuing. Capital budgeting techniques include non-discounted cash flow techniques (payback period and the accounting rate of return) and the discounted cash flow techniques (net present value, internal rate of return, profitability index and discounted payback period).

# 4.7.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on capital budgeting techniques, a coefficient of 0.878 was found as shown in Table 4.31.

Statement	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Payback period is considered before investing in projects	0.763	0.848
Before projects on gross revenue are undertaken accounting rate of return is factored in	0.564	0.872
Net present value is considered before introducing new projects by the company	0.521	0.877
New branches are set and opened while the consideration is made on both discounting and non-discounting techniques.	0.767	0.845
Projects invested on are given priority depending on their profitability indexes	0.72	0.852
Capital budgeting decision has been vital to the firm's financial performance.	0.612	0.867
Capital budgeting decision often involves significant capital outlay to acquire fixed assets Number of items	0.687 7	0.856
Cronbach's Alpha	0.878	

#### Table 4.31: Reliability Test for Capital Budgeting Techniques

The results in Table 4.31 corroborates the findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the capital budgeting techniques variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

# 4.7.2 Sampling Adequacy

The findings in Table 4.32 showed that the KMO statistic was 0.721 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 884.124 with 21 degrees of

freedom, at p < 0.05). These results provide an excellent justification for further statistical analysis to be conducted.

Kaiser-Meyer-Olkin Measure	0.721
Bartlett's Chi- Square	884.124
Bartlett's df	21
Bartlett's Sig.	0.000

#### 4.7.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Total Variance analysis indicates that the 7 statements on capital budgeting techniques can be factored into 1 factor. The total variance explained by the extracted factor is 58.2% as shown in Table 4.33.

Component	Initial E	Eigen values		Extraction Sums of Squared Lo				
	Total	% of	Cumulative	Total	% of	Cumulative		
	Total	Variance	%	Total	Variance	%		
1	4.074	58.2	58.2	4.074	58.2	58.2		
2	1.177	16.821	75.021					
3	0.898	12.834	87.854					
4	0.326	4.661	92.515					
5	0.22	3.145	95.661					
6	0.178	2.536	98.196					
7	0.126	1.804	100					
Extraction M	the d. Duit	ainal Campa	name Amalanaia					

Table 4. 33: Capital Budgeting Techniques Total Variance Explained

Extraction Method: Principal Component Analysis.

Table 4.34 shows the factor loadings for capital budgeting techniques. All the seven factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis.

Statement	Component Matrix
Payback period is considered before investing in projects	0.878
Before projects on gross revenue are undertaken accounting rate of return is factored in	0.883
Net present value is considered before introducing new projects by the company	0.703
New branches are set and opened while the consideration is made on both discounting and non-discounting techniques.	0.645
Projects invested on are given priority depending on their profitability indexes	0.784
Capital budgeting decision has been vital to the firm's financial performance.	0.782
Capital budgeting decision often involves significant capital outlay to acquire fixed assets	0.759

# Table 4.34: Capital Budgeting Techniques Factor Analysis Component Matrix

Extraction Method: Principal Component Analysis.

According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

# 4.7.4 Descriptive Analysis

The first objective of the study was to establish the effect of working capital budgeting techniques on financial performance of insurance companies in Kenya as shown in Table 4.35.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Likert mean
Payback period is						
considered before						
investing in projects	1.80%	19.50%	16.30%	37.60%	24.90%	3.64
Before projects on gross revenue are undertaken,						
accounting rate of return is						
factored in	0.90%	18.60%	17.60%	42.50%	20.40%	3.63
Net present value is	0.90%	18.00%	17.00%	42.30%	20.40%	5.05
considered before						
introducing new projects						
by the company	4.10%	14.90%	15.40%	32.60%	33.00%	3.76
New branches are set and	1.1070	11.9070	15.1070	52.0070	55.0070	5.70
opened while the						
consideration is made on						
both discounting and non-						
discounting techniques.	4.50%	19.90%	11.30%	31.70%	32.60%	3.68
Projects invested on are						
given priority depending						
on their profitability						
indexes	4.10%	24.40%	8.60%	29.90%	33.00%	3.63
Capital budgeting decision						
has been vital to the firm's						<b>-</b>
financial performance.	8.10%	14.00%	8.10%	42.50%	27.10%	3.67
Capital budgeting decision						
often involves significant						
capital outlay to acquire	7 2004	11.000/		41 2004	22 0004	2 0 1
fixed assets	7.20%	11.80%	6.80%	41.20%	33.00%	3.81
Average	4.40%	17.60%	12.00%	36.90%	29.10%	3.69

# Table 4.35: Capital Budgeting Techniques Descriptive

The finding in Table 4.35 indicated that 62.5% of the respondents agreed that payback period was considered before investing in projects, 62.9% agreed that before projects on gross revenue was undertaken, accounting rate of return was factored in and 65.6% agreed that net present value was considered before introducing new projects by the company.

In addition, 64.3% of the respondents agreed that new branches were set and opened while the consideration was made on both discounting and non-discounting techniques, 62.9% agreed that projects invested on were given priority depending on their profitability indexes and 69.6% agreed that capital budgeting decision had been vital to the firm's financial performance. Finally, 74.2% of the respondents agreed that capital budgeting decision often involves significant capital outlay to acquire fixed assets.

The mean score for responses for this section was 3.69 which indicates that majority of the respondents agreed that capital budgeting techniques was a key determinant of financial performance of insurance companies. On average 66% of the respondent agreed while 22% disagreed and 12% were neutral that capital budgeting techniques had an influence on financial performance of insurance companies.

The finding was consistent with Gallagher (2000), which stated that implementation of a good cash management system will ensure better control of financial risk, increase the opportunity for profit, strengthen the company's balance sheet, ensure increased confidence in the company and improve operational efficiency. Finnerty and Stowe (2004) indicated that the daunting task of cash management is to maintain an appropriate level of cash and marketable securities that reduce the risk of insufficient fund for operation. Thus, a company's competency to synchronize cash inflows with cash outflow, by using cash budgeting and forecasting in formulating a cash management strategy is important.

#### 4.7.4.1 Effect of Capital Budgeting Techniques on Financial Performance.

The respondents were asked to indicate in their view whether capital budgeting techniques in their insurance firm had affected its performance as represented in Figure 4.10.

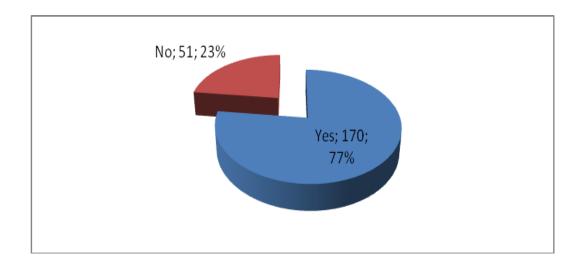
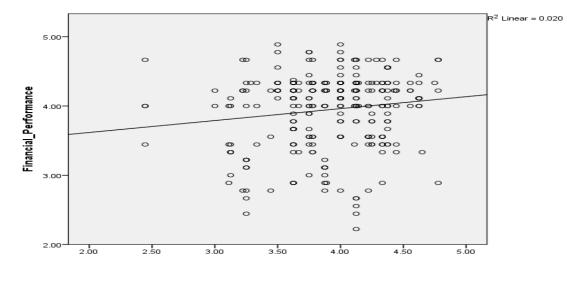


Figure 4.10: Effect of Capital Budgeting Techniques on Financial Performance

The results indicates that 77% of the respondents indicated that capital budgeting techniques affected financial performance while 23% indicated that capital budgeting techniques does not affect financial performance.

# 4.7.5 Relationship between Capital Budgeting Techniques and Financial Performance

The findings on Figure 4.11 show the relationship between capital budgeting techniques and financial performance of insurance companies. The figure below indicates that a positive relationship exists between capital budgeting techniques and financial performance of insurance companies.



**Capital Budgeting Techniques** 

# Figure 4.11: Capital Budgeting Techniques and Financial Performance

Ordinary Least Squares was carried out to determine the relationship between capital budgeting techniques and financial performance. The regression model  $Y = \beta_0 + \beta_2 X_2 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.36, the value of R and R<sup>2</sup> were 0.352 and 0.124 respectively. The R value of 0.352 showed that there was a positive linear relationship between capital budgeting techniques and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.124. This means that 12.4% of the variation in financial performance was explained by the model Y=  $\beta_0 + \beta_2 X_2 + \epsilon$ .

#### **Table 4.36: Model Summary**

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the			
				Estimate			
1	0.352	0.124	.011	.543557			
a. Predictors: (Constant), Capital Budgeting Techniques							

Table 4.37 provided the results on the analysis of the variance (ANOVA). An F statistic of 5.743 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The reported p value of 0.017 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital budgeting techniques had an effect on financial performance.

Model		Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	1.586	1	1.586	5.743	.017
1	Residual	77.342	219	.353		
	Total	78.929	220			
a. De	pendent Variabl	e: Financial Per	formance			
b. Pre	edictors: (Consta	ant), Capital Buc	lgeting Te	chniques		

#### Table 4.37: ANOVA

The results of coefficients to the model  $Y = 4.351 + 0.125 X_2$  estimates were both significant at the 0.05 level of significance as shown on Table 4.38 This was because the significance was 0.042, which was less than 0.05. The constant term implied that at zero capital budgeting techniques, the financial performance of insurance companies in Kenya performs at 4.351 units. The coefficient 0.125 implies that improvement in capital budgeting techniques by one unit increases financial performance by 0.125 units.

Table	4.38:	Regression	Analysis	for	Capital	Budgeting	Techniques	and
Financial Performance								

	Unstandardized Coefficients Std.		Standardized Coefficients	t	Sig.
	В	Error	Beta		
(Constant) Capital Budgeting	4.351	0.200		21.734	0.000
Techniques	0.125	0.049	0.121	2.047	0.042

## 4.7.6 Regression Analysis for Capital Budgeting Techniques and Gross Premium

Simple regression was carried out to determine the relationship between capital budgeting techniques and gross premium. The regression model  $Y = \beta_0 + \beta_2 X_2 + \varepsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.39, the value of R and R<sup>2</sup> were 0.217 and 0.047 respectively. The R value of 0.217 showed that there was a positive linear relationship between capital budgeting techniques and gross premium of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.047. This means that 4.7% of the variation in gross premium was explained by the model Y= $\beta_0 + \beta_2 X_2 + \varepsilon$ .

## Table 4.39: Model Summary

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	0.217	0.047	.031	.524557		
a. Predictors: (Constant), Capital Budgeting Techniques						

Table 4.40 provided the results on the analysis of the variance (ANOVA). An F statistic of 5.743 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.004 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital budgeting techniques had an effect on gross premium.

#### Table 4.40: ANOVA

Mod	el	Sum of	df	Mean	F	Sig.
_		Squares		Square		
	Regression	1.586	1	1.586	5.743	.004
1	Residual	77.342	219	.353		
	Total	78.929	220			
a. De	ependent Variable	e: Gross premium	1			
b. Pro	edictors: (Consta	unt), Capital Budg	eting Tech	niques		

The results of coefficients to the model  $Y=3.522+0.025X_2$  estimate was significant at the 0.05 level of significance as shown on Table 4.41. This was because the significance was 0.004, which was more than 0.05. The constant term implied that at zero capital budgeting techniques, the gross premium of insurance companies in Kenya performs at 3.522 units. The coefficient 0.025 implies that improvement in capital budgeting techniques by one unit increases gross premium by 0.025 units

 Table 4.41: Regression Analysis for Capital Budgeting Techniques and Gross

 Premium

	Unstandardized Coefficients Std.		Standardize d Coefficients	Т	Sig.
	В	Error	Beta		
(Constant)	3.522	0.305		11.544	0.000
Capital Budgeting					
Techniques	0.025	0.075	0.017	2.850	0.004

## 4.7.7 Relationship between Capital Budgeting Techniques and Return on Assets (ROA)

Simple regression was carried out to determine the relationship between capital budgeting techniques and ROA. The regression model  $Y = \beta_0 + \beta_2 X_2 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.42, the value of R and R<sup>2</sup> were 0.281 and 0.079 respectively. The R value of 0.281 showed

that there was a positive linear relationship between capital budgeting techniques and ROA of insurance firms.

The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.079. This means that 7.9% of the variation in ROA was explained by the model Y=  $\beta_0 + \beta_2 X_2 + \epsilon$ .

## **Table 4.42: Model Summary**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	0.281	0.079	.061	.494557		
a. Predictors: (Constant), Capital_Budgeting_Techniques						

Table 4.43 provided the results on the analysis of the variance (ANOVA). An F statistic of 5.743 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.038 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital budgeting techniques had an effect on ROA.

Mode	el	Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	1.586	1	1.586	5.743	.0038
1	Residual	77.342	219	.353		
	Total	78.929	220			
a. De	pendent Variabl	e: ROA				
b. Pre	dictors: (Consta	nt), Capital Budg	eting Tech	niques		

## Table 4.43: ANOVA

The results of coefficients to the model  $Y = 0.377 + 0.055X_2$  estimates were significant at the 0.05 level of significance as shown on Table 4.44. This was because

the significance was 0.038, which was less than 0.05. The constant term implied that at zero capital budgeting techniques, the ROA of insurance companies in Kenya performs at 0.377 units. The coefficient 0.055 implies that improvement in capital budgeting techniques by one unit increases ROA by 0.055 units.

	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		Std.			
	В	Error	Beta		
(Constant)	0.377	0.016		2.227	0.000
Capital Budgeting					
Techniques	0.055	0.042	0.079	2.330	0.038
Dependent Variable: ROA	1				

 Table 4.44: Regression Analysis for Capital Budgeting Techniques and ROA

## **4.7.8** Relationship between Capital Budgeting Techniques and Return on Equity (ROE)

Simple regression was carried out to determine the relationship between capital budgeting techniques and ROE. The regression model  $Y = \beta_0 + \beta_2 X_2 + \varepsilon$  was fitted to the data and the model was found to be significant. From Table 4.45, the value of R and R<sup>2</sup> were 0.228 and 0.052 respectively. The R value of 0.228 showed that there was a positive linear relationship between capital budgeting techniques and ROE of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.052. This means that 5.2% of the variation in ROE was explained by the model Y=  $\beta_0 + \beta_2 X_2 + \varepsilon$ .

## Table 4.45: Model Summary

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the	
				Estimate	
1	0.228	0.052	0.041	.493457	
a. Predictors: (Constant), Capital_Budgeting_Techniques					

Table 4.46 provided the results on the analysis of the variance (ANOVA). An F statistic of 6.543 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.007 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital budgeting techniques had an effect on ROE.

Mod	el	Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	1.586	1	1.586	6.543	.007
1	Residual	77.342	219	.353		
	Total	78.929	220			
a. De	pendent Variable	e: ROE				
b. Pre	edictors: (Consta	nt), Capital Budg	eting Tech	niques		

### Table 4.46: ANOVA

The results of coefficients to the model  $Y= 0.136+ 0.154X_2$  estimates were significant at the 0.05 level of significance as shown on Table 4.47. This was because the significance was 0.007, which was less than 0.05. The constant term implied that at zero capital budgeting techniques, the ROE of insurance companies in Kenya performs at 0.136 units. The coefficient 0.054 implies that improvement in capital budgeting techniques by one unit increases ROE by 0.154 units.

Table 4.47: Regression	Analysis for	: Capital l	Budgeting 7	<b>Fechniques and ROE</b>
		- ···		· · · · · · · · · · · ·

	Unstandardized Coefficients Std.		Standardize d Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	0.136	0.151		9.065	0.000
Capital Budgeting					
Techniques	0.154	0.369	0.025	4.170	0.007
Dependent Variable: ROE					

#### 4.7.9 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.38) The acceptance/rejection criteria were that, if the p value is greater than 0.05, the  $H_0$  is not rejected but if it's less than 0.05, the  $H_0$  fails to be accepted.

Based on this objective and literature review, the following null hypothesis was formulated for testing;

 $H_{01}$ : Capital budgeting techniques had no effect on financial performance of insurance companies in Kenya

Results in Table 4.38 showed that the p-value was 0.042<0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between capital budgeting techniques and financial performance of insurance companies in Kenya.

This study findings agreed with that of Olawale, Olumuyiwa and George (2010) who investigated whether companies made use of sophisticated investment appraisal techniques when making investment decisions, and the impact of sophisticated appraisal techniques on the profitability of the manufacturing firms in the Nelson Mandela Bay Metropolitan area, South Africa. The study had a sample of 124 firms out which 85 firms responded making 39% which were found to be using sophisticated investment appraisal techniques when making investment decisions.

Hence confirmed that manufacturing firms usually employed sophisticated investment appraisal techniques when making investment decisions. The profitability of the firms was measured by the rate of return on assets (ROA) and was determined based on the calculation of the earnings after interest and taxes (EAIT) and total assets. The study used regression analysis to test the relationship of each independent variable on profitability. The results indicated that the use of sophisticated investment appraisal techniques had a positive impact on profitability of manufacturing firms.

### 4.8 Capital structure Decisions

Capital structure is defined as the relative amount of debt and equity used to finance a firm. It's the relative amount of permanent short term debt, long term debt, preferred stock and common equity used to finance a firm. When determining a company's cost of capital, the costs of each component of the capital structure are weighted in relation to the overall total amount. A company's capital structure refers to the combination of its various sources of funding. Most companies are funded by a mix of debt and equity.

## 4.8.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on capital structure decisions, a coefficient of 0.921 was found as shown in Table 4.48. The results corroborate findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the capital structure decisions variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

#### Table 4.48: Reliability Test for Capital structure Decisions

Statement	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
The capital structure of the company is		
appropriate	0.736	0.913
The company has fully utilized the debt		
facility according to its capabilities	0.776	0.907
The company relies on equity capital than		
any other capital	0.833	0.902
Capital structure decisions are formulated		
based on tax savings	0.816	0.902
Management conduct yearly budget cost		
variance analysis on capital structures	0.823	0.9
Number of items	5	
Cronbach's Alpha	0.921	

#### 4.8.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000) as summarized in Table 4.49.

 Table 4.49: KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.749
Bartlett's Chi- Square	992.361
Bartlett's df	15
Bartlett's Sig.	0.000

The findings in Table 4.49 showed that the KMO statistic was 0.749 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 992.361 with 15 degrees of freedom, at p < 0.05). These results provide an excellent justification for further statistical analysis to be conducted.

#### **4.8.3 Factor Analysis**

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. The essence of conducting factor analysis per variable is to generate factor loadings for every statement. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 5 statements on capital structure can be factored into 1 factor. The total variance explained by the extracted factor is 73.5% as shown in Table 4.50.

Compone nt	Initial Eigen values			Extr	action Sums Loading	-
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.415	73.592	73.592	4.415	73.592	73.592
2	0.561	9.344	82.936			
3	0.417	6.953	89.889			
4	0.239	3.981	93.87			
5	0.202	3.363	100			

**Table 4.50: Capital Structure Decisions Total Variance Explained** 

Extraction Method: Principal Component Analysis.

Table 4.51 shows the factor loadings for capital structure decisions statements. All the five factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Table 4.51: Capital Structure Decisions	Factor Analysis Component Matrix

	Component
Statement	Matrix
The capital structure of the company is appropriate	0.748
The company has fully utilized the debt facility according to its	
capabilities	0.784
The company relies on equity capital than any other capital	0.803
Capital structure decisions are formulated based on tax savings	0.808
Management conduct yearly budget cost variance analysis on capital	
structures	0.775

Extraction Method: Principal Component Analysis

## 4.8.4 Descriptive Analysis

The third objective of the study was to determine the effect of capital structure decisions on financial performance of insurance companies in Kenya as shown in Table 4.52.

	Strongly Disagree	Disagree	Neutral	gree	trongly gree	Likert Mean
Statement	хц	Ξ	L	A	N A	
The capital structure of the company is						
appropriate	2.7%	9.0%	6.3%	33.0%	48.9%	4.16
The company has fully utilized the						
debt facility according to its						
capabilities	1.8%	4.5%	4.5%	47.5%	41.6%	4.23
The company relies on equity capital						
than any other capital	1.8%	3.6%	13.6%	46.6%	34.4%	4.08
Capital structure decisions are						
formulated based on tax savings	1.8%	7.2%	18.1%	44.3%	28.5%	3.90
Management conduct yearly budget						
cost variance analysis on capital						
structures	3.6%	13.6%	24.4%	20.4%	38.0%	3.76
Average	2.3%	6.9%	12.2%	41.8%	36.8 %	4.04

#### Table 4.52: Capital Structure Decisions Descriptive

The table illustrates that 81.9% of the respondents agreed that the capital structure of the company was appropriate, 89.1% agreed that the company had fully utilized the debt facility according to its capabilities and 81% agreed that the company relied on equity capital than any other capital. Furthermore, 72.8% of the respondents agreed that capital structure decisions are formulated based on tax savings, 58.4% agreed that management conduct yearly budget cost variance analysis on capital structures.

The mean score for responses for this section was 4.04 which indicates that majority of the respondents agreed that capital structure decisions was a key determinant of financial performance of insurance companies. On average 78.6% of the respondents agreed while 9.2% disagreed and 12.2% were neutral that capital structure decisions in insurance companies affects the financial performance of the firm.

The study findings agreed with that of Abdel-Jalil (2014), who by employing multiple regression analysis, documented a significant inverse influence of debt ratio and the proportion of debt to equity on the rate of return generated from investment activities, ROI.

Memon et al. (2012) checked the relationship of a capital structure decisions with the performance of the Pakistani organisations, where the authors used ROA as a single measure of performance. They applied the log-linear regression model on the data of 141 Pakistani textile companies for the period of 2004–2009 and reported a significantly negative association between TDTA and ROA. By using the ratio of debt to the total asset as a single proxy of capital structure and ROA as a proxy to measure the performance of firms, Muritala (2012) examined the influence of using leverage in the capital structure on the performance of Nigerian firms. They gathered data on ten firms over the period of 2006–2010 and, by applying panel least square approach, observed a negative influence of debt to total asset ratio on ROA.

### 4.8.4.1 Effect of Capital Structure Decisions on Financial Performance

The study sought to find out whether capital structure decisions in insurance firm affects its financial performance as represented in Figure 4.12

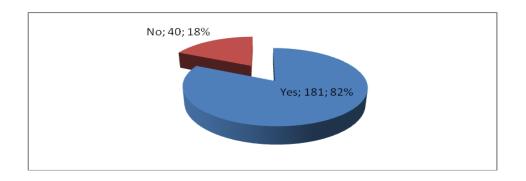
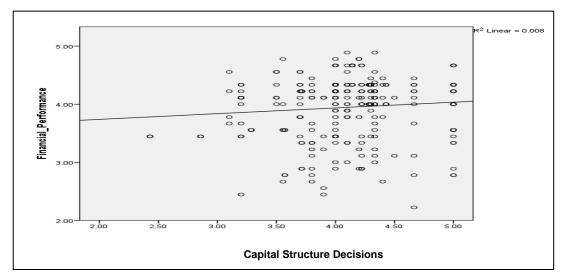


Figure 4.12: Effect of Capital Structure Decisions on Financial Performance

The figure shows that 82% of the respondents indicated that capital structure decisions affects financial performance while 18% indicated that capital structure decisions does not affect financial performance.

## 4.8.5 Relationship between Capital Structure Decisions and Financial Performance

The findings on Figure 4.13 show the relationship between capital structure decisions and financial performance of insurance companies. The figure indicated that a positive relationship exists between capital structure decisions and financial performance of insurance companies.



## Figure 4.13: Capital Structure Decisions and Financial Performance

Ordinary least squares regression was carried out to determine the relationship between capital structure decisions and financial performance. The regression model  $Y = \beta_0 + \beta_3 X_3 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.53, the value of R and R<sup>2</sup> were 0.298 and 0.089 respectively. The R value of 0.298 showed that there was a positive linear relationship between capital structure decisions and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.089. This means that 8.9% of the variation in financial performance was explained by the model  $Y = \beta_0 + \beta_3 X_3 + \epsilon$ .

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	.298	.089	.073	.52873		
a. Predictors: (Constant), Capital_Structure_Decisions						

Table 4.54 provided the results on the analysis of the variance (ANOVA). An F statistic of 5.298 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.012 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital structure decisions had an effect on financial performance.

Mode	el	Sum of	Df	Mean	F	Sig.		
		Squares		Square				
	Regression	.655	1	.655	5.298	.0012		
1	Residual	78.274	219	.357				
	Total	78.929	220					
a. Dependent Variable: Financial Performance								
b. Pre	b. Predictors: (Constant), Capital Structure Decisions							

Table 4.54: ANOVA

The results of coefficients to the model  $Y= 3.542 + 0.198X_3$  estimates were both significant at the 0.05 level of significance as shown on Table 4.55. This was because the significance was 0.012, which was less than 0.05. The constant term implied that at zero capital structure decisions, the financial performance of insurance companies in Kenya performs at 3.542 units. The coefficient 0.198 implies that improvement in capital structure decisions by one unit increases financial performance by 0.198 units.

		ndardized ficients	Standardized Coefficients	t	Sig.		
	В	Std. Error	Beta				
(Constant)	3.542	0.266		13.329	0.000		
Capital Structure							
Decisions	0.198	0.064	0.091	7.530	0.012		
Dependent Variable: Financial Performance							

 Table 4.55: Regression Analysis for Capital Structure Decisions and Financial

 Performance

### 4.8.6 Relationship between Capital Structure Decisions and Gross Premium

Simple regression was carried out to determine the relationship between capital structure decisions and gross premium. The regression model  $Y = \beta_0 + \beta_3 X_3 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.56, the value of R and R<sup>2</sup> were 0.253 and 0.064 respectively. The R value of 0.253 showed that there was a positive linear relationship between capital structure decisions and gross premium of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.064. This means that 6.4% of the variation in capital structure decisions was explained by the model Y=  $\beta_0 + \beta_3 X_3 + \epsilon$ .

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	.253	.064	.058	.52293		
a. Predictors: (Constant), Capital_Structure_Decisions						

Table 4.57 provided the results on the analysis of the variance (ANOVA). An F statistic of 6.275 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.042 was less than 0.05 showing that the

coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital structure decisions had an effect on gross premium.

Mod	el	Sum of	df	Mean	F	Sig.
_		Squares		Square		
	Regression	.655	1	.655	6.275	0.042
1	Residual	78.274	219	.357		
	Total	78.929	220			
a. Dependent Variable: Gross premium						
b. Pr	edictors: (Consta	nt), Capital_St	ructure_Dec	cisions		

## Table 4.57: ANOVA

The results of coefficients to the model  $Y= 2.463+ 0.174X_3$  estimates were significant at the 0.05 level of significance as shown on Table 4.58. This was because the significance was 0.042, which was less than 0.05. The constant term implied that at zero capital structure decisions, the gross premium of insurance companies in Kenya performs at 2.463 units. The coefficient 0.174 implies that improvement in capital structure decisions by one unit increases gross premium by 0.174 units.

	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	2.463	0.216		12.749	0.00
Capital Structure					
Decisions	0.174	0.047	0.011	2.373	0.042
Dependent Variable: G	ross Premium				

 Table 4.58: Regression Analysis for Capital Structure Decisions and Gross

 Premium

## 4.8.7 Relationship between Capital Structure Decisions and Return on Assets (ROA)

Simple regression was carried out to determine the relationship between capital structure decisions and ROA. The regression model  $Y = \beta_0 + \beta_3 X_3 + \epsilon$  was fitted to the data and the model was found to be significant. From Table 4.59, the value of R and R<sup>2</sup> were 0.335 and 0.112 respectively. The R value of 0.335 showed that there was a positive linear relationship between capital structure decisions and ROA of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.112. This means that 11.2% of the variation in ROA was explained by the model  $Y = \beta_0 + \beta_3 X_3 + \epsilon$ .

#### **Table 4.59: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	.335	.112	.111	.53893		
a. Predictors: (Constant), Capital Structure Decisions						

Table 4.60 provided the results on the analysis of the variance (ANOVA). An F statistic of 12.769 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The reported p value of 0.003 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital structure decisions had an effect on ROA.

Mode		Sum of	df	Mean Square	F	Sig.
		Squares				
	Regression	.655	1	.655	12.769	0.003
1	Residual	78.274	219	.357		
	Total	78.929	220			
a. Dependent Variable: ROA						
b. Prec	lictors: (Constant	t), Capital Struct	ure Decisio	ons		

#### Table 4.60: ANOVA

The results of coefficients to the model  $Y = 0.375 + 0.109X_3$  estimates were significant at the 0.05 level of significance as shown on Table 4.61. This was because the significance was 0.003, which was less than 0.05. The constant term implied that at capital structure decisions, the ROA of insurance companies in Kenya performs at 0.375 units. The coefficient 0.109 implies that improvement in capital structure decisions by one-unit increases ROA by 0.109 units.

	Unstandardized Coefficients Std.		Standardize d Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	0.375	0.027		13.553	0.000
Capital Structure					
Decisions	0.109	0.031	0.088	9.107	0.003
Dependent Variable: ROA	L				

Table 4.61: Regression Analysis for Capital Structure Decisions and ROA

# 4.8.8 Relationship between Capital Structure Decisions and Return on Equity (ROE)

Simple regression was carried out to determine the relationship between capital structure decisions and ROE. The regression model  $Y = \beta_0 + \beta_3 X_3 + \epsilon$  was fitted to the data and the model was found to be significant. From Table 4.62, the value of R and R<sup>2</sup> were 0.290 and 0.084 respectively. The R value of 0.290 showed that there was a positive linear relationship between capital structure decisions and ROE of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.084. This means that 8.4% of the variation in ROE was explained by the model  $Y = \beta_0 + \beta_3 X_3 + \epsilon$ .

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	.290 <sup>a</sup>	.084	.079	.49893		
a. Predictors: (Constant), Capital_Structure_Desicion						

Table 4.63 provided the results on the analysis of the variance (ANOVA). An F statistic of 11.221 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.036 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, capital structure decisions had an effect on ROE.

Mode	ł	Sum of	Df	Mean	F	Sig.		
		Squares		Square				
	Regression	.655	1	.655	11.221	0.036		
1	Residual	78.274	219	.357				
	Total	78.929	220					
a. Dependent Variable: ROE								
b. Pre	dictors: (Consta	nt), Capital Str	b. Predictors: (Constant), Capital Structure Decisions					

#### Table 4.63: ANOVA

The results of coefficients to the model  $Y= 0.243+ 0.119X_3$  estimates were significant at the 0.05 level of significance as shown on Table 4.64 This was because the significance was 0.036, which was less than 0.05. The constant term implied that at zero capital structure decisions, the ROE of insurance companies in Kenya performs at 0.243 units. The coefficient 0.119 implies that improvement in capital structure decisions by one unit increases ROE by 0.119 units.

	Unstandardized Coefficients Std.		Standardize d Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	0.243	0.204		11.761	0.000
Capital Budgeting					
Techniques	0.119	0.224	0.108	3.499	0.036
Dependent Variable: ROE					

## Table 4.64: Regression Analysis for Capital Structure Decisions and ROE

#### 4.8.8 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.55). The acceptance/rejection criteria were that, if the p value is greater than 0.05, the  $H_0$  is not rejected but if it's less than 0.05, the  $H_0$  fails to be accepted.

Based on this objective and literature review, the following null hypothesis was formulated for testing;

 $H_{01}$ : Capital structure decisions does not affect financial performance of insurance companies in Kenya

Results in Table 4.55 above showed that the p-value was 0.012<0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between capital structure decisions and financial performance of insurance companies in Kenya.

This study was consistent with that of Liebenberg and Sommer (2008) whose results indicated that undiversified insurers consistently outperform diversified insurers. In terms of accounting performance, the diversification penalty is at least 1 percent of return on assets or 2 percent of return on equity. Using a market-based performance measure (Tobin's Q) the authors found that the market applies a significant discount to diversified insurers. The existence of a diversification penalty (and diversification discount) provides strong support for the strategic focus hypothesis. The authors also

found that insurance groups underperform unaffiliated insurers and that stock insurers outperform mutual firms.

## **4.9 Claims Management Policies**

Claims management policies consist of advice or services in respect of claims for compensation, restitution, repayment or any other remedy for loss or damage, or in respect of some other obligation. Claims management services cover litigation, or claims under regulation schemes or voluntary arrangements

## 4.9.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on liability management policies, a coefficient of 0.802 was found as shown in Table 4.65.

Statement	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Production of monthly financial statements is important in monitoring liability management of the company	0.606	0.76
Our company management is particular about monthly targets for each department as guided by departmental targets	0.534	0.779
Management in my company conduct variance analysis every month as a way of monitoring performance	0.606	0.762
Our company has put in place claims settlement policies to curb fraud	0.55	0.773
My company ensures that the correct procedures are followed in settling claims	0.485	0.787
Liability management policies is a key driver of company's financial performance	0.616	0.764
Number of items	6	
Cronbach's Alpha	0.802	

### **Table 4.65: Reliability Test for Claims Management Policies**

The findings in Table 4.65 was consistent with that of Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the claims management policies variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

#### 4.9.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000) as summerised in Table 4.66.

 Table 4.66: KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.769
Bartlett's Chi- Square	542.241
Bartlett's df	15
Bartlett's Sig.	0

The findings in Table 4.66 showed that the KMO statistic was 0.769 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 542.241 with 15 degree of freedom, at p < 0.05). These results provide an excellent justification for further statistical analysis to be conducted.

### 4.9.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. The essence of conducting factor analysis per variable is to generate factor loadings for every statement. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 6 statements on claims management policies can be factored into 1 factor. The total variance explained by the extracted factor is 51.1% as shown in Table 4.67.

Compone nt	Initial Eigenvalues			Extra	of Squared	
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.067	51.113	51.113	3.067	51.113	51.113
2	1.42	23.67	74.783			
3	0.486	8.093	82.876			
4	0.413	6.878	89.754			
5	0.319	5.323	95.076			
6	0.295	4.924	100			

**Table 4.67: Claims Management Policies Total Variance Explained** 

Extraction Method: Principal Component Analysis.

Table 4.68 shows the factor loadings for claims management policies statements. All the six factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

	Component
Statement	Matrix
Production of monthly financial statements is important in	0.795
monitoring claims management of the company	0.785
Our company management is particular about monthly targets for	0 712
each department as guided by departmental targets	0.713
Management in my company conduct variance analysis every	0.775
month as a way of monitoring performance	0.775
Our company has put in place claims settlement policies to curb	0.664
fraud	0.664
My company ensures that the correct procedures are followed in	0.506
settling claims	0.596
Claims management policies is a key driver of company's	0.720
financial performance	0.739

## **Table 4.68: Factor Analysis Component Matrix**

4.9.4 Descriptive Analysis

The fourth objective of the study was to assess the effect of claims management policies on financial performance of insurance companies in Kenya as represented in Table 4.69.

#### **Table 4.69: Claims Management Policies Descriptive**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Likert Scale
Production of monthly	0				0	
financial statements is						
important in monitoring	1.8%	3.2%	20.4%	43.0%	31.7%	4.00
claims management of the						
company						
Our company management						
is particular about monthly	0.00/	2.201	4.4.07		05.00/	
targets for each	0.0%	3.2%	4.1%	57.5%	35.3%	4.25
department as guided by						
departmental targets						
Management in my company conduct variance						
analysis every month as a	0.0%	6.3%	18.1%	56.6%	19.0%	3.88
way of monitoring	0.070	0.570	10.170	50.070	17.070	5.00
performance						
Our company has put in						
place claims settlement	0.0%	4.1%	15.8%	43.0%	37.1%	4.13
policies to curb fraud						
My company ensures that						
the correct procedures are	0.0%	5.0%	7.2%	52.0%	35.7%	4.19
followed in settling claims						
Claims management						
policies is a key driver of	4.1%	9.5%	11.3%	36.2%	38.9%	3.96
company's financial	4.1%	7.3%	11.3%	30.270	30.9%	5.90
performance						
Average	1.0%	5.2%	12.8%	48.1%	33.0%	4.07

The results in Table 4.69 show that 74.7% of the respondents agreed that production of monthly financial statements was important in monitoring claims management of the company, 92.8% agreed that their company management was particular about monthly targets for each department as guided by departmental targets and 75% agreed that management in their company conduct variance analysis every month as a way of monitoring performance. In addition, 80.1% of the respondents agreed that their company had put in place claims settlement policies to curb fraud, 87.7% agreed that their company ensures that the correct procedures are followed in settling claims and 75.1% agreed that claims management policies was a key driver of company's financial performance.

The mean score for responses for this section was 4.07 which indicates that majority of the respondents agreed that claims management policies was a key determinant of financial performance of insurance companies. On average 81.1% of the respondents agreed while 6.2% disagreed and 12.8% were neutral that claims management policies influenced organization performance of insurance companies.

Results are in agreement with those of Sayeed and Hogue (2009) who studied the impact of assets and claims management on profitability; a study on public versus private commercial banks in Bangladesh. According to the study, banks' profitability is a concern in modern economy. Thus commercial banks incur cost for their claims and earn income from their assets. Thus profitability of banks is directly affected by management of their assets and liability. Their study examined how assets and liability management together with external variable such as degree of market concentration and inflation rate impact the profitability of selected commercial banks in Bangladesh. The study also dealt with the impact of Assets and Liability Management (ALM) on the profitability of the sixteen Bangladesh commercial banks classified into private and public. The regression results showed that the use of total income as the dependent variable for private and public banks show evidence that all of the assets have significant contribution to total income of the private banks.

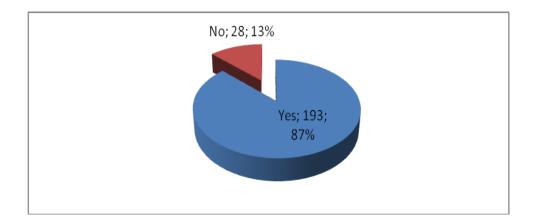
The coefficients of all claims are insignificant. Six out of eleven independent variables have significant impact on total income to assets ratio of public sector banks. The co-efficient of assets are positive and significant whereas the coefficient of three out of the four claims is not significant implying that, like private banks, public banks are earning very nominal or zero return from these claims.

The study findings further were in agreement with those of Pottier and Sommer (2006) who investigated whether certain insurers were inherently more difficult to evaluate than others. They identified certain insurer characteristics that were associated with greater difficulty in financial strength evaluation, as proxied for by the level of rating disagreement by Moody's and Standard and Poor's. Specifically, the empirical results indicated that insurers that exhibit the following characteristics were more difficult to assess in terms of financial strength: smaller insurers, stock

insurers, insurers with a history of reserving errors, insurers that use less reinsurance, insurers with greater levels of investment in stocks and low grade bonds, and insurers that were more geographically diversified.

## 4.9.4.1 Effect of Claims Management Policies on Financial Performance

The study sought to find out whether claims management policies in insurance firm affect its performance as shown in Figure 4.14.

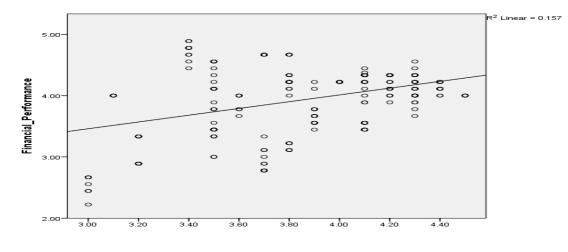


## Figure 4.14: Effect of Claims Management Policies on Performance

The results shows that 87% of the respondents indicated that claims management policies affect financial performance while 13% indicated that claims management policies do not affect financial performance.

## 4.9.5 Relationship between Claims Management Policies and Financial Performance

The findings on Figure 4.15 show the relationship between claims management and financial performance of insurance companies. The figure below indicated that a positive relationship exists between claims management policies and financial performance of insurance companies.



**Claims Management Policies** 

## **Figure 4.15: Claims Management Policies and Financial Performance**

Ordinary least squares regression was carried out to determine the relationship between claims management policies and financial performance. The regression model  $Y = \beta_0 + \beta_4 X_4 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.70, the value of R and R<sup>2</sup> were 0.396 and 0.157 respectively. The R value of 0.396 showed that there was a positive linear relationship between claims management policies and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.157. This means that 15.7% of the variation in financial performance was explained by the model  $Y = \beta_0 + \beta_4 X_4 + \epsilon$ .

## Table 4.70: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	.396	.157	.154	.48760		
a. Predictors: (Constant), Claims Management Policies						

Table 4.71 provided the results on the analysis of the variance (ANOVA). An F statistic of 5.976 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The reported p value of 0.000 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, claims management policies had an effect on financial performance.

Mod	lel	Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	12.358	1	12.358	5.976	.000
1	Residual	66.571	219	.238		
	Total	78.929	220			
a. Dependent Variable: Financial Performance						
b. Pr	edictors: (Consta	ant), Claims M	lanagemen	t policies		

#### Table 4.71: ANOVA

The results of coefficients to the model  $Y = 1.804 + 0.552X_4$  estimates were both significant at the 0.05 level of significance as shown on Table 4.72. This was because the significance was 0.000, which was less than 0.05. The constant term implied that at zero claims management policies, the financial performance of insurance companies in Kenya performs at 1.804 units. The coefficient 0.552 implies that improvement in claims management policies by one unit increases financial performance by 0.552 units.

	Unstanda Coeffic		Standardized Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	1.804	0.298		6.044	0.000
Claims					
Management					
Policies	0.552	0.077	0.396	7.209	0.000
Dependent Variat	ole: Financial l	Performance			

 Table 4.72: Regression Analysis for Claims Management Policies and Financial

 Performance

## 4.9.6 Relationship between Claims Management Policies and Gross Premium

Simple regression was carried out to determine the relationship between claims management policies and gross premium. The regression model  $Y = \beta_0 + \beta_4 X_4 + \epsilon$  was fitted to the data and the model was found to be significant. From Table 4.73, the value of R and R<sup>2</sup> were 0.345 and 0.119 respectively. The R value of 0.345 showed that there was a positive linear relationship between claims management policies and gross premium of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.119. This means that 11.9% of the variation in gross premium was explained by the model Y=  $\beta_0 + \beta_4 X_4 + \epsilon$ .

<b>Table 4.73:</b>	Model	Summary
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Model	R	R Square	Adjusted R Square	Std. Error of the						
				Estimate						
1	.345 <sup>a</sup>	.119	.104	.486760						
a. Predictor	a. Predictors: (Constant), Claims Management Policies									

Table 4.74 provided the results on the analysis of the variance (ANOVA). An F statistic of 8.221 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of

significance. The reported p value of 0.028 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, claims management policies had an effect on gross premium.

Mod	el	Sum of	Df	Mean	F	Sig.		
		Squares		Square				
	Regression	12.358	1	12.358	8.221	.028		
1	Residual	66.571	219	.304				
	Total	78.929	220					
a. De	pendent Variable	e: Gross Premiu	ım					
b. Predictors: (Constant), Claims Management Policies								

## Table 4.74: Model Summary

The results of coefficients to the model  $Y= 2.792+ 0.153X_4$  estimates were significant at the 0.05 level of significance as shown on Table 4.75. This was because the significance was 0.023, which was more than 0.05. The constant term implied that at zero claims management policies, the gross premium of insurance companies in Kenya performs at 2.792 units. The coefficient 0.153 implies that improvement in claims management policies by one unit increases gross premium by 0.153 units.

Table 4.75:	Regression	Analysis	for	Claims	Management	Policies	and	Gross
Premium								

	Unstanda Coeffic		Standardized Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	2.792	0.293		7.991	0.000
Claims Management					
Policies	0.153	0.105	0.147	3.631	0.028
Dependent Variable: Gros	s Premium				

## 4.9.7 Relationship between Claims Management Policies and Return on Assets (ROA)

Simple regression was carried out to determine the relationship between claims management policies and ROA. The regression model  $Y = \beta_0 + \beta_4 X_4 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.76, the value of R and R<sup>2</sup> were 0.248 and 0.062 respectively. The R value of 0.248 showed that there was a positive linear relationship between claims management policies and ROA of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.062. This means that 6.2% of the variation in ROA was explained by the model Y=  $\beta_0 + \beta_4 X_4 + \epsilon$ .

#### Table 4.76: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.248	.062	.060	.59760
a. Predictor	s: (Constant)	, Claims Manag	ement Policies	

Table 4.77 provided the results on the analysis of the variance (ANOVA). An F statistic of 16.327 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The reported p value of 0.009 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, claims management policies had an effect on ROA.

## Table 4.77: ANOVA

Mod	el	Sum of	Df	Mean	F	Sig.			
		Squares		Square					
	Regression	12.358	1	12.358	16.327	.009			
1	Residual	23.571	219	.304					
	Total	76.929	220						
a. De	ependent Variable	e:ROA							
b. Pre	b. Predictors: (Constant), Claims Management Policies								

The results of coefficients to the model  $Y= 0.232+ 0.017X_4$  estimates were significant at the 0.05 level of significance as shown on Table 4.78. This was because the significance was 0.009, which was less than 0.05. The constant term implied that at zero claims management policies technique, the ROA of insurance companies in Kenya performs at 0.232 units. The coefficient 0.017 implies that improvement in claims management policies by one-unit increases ROA by 0.017 units1

Table 4.78: Regression Analysis for Claims Management Policies and ROA

	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	0.232	0.196		10.732	0.000
Claims Management					
Policies	0.017	0.013	0.061	6.409	0.009
Dependent Variable: RO	A				

## **4.9.8** Relationship between Claims Management Policies and Return on Equity (ROE)

Simple regression was carried out to determine the relationship between claims management policies and ROE. The regression model  $Y = \beta_0 + \beta_4 X4 + \epsilon$  was fitted to the data and the model was found to be significant. From Table 4.79, the value of R

and R<sup>2</sup> were 0.270 and 0.073 respectively. The R value of 0.270 showed that there was a positive linear relationship between claims management policies and ROE of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.073. This means that 7.3% of the variation in ROE was explained by the model  $Y = \beta_0 + \beta_4 X_4 + \epsilon$ .

Model	R	<b>R</b> Square	Adjusted R Square	Std. Error of the						
				Estimate						
1	.270	.073	.071	.58790						
a. Predictor	a. Predictors: (Constant), Claims Management Policies									

 Table 4.79: Model Summary

Table 4.80 provided the results on the analysis of the variance (ANOVA). An F statistic of 6.172 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.006 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, claims management policies had an effect on ROE.

Mod	lel	Sum of	df	Mean	F	Sig.			
		Squares		Square					
	Regression	16.358	1	12.358	6.172	.006			
1	Residual	20.571	219	.304					
	Total	36.929	220						
a. De	a. Dependent Variable:ROE								
b. Pr	b. Predictors: (Constant), Claims Management Policies								

#### Table 4.80: ANOVA

The results of coefficients to the model  $Y = 0.142 + 0.219X_4$  estimates were significant at the 0.05 level of significance as shown on Table 4.81. This was because

the significance was 0.006, which was less than 0.05. The constant term implied that at zero claims management policies, the ROE of insurance companies in Kenya performs at 0.219 units. The coefficient 0.142 implies that improvement in claims management policies by one-unit increases ROE by 0.142 units.

	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		Std.			
	В	Error	Beta		
(Constant)	0.219	0.208		12.371	0.000
Claims Management					
Policies	0.142	0.137	0.135	2.019	0.006
Dependent Variable: ROE	2				

Table 4.81: Regression Analysis for Claims Management Policies and ROE

## 4.9.9 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.72). The acceptance/rejection criteria were that, if the p value is greater than 0.05, the  $H_0$  is not rejected but if it's less than 0.05, the  $H_0$  fails to be accepted.

Based on this objective and literature review, the following null hypothesis was formulated for testing;

 $H_{01}$ : Claims management policies had no effect on financial performance of insurance companies in Kenya

Results in Table 4.72 showed that the p-value was 0.000<0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between claims management policies and financial performance of insurance companies in Kenya.

The study findings agreed with those of Pottier and Sommer (2006) who investigated whether certain insurers were inherently more difficult to evaluate than others. They identified certain insurer characteristics that were associated with greater difficulty in financial strength evaluation, as proxied for by the level of rating disagreement by Moody's and Standard and Poor's. Specifically, the empirical results indicated that insurers that exhibit the following characteristics were more difficult to assess in terms of financial strength: smaller insurers, stock insurers, insurers with a history of reserving errors, insurers that use less reinsurance, insurers with greater levels of investment in stocks and low grade bonds, and insurers that were more geographically diversified.

#### **4.10** Corporate Governance

### 4.10.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on corporate governance, a coefficient of 0.938 was found as shown in Table 4.82.

Statement	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
My company has put in place a functional audit department.	0.775	0.933
The audit functions are not influenced in discharging their duties.	0.848	0.928
My company is transparent and accountable. It does ensure transparency by allowing its books of accounts to be audited	0.763	0.934
My company has a good leadership and managements structure which support corporate governance	0.734	0.935
My company has implemented risked based supervision as required by the regulator	0.751	0.933
Board of directors and top-level management are trained on corporate governance	0.774	0.932
My company has effective systems of detecting fraud	0.775	0.932
Number of items	7	
Cronbach's Alpha	0.938	

#### Table 4.82: Reliability Test for Corporate Governance

The results in Table 4.82 corroborates findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and

above, indicate satisfactory reliability. Based on these recommendations, the statements under the corporate governance variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

## 4.10.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000) as summarized in Table 4.82

## Table 4.82: KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.813
Bartlett's Chi- Square	129.113
Bartlett's df	36
Bartlett's Sig.	0.000

The findings in Table 4.82 showed that the KMO statistic was 0.813 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 1292.113 with 36 degree of freedom, at p < 0.05). These results provide an excellent justification for further statistical analysis to be conducted.

### **4.10.3 Factor Analysis**

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors

followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 7 statements on corporate governance can be factored into 1 factor. The total variance explained by the extracted factor is 67.8% as shown in Table 4.83.

Compone nt	Initial Eigen values			Extr	action Sums Loading	1
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.103	67.806	67.806	6.103	67.806	67.806
2	0.675	7.498	75.304			
3	0.549	6.095	81.399			
4	0.432	4.798	86.197			
5	0.364	4.048	90.244			
6	0.265	2.941	93.186			
7	0.249	2.768	100.00			

 Table 4.83: Corporate Governance Total Variance Explained

Table 4.84 below shows the factor loadings for corporate governance. All the seven factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Statement	Component Matrix
My company has put in place a functional audit department.	0.549
The audit functions are not influenced in discharging their duties. My company is transparent and accountable. It does ensure	0.711
transparency by allowing its books of accounts to be audited My company has a good leadership and managements structure	0.742
which support corporate governance	0.797
My company has implemented risked based supervision as required by the regulator	0.806
Board of directors and top-level management are trained on corporate governance	0.81
My company has effective systems of detecting fraud	0.787

## Table 4.84: Corporate Governance Factor Analysis Component Matrix

Extraction Method: Principal Component Analysis.

## **4.10.4 Descriptive Statistics**

The fifth and last objective of the study was to explore the effect of corporate governance on financial performance of insurance companies in Kenya as represented in Table 4.85.

Table 4.85: Corporate Gove	ernance Descriptive
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Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Likert Mean
My company has put in place a functional audit department.	3.6%	10.9%	8.1%	45.2%	32.1%	3.91
The audit functions are not influenced in discharging their duties.	0.0%	10.0%	10.9%	50.7%	28.5%	3.98
My company is transparent and accountable. It does ensure transparency by allowing its books of accounts to be audited	0.0%	5.4%	5.4%	62.9%	26.2%	4.10
My company has a good leadership and managements structure which support corporate governance	0.0%	5.9%	12.7%	57.0%	24.4%	4.00
My company has implemented risked based supervision as required by the regulator	0.0%	6.3%	29.9%	41.6%	22.2%	3.80
Board of directors and top-level management are trained on corporate governance	0.5%	8.1%	13.1%	36.7%	41.6%	4.11
My company has effective systems of detecting fraud	2.3%	9.5%	17.2%	35.7%	3 5.3%	3.92
Average	1.0%	8.1%	14.5%	47.3%	29.0%	3.95

The results in Table 4.85 show that 77.3% of the respondents agreed that their company had put in place a functional audit department, 79.2% agreed that the audit functions were not influenced in discharging their duties and 89.1% agreed that their company was transparent and accountable, it does ensure transparency by allowing its books of accounts to be audited. In addition, 81.4% of the respondents agreed that their company had a good leadership and managements structure which supports corporate governance, 63.8% agreed that the company had implemented risked based supervision as required by the regulator and 78.3% agreed that board of directors and top level management are trained on corporate governance.

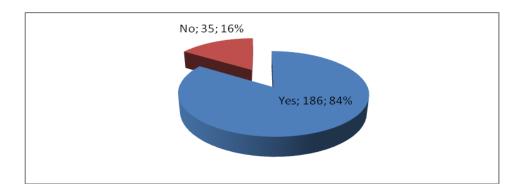
Furthermore, 77.8% of the respondents agreed that their company had effective systems of detecting fraud. The mean score for responses for this section was 3.95 which indicates that majority of the respondents agreed that corporate governance was a key determinant of organization performance of insurance companies. On average 76.3% of the respondents agreed while 9.1% disagreed and 14.5% were neutral that effective internal controls influenced organization performance of insurance of insurance of insurance section.

The study findings are in agreement with those of Ssuuna (2008) who examined the effects of internal control systems on financial performance in an institution of higher learning in Uganda. The study found that management of the institution was committed to the control systems, actively participated in monitoring and supervision of the activities of the University, all the Institution's activities were initiated by the top level management and that the internal audit department was not efficient, it was understaffed. However, the study also found out that there was lack of information sharing and inadequate security measures to safeguard the assets of the University. The study established a significant relationship between internal control system and financial performance.

The findings were consistent with those of Owino (2009) who examined the impact of internal control systems on the financial performance of private hospitals in Kenya. Regression analysis was used to find the relationship between monitoring, control activities, risk assessment, information and communication, control environment and financial performance of private hospitals in Kenya. The findings indicated that all the five components must be present for an internal control system to be considered effective. The findings also indicated that Monitoring had the highest influence on financial performance of private hospitals in Kenya followed by control environment, information and communication, risk assessment and control activities respectively.

## **4.10.4.1 Effect of Corporate Governance on Financial Performance**

The study sought to find out whether corporate governance in insurance firm affect its financial performance as represented in Figure 4.16.



**Figure 4.16: Effect of Corporate Governance on Financial Performance** 

The results shows that 84% of the respondents indicated that corporate governance affected financial performance while 16% indicated that corporate governance did not affect financial performance.

## 4.10.5. Relationship between Corporate Governance and Financial Performance

The findings on Figure 4.17 show the relationship between corporate governance and financial performance of insurance companies. The figure below indicates that a positive relationship exists between corporate governance and financial performance of insurance companies.

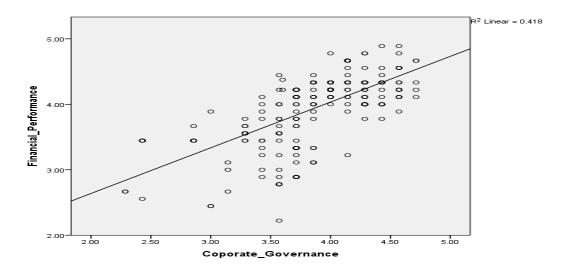


Figure 4.17: Corporate Governance and Financial Performance

Ordinary least squares regression was carried out to determine the relationship between corporate governance and financial performance. The regression model Y=  $\beta_0 + \beta_5 X_5 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.86, the value of R and R<sup>2</sup> were 0.647 and 0.416 respectively. The R value of 0.647 showed that there was a positive linear relationship between corporate governance and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.416. This means that 41.6% of the variation in financial performance was explained by the model Y=  $\beta_0$  +  $\beta_5 X_5 + \epsilon$ .

 Table 4.86: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.647	.416	.414	.40504
a. Predictor	rs: (Constant),	Corporate Gov	ernance	

Table 4.87 provided the results on the analysis of the variance (ANOVA). An F statistic of 21.114 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.000 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, corporate governance had an effect on financial performance.

Table 4.87: A	NOVA
---------------	------

	Sum of	df	Mean	$\mathbf{F}$	Sig.
	Squares		Square		
Regression	32.994	1	32.994	21.114	.000
Residual	45.935	219	.210		
Total	78.929	220			
a. Dependent Variable: Financial Performance					
b. Predictors: (Constant), Corporate Governance					
	Residual Total endent Variable	SquaresRegression32.994Residual45.935Total78.929endent Variable: Financial Per	SquaresRegression32.9941Residual45.935219Total78.929220endent Variable:Financial Performance	SquaresSquareRegression32.994132.994Residual45.935219.210Total78.929220endent Variable:Financial Performance	SquaresSquareRegression32.994132.99421.114Residual45.935219.210Total78.929220endent Variable:Financial Performance

The results of coefficients to the model  $Y = 1.242 + 0.698X_5$  estimates were both significant at the 0.05 level of significance as shown on Table 4.88. This was because the significance was 0.000, which was less than 0.05. The constant term implied that at zero corporate governance, the financial performance of insurance companies in Kenya performs at 1.242 units. The coefficient 0.698 implies that improvement in corporate governance by one unit increases financial performance by 0.698 units.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std.			
	В	Error	Beta		
(Constant)	1.242	0.192		6.465	0.000
Corporate					
Governance	0.698	0.049	0.647	14.181	0.000
Dependent Va	riable: Financial Pe	rformance	•		

 Table 4.88: Regression Analysis for Corporate Governance and Financial

 Performance

#### 4.10.6 Relationship between Corporate Governance and Gross Premium

Simple regression was carried out to determine the relationship between corporate governance and gross premium. The regression model  $Y = \beta_0 + \beta_5 X_5 + \epsilon$  was fitted to the data and the model was found to be significant. From Table 4.89, the value of R and R<sup>2</sup> were 0.356 and 0.127 respectively. The R value of 0.356 showed that there was a positive linear relationship between corporate governance and gross premium of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.127. This means that 12.7% of the variation in gross premium was explained by the model Y= $\beta_0 + \beta_5 X_5 + \epsilon$ .

Model	R	<b>R</b> Square	Adjusted R Square	Std. Error of the
				Estimate
1	.356	.127	.125	.59504
a. Predictor	rs: (Constant),	Corporate Gov	ernance	

Table 4.90 provided the results on the analysis of the variance (ANOVA). An F statistic of 6.342 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.002 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, corporate governance had an effect on gross premium.

Mod	lel	Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	32.994	1	32.994	6.342	.002
1	Residual	45.935	219	.210		
	Total	78.929	220			
a. Dependent Variable: Gross premium						
b. Pr	edictors: (Consta	nt), Corporate	Governance			

Table	4.90:	ANO	VA

The results of coefficients to the model  $Y= 2.791+ 0.198X_5$  estimates were significant at the 0.05 level of significance as shown on Table 4.91. This was because the significance was 0.002, which was less than 0.05. The constant term implied that at zero corporate governance, the gross premium of insurance companies in Kenya performs at 2.791 units. The coefficient 0.198 implies that improvement in corporate governance by one unit increases gross premium by 0.198 units.

Table 4.91: Regression	Analysis for	Corporate (	Governance and	Gross Premium
------------------------	--------------	-------------	----------------	---------------

	Unstandardized Coefficients Std.		Standardized Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	2.791	0.305		11.544	0.000
Corporate Governance	0.198	0.075	0.017	2.850	0.002
Dependent Variable: Gross	Premium				

# 4.10.7 Relationship between Corporate Governance and Return on Assets (ROA)

Simple regression was carried out to determine the relationship between corporate governance and ROA. The regression model  $Y = \beta_0 + \beta_5 X_5 + \varepsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.92, the value of R and R<sup>2</sup> were 0.176 and 0.031 respectively. The R value of 0.176 showed that there was a positive linear relationship between corporate governance and ROA of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.031. This means that 3.1% of the variation in ROA was explained by the model  $Y = \beta_0 + \beta_5 X_5 + \varepsilon$ .

#### Table 4.92: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the				
				Estimate				
1	.176	.031	.030	.49204				
a. Predictor	a. Predictors: (Constant), Corporate Governance							

Table 4.93 provided the results on the analysis of the variance (ANOVA). An F statistic of 7.487 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.015 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, corporate governance had an effect on ROA.

## Table 4.93: ANOVA

(Constant)

Corporate Governance

Mod	lel	Sum of	Df	Mean	F	Sig.		
		Squares		Square				
	Regression	32.994	1	32.994	7.487	.015		
1	Residual	45.935	219	.210				
	Total	78.929	220					
a. De	ependent Variable	e: ROA						
b. Pr	b. Predictors: (Constant), Corporate Governance							

The results of coefficients to the model  $Y= 0.427+ 0.0109X_5$  estimates were significant at the 0.05 level of significance as shown on Table 4.94. This was because the significance was 0.015, which was less than 0.05. The constant term implied that at zero corporate governance, the ROA of insurance companies in Kenya performs at 0.427 units. The coefficient 0.109 implies that improvement in corporate governance by one unit increases ROA by 0.109 units.

Unstandardized Coefficients	Standardized Coefficients	t	Sig.
Std.			

Table 4.94: 1	Regression A	Analysis for	Corporate	Governance and ROA
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B

0.427

0.109

Dependent Variable: ROA			

Error

0.211

0.076

Beta

0.101

17.991

8.384

0.001

0.015

# 4.10.7 Relationship between Corporate Governance and Return on Equity (ROE)

Simple regression was carried out to determine the relationship between corporate governance and ROE. The regression model  $Y = \beta_0 + \beta_5 X_5 + \epsilon$  was fitted to the data and the model was found to be significant. From Table 4.95, the value of R and R<sup>2</sup> were 0.210 and 0.044 respectively. The R value of 0.210 showed that there was a positive linear relationship between corporate governance and ROE of insurance

firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.044. This means that 4.4% of the variation in ROE was explained by the model  $Y = \beta_0 + \beta_5 X_5 + \epsilon$ .

### **Table 4.95: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the				
				Estimate				
1	.210 <sup>a</sup>	.044	.042	.56201				
a. Predictor	a. Predictors: (Constant), Corporate Governance							

Table 4.96 provided the results on the analysis of the variance (ANOVA). An F statistic of 21.114 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.017 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, corporate governance had an effect on ROE.

## Table 4.96: ANOVA

Mode	1	Sum of	Df	Mean	$\mathbf{F}$	Sig.		
		Squares		Square				
	Regression	32.994	1	32.994	7.282	.017		
1	Residual	45.935	219	.210				
	Total	78.929	220					
a. Dep	oendent Variable	e: ROE						
b. Pre	b. Predictors: (Constant), Corporate Governance							

The results of coefficients to the model  $Y= 0.392+ 0.108X_5$  estimates were significant at the 0.05 level of significance as shown on Table 4.97 This was because the significance was 0.017, which was less than 0.05. The constant term implied that at zero corporate governance, the ROE of insurance companies in Kenya performs at 0.392 units. The coefficient 0.108 implies that improvement in corporate governance by one unit increases ROE by 0.108 units.

	Unstandardized Coefficients Std.		Standardized Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	0.392	0.209		11.842	0.000
Corporate Governance	0.108	0.196	0.101	6.917	0.017
Dependent Variable: ROE					

#### Table 4.97: Regression Analysis for Corporate Governance and ROE

### 4.10.8 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.88). The acceptance/rejection criteria were that, if the p value is greater than 0.05, the  $H_0$  is not rejected but if it's less than 0.05, the  $H_0$  fails to be accepted.

Based on this objective and literature review, the following null hypothesis was formulated for testing;

 $H_{05}$ : Corporate governance do not affect financial performance of insurance companies in Kenya

Results in Table 4.88 above show that the p-value was 0.000<0.05. This indicated that the null hypothesis was rejected hence there is a significant relationship between corporate governance and financial performance of insurance companies in Kenya.

This study is consistent with that of Owino (2009) which indicated that all the five components that is monitoring, control activities, risk assessment, information and communication and control environment must be present for an internal control system to be considered effective. The findings also indicated that monitoring had the highest influence on financial performance of private hospitals in Kenya followed by control environment, information and communication, risk assessment and control activities respectively.

## 4.11 Firm Characteristics

The respondents were requested to indicate the number of branches for their insurance firms for the period 2011 to 2015. The graph below shows the trend.

Figure 4.18 shows that there has been an increasing trend in branch networks of various insurance companies in the country which may have been necessitated mergers and acquisitions witnessed in the insurance industry in the last five years and emerging new client needs which may be addressed by micro insurance products which are designed to meet the insurance needs of low income earners in Kenya. This people are mostly found in the rural areas and therefore insurance companies end up setting branches in a bid to meet the client needs. Another reason for increased insurance branch networks may be due increased training by the College of insurance through the partnership with IRA where 100 insurance sales agents are trained per county. At the end of the training these sales team are recruited by insurance companies and are expected to sell insurance products in the counties where they were trained from.

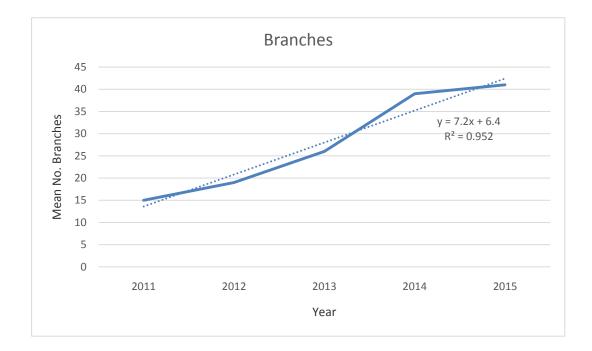


Figure 4.18: Trend line for number of branches for 2011-2015

The respondents were asked to state the number of years the company has been in operations. The figure 4.19 shows that 8% had been operation for between 5 years and 10 years, 11% have been in operation for between 11 and 15 years, 20% have been in operation for between 16 and 20 years while 61% have been in operation for

over 61 years as shown in Figure 4.19. It can said that majority of the insurance companies had been in operation for more than 20 years.



Figure 4.19: Number of Years the Company has been in operation

Further, the respondents were requested indicate if firm size influenced financial performance. Majority who were 94% indicated that firm size influenced financial performance while only 6% indicated that it did not as shown in Figure 4.20.

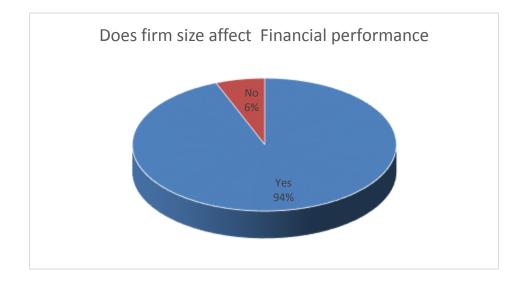


Figure 4.20: Effect of firm size on financial performance

For those who answered that firm size influenced financial performance, they were further asked to show the extent to which firm size improved financial performance. Majority of the respondents who were 54% indicated that firm size improved financial performance by between 50% and 75% while only 5% indicated that firm size improved financial performance by below 25% as shown in Figure 4.21.

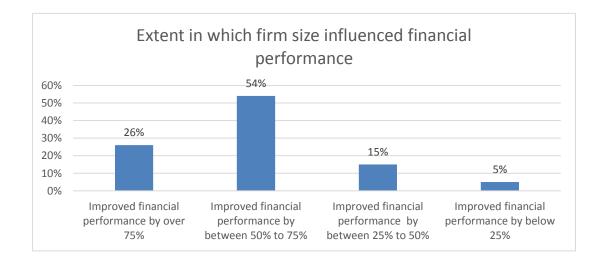


Figure 4.21: Extent in which firm size influenced financial performance

## 4.11.1 Relationships between Firm Characteristics and Financial Performance

The findings on Figure 4.22 showed the relationship between firm characteristics and financial performance of insurance companies. The figure below indicated that a positive relationship exists between firm characteristics and financial performance of insurance companies.

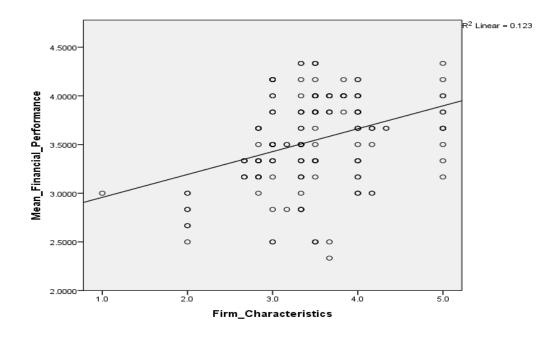


Figure 4.22: Firm Characteristics and Financial Performance

Ordinary least squares regression was carried out to determine the relationship between firm characteristics and financial performance. The regression model  $Y = \beta_0$ +  $\beta_6 X_6 + \epsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.98, the value of R and R<sup>2</sup> were 0.236 and 0.07 respectively. The R value of 0.236 showed that there was a positive linear relationship between firm characteristics and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.07. This means that 7% of the variation in financial performance was explained by the model Y=  $\beta_0$  +  $\beta_6 X_6 + \epsilon$ .

## Table 4.98: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.236	.070	.141	.34260
a. Predictor	s: (Constant)	, Firm Character	ristics	

Table 4.99 provided the results on the analysis of the variance (ANOVA). An F statistic of 7.626 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.000 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, firm characteristics had an effect on financial performance.

Mod	lel	Sum of	Df	Mean	F	Sig.	
		Squares		Square			
	Regression	10.708	1	10.708	7.626	.000	
1	Residual	68.221	219	.238			
	Total	78.929	220				
a. De	ependent Variab	le: Financial P	erformance				
b. Pr	b. Predictors: (Constant), Firm Characteristics						

Table 4.99: ANOVA
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The results of coefficients to the model  $Y= 1.312 + 0.031X_6$  estimates were both significant at the 0.05 level of significance as shown on Table 4.100. This was because the significance was 0.000, which was less than 0.05. The constant term implied that at zero firm characteristics, the financial performance of insurance companies in Kenya performs at 1.312 units. The coefficient 0.031 implies that improvement in firm characteristics by one unit increases financial performance by 0.031 units.

	Unstandardized Coefficients Std.		Standardized Coefficients	t	Sig.			
	В	Stu. Error	Beta					
(Constant)	1.312	0.298		4.221	0.000			
Firm								
Characteristics	0.031	0.077	0.396	3.141	0.000			
Dependent Variable: Financial Performance								

Table 4.100:	Regression	Analysis	for	Firm	Characteristics	and	Financial
Performance							

## 4.11.2 Relationship between Firm Characteristics and Gross Premium

Simple regression was carried out to determine the relationship between firm characteristics and gross premium. The regression model  $Y = \beta_0 + \beta_6 X_6 + \varepsilon$  was fitted to the data and the model was found to be significant. From Table 4.101, the value of R and R<sup>2</sup> were 0.355 and 0.126 respectively. The R value of 0.355 showed that there was a positive linear relationship between firm characteristics and gross premium of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.126. This means that 12.6% of the variation in gross premium was explained by Firm Characteristics.

Model R		R Square	Adjusted R Square	Std. Error of th	
				Estimate	
1	.355	.126	.121	.467260	
a. Predictor	rs: (Constant)	, Firm Character	ristics		

e

#### Table 4.101: Model Summary

Table 4.102 provided the results on the analysis of the variance (ANOVA). An F statistic of 6.332 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.021 was less than 0.05 showing that the

coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, firm characteristics had an effect on gross premium.

Mod	lel	Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	10.358	1	10.358	6.332	.028
1	Residual	68.571	219	.304		
	Total	78.929	220			
a. De	ependent Variable	e: Gross Premi	um			
b. Pr	edictors: (Consta	nt), firm charad	cteristics			

## Table 4.102: ANOVA

The results of coefficients to the model  $Y = 2.792 + 0.153X_6$  estimates were significant at the 0.05 level of significance as shown on Table 4.103. This was because the significance was 0.028, which was less than 0.05. The constant term implied that at zero firm characteristics, the gross premium of insurance companies in Kenya performs at 0.153 units. The coefficient 0.153 implies that improvement in firm characteristics by one unit increases gross premium by 0.153 units.

Table 4.103: Regression	<b>Analysis for Firm</b>	<b>Characteristics and</b>	<b>Gross Premium</b>

	Unstanda Coeffic		Standardize d Coefficients	Т	Sig.		
	В	Error	Beta				
(Constant)	2.792	0.293		7.991	0.000		
Firm Characteristics	0.153	0.105	0.147	3.631	0.028		
Dependent Variable: Gross Premium							

### 4.11.3 Relationship between Firm Characteristics and Return on Assets (ROA)

Simple regression was carried out to determine the relationship between firm characteristics and ROA. The regression model  $Y = \beta_0 + \beta_6 X_6 + \varepsilon$  was thus fitted to the data and the model was found to be significant. From Table 4.104, the value of R and R<sup>2</sup> were 0.218 and 0.047 respectively. The R value of 0.218 showed that there was a positive linear relationship between firm characteristics and ROA of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.047. This means that 4.7% of the variation in ROA was explained by the Firm Characteristics.

#### Table 4.104: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the				
				Estimate				
1	.218	.047	.061	.532210				
a. Predictors: (Constant), Firm Characteristics								

Table 4.105 provided the results on the analysis of the variance (ANOVA). An F statistic of 16.327 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.009 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, Firm Characteristics had an effect on ROA.

Model		Sum of	Df	Mean Square	F	Sig.
		Squares				
	Regression	12.358	1	12.358	16.327	.009
1	Residual	23.571	219	.304		
	Total	76.929	220			
a. Depe	ndent Variable:	ROA				
b. Predi	ctors: (Constant	t), Firm Characte	ristics			

### Table 4.105: ANOVA

The results of coefficients to the model  $Y= 0.232+ 0.017X_6$  estimates were significant at the 0.05 level of significance as shown on Table 4.106. This was because the significance was 0.009, which was less than 0.05. The constant term implied that at zero Firm Characteristics, the ROA of insurance companies in Kenya performs at 0.232 units. The coefficient 0.017 implies that improvement in Firm Characteristics by one-unit increases ROA by 0.017 units.

	Unstanda Coeffic		Standardize d Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	0.232	0.196		10.732	0.000
Firm Characteristics	0.017	0.013	0.061	6.409	0.009
Dependent Variable: RC	DA				

## Table 4.106: Regression Analysis for Firm Characteristics and ROA

## 4.11.4 Relationship between Firm Characteristics and Return on Equity (ROE)

Simple regression was carried out to determine the relationship between firm characteristics and ROE. The regression model  $Y = \beta_0 + \beta_6 X_6 + \epsilon$  was fitted to the data and the model was found to be significant. From Table 4.107, the value of R and R<sup>2</sup> were 0.270 and 0.073 respectively. The R value of 0.270 showed that there was a positive linear relationship between Firm Characteristics and ROE of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.073. This means that 7.3% of the variation in ROE was explained by Firm Characteristics.

Model	R	R Square	Adjusted R Square	Std. Error of the				
				Estimate				
1	.270	.073	.071	.58790				
a. Predictors: (Constant), Firm Characteristics								

## Table 4.107: Model Summary

Table 4.108 provided the results on the analysis of the variance (ANOVA). An F statistic of 6.172 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance. The reported p value of 0.006 was less than 0.05 showing that the coefficient in the equation fitted was not equal to zero implying a good fit and therefore considering the simple regression fitted, firm characteristics had an effect on ROE.

Mod	el	Sum of	Df	Mean	F	Sig.		
		Squares		Square				
	Regression	16.358	1	12.358	6.172	.006		
1	Residual	20.571	219	.304				
	Total	36.929	220					
a. Dependent Variable: ROE								
b. Pr	b. Predictors: (Constant), Firm Characteristics							

#### Table 4.108: ANOVA

The results of coefficients to the model  $Y= 0.219+ 0.142X_6$  estimates were significant at the 0.05 level of significance as shown on Table 4.109. This was because the significance was 0.006, which was less than 0.05. The constant term implied that at zero Firm Characteristics, the ROE of insurance companies in Kenya performs at 0.219 units. The coefficient 0.142 implies that improvement in firm characteristics by one-unit increases ROE by 0.142 units.

## Table 4.109: Regression Analysis for Firm Characteristics and ROE

	Unstandardized Coefficients Std.		Standardize d Coefficients	t	Sig.
	В	Error	Beta		
(Constant)	0.219	0.208		12.371	0.000
Firm Characteristics	0.142	0.137	0.135	2.019	0.006
Dependent Variable: RO	E				

## 4.11.5 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.100). The acceptance/rejection criteria were that, if the p value is greater than 0.05, the  $H_0$  is not rejected but if it's less than 0.05, the  $H_0$  fails to be accepted.

Based on this objective and literature review, the following null hypothesis was formulated for testing;

 $H_{06}$ : Firm Characteristics had no significant moderating effect on relationship between financial management practices and financial performance of insurance companies in Kenya.

Results in Table 4.100 above show that the p-value was 0.000<0.05. This indicated that the null hypothesis was rejected hence firm characteristic had significant moderating effect on relationship between financial management practices and financial performance of insurance companies in Kenya.

This study is consistent with that of Kaguri (2013) who conducted a study on relationship between firm characteristics and financial performance of life insurance companies in Kenya. The study used size, diversification, leverage, liquidity, age, premium growth and claim experience as the independent variables and financial performance as the dependent variable. The study findings indicate that the joint effect of variables are statistically significance to influencing financial performance of life insurance companies as indicated by the positive and strong Pearson correlation coefficients.

## 4.12 Overall Correlation Analysis

Preliminary analysis was carried out to determine whether there were significant associations between working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance and financial performance of insurance companies in Kenya. In this study, Pearson's product-moment correlation coefficient (r) was used to explore relationships between the variables, specifically to assess both the direction and strength. This was crucial to assess the nature of relationships existing between the variables before carrying out further analysis.

Pearson's product-moment correlation coefficient (r) was used to examine the extent of correlation between the variables of study and to show the strength of the linear relationships between the variables in the regression ranges between  $\pm 1$ . Where r=  $\pm 0.7$  and above it indicates a very strong relationship; r= $\pm 0.5$  to below 0.7 is a strong relationship; r=0.3-0.49 is a moderate relationship while r=0.29 and below indicates a weak relationship. Where r=0 it indicates that there is no relationship (Esther-Smith, Thorge and Love, 1999). The results of correlation analysis are presented in table 4.110.

Correlation results showed that relationship between working capital management and financial performance was positive and statistically significant (r=.631, p<0.05), capital budgeting techniques and financial performance was positive and significant (r= 0.601, p<0.05), capital structure decisions and financial performance was positive and significant (r= 0.591, p<0.05), claims management policies and financial performance was positive and significant (r= 0.696, p<0.05), corporate governance and financial performance was positive and significant (r= 0.647, p<0.05). From the findings no variable had a correlation above 0.7 hence the study sought to analyse the regression analysis to establish further relationship.

		Financial Performance	Working Capital	Capital Budgeting	Capital Structure	Claims Management Policies	Corporate Governance
Financial Performance	Pearson Correlation	1.000					
Working Capital Management	Sig. (2-tailed) Pearson Correlation	.631*	1.000				
Capital Budgeting Techniques	Sig. (2-tailed) Pearson Correlation	0.028 .601*	-0.077	1.000			
Capital Structure Decisions	Sig. (2-tailed) Pearson Correlation	0.042 0.591**	0.198 .123*	0.101	1.000		
Claims Management Policies	Sig. (2-tailed) Pearson Correlation	0.027	0.039 0.056	0.092	0.035	1.000	
Corporate Governance	Sig. (2-tailed) Pearson Correlation	0.000 .647**	0.347 0.050	0.967 -0.006	0.559 .203**	.196**	1.000
* Correlation is sign	Sig. (2-tailed) ificant at the 0.05 le	0.000 vel (2-tailed).	0.404	0.923	0.001	0.001	
** Correlation is sign	nificant at the 0.01 l	evel (2-tailed	).				

## **Table 4.110: Correlation Coefficients Matrix**

#### 4. 13 Joint Regression before Moderation

A multiple regression for joint variables was first run before moderation. The results in Table 4.111 present the fitness of model used in explaining the relationship between working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance on the dependent variable which was financial performance of insurance companies in Kenya. The independent variables (working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance) were found to be satisfactory variables in determining financial performance of insurance companies in Kenya. This was supported by the coefficient of determination, R-square of 0.508. This means that working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance explain 50.8% of the variations in the dependent variable which is financial performance of insurance companies in Kenya. These results further mean that the model applied to link the relationship of the variables was satisfactory.

Model	R	<b>R</b> Square	Adjusted R Square	Std. Error of the				
				Estimate				
1	.713	.508	.499	.37507				
a. Predictor	rs: (Constant),	Corporate Gov	ernance, Capital Budge	ting Techniques,				
Claims Management Policies, Capital Structure Desicions, Working Capital								
Manageme	Management							

 Table 4.111: Model Summary

The (ANOVA) results in table 4.112 indicated that the model was statistically significant. Further, the results implied that the independent variables were good predictors of financial performance of insurance companies in Kenya. This was supported by an F statistic of 58.500 which indicated that the overall model was significant as it was more than the critical F value of 3.88 with (5, 215) degrees of freedom at the P=0.05 level of significance. The reported p=0.000 was less than the conventional probability of 0.05 significance level.

## Table 4.112: ANOVA

Model		Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	40.102	5	8.020	58.500	.000
1	Residual	38.827	215	.181		
	Total	78.929	220			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Corporate Governance, Capital Budgeting Techniques, Liability Management Policies, Capital Structure Decisions, Working Capital Management Regression of coefficients results in table 4.113 below showed that working capital management had a positively and significant influence on financial performance of insurance companies ( $\beta$ =0.099, p=0.045). The table indicated that capital budgeting techniques had a positively and significantly influence on financial performance of insurance companies ( $\beta$ =0.089, p=0.012), capital structure decisions had a positively and significantly influence of insurance companies ( $\beta$ =0.042, p=0.037), claims management policies had a positively and significantly influence of insurance positively and significantly influence on financial performance of insurance positively and significantly influence of insurance of insurance companies ( $\beta$ =0.043, p=0.000). It was further established that corporate governance positively and significantly influence of insurance of insurance companies ( $\beta$ =0.643, p=0.000).

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		Std.					
	B	Error	Beta				
(Constant)	0.106	0.374		0.283	0.778		
Working Capital							
Management	0.099	0.051	0.082	1.990	0.045		
Capital Budgeting							
Techniques	0.089	0.035	0.107	2.529	0.012		
Capital Structure							
Decisions	0.042	0.047	0.039	1.990	0.037		
Claims Management							
Policies	0.384	0.060	0.276	6.437	0.000		
Corporate Governance	0.643	0.047	0.596	13.643	0.000		
Dependent Variable: Financial Performance							

### **Table 4.113: Regression Analysis**

The joint regression optimal model was as shown below

 $Y = 0.106 + 0.099X_1 + 0.089X_2 + 0.042X_3 + 0.384X_4 + 0.643X_5$ 

Where;

Y= Financial Performance

X<sub>1</sub>= Working Capital Management

- X<sub>2</sub>= Capital Budgeting Techniques
- X<sub>3</sub>= Capital Structure Decisions
- X<sub>4</sub>= Claims Management Policies
- X<sub>5</sub>= Corporate Governance

## 4.14 Regression Analysis after Moderation

In order to establish interaction effects between the independent variables and the dependent variable, firm characteristic was used as a moderating variable. The hierarchical linear regression analysis was used to test the moderating influence. This test was appropriate since this study had multiple independent variables (Cauvery *et al.*, 2010). The regression analysis was done for each independent variable and the dependent variable to determine the individual moderating effect of each element on financial performance of insurance companies in Kenya.

## 4.14.1 Regression analysis on the moderating effect of firm characteristics on relationship between working capital management and financial performance

A regression analysis was done to determine the effect of firm characteristics on the relationship between working capital management and financial performance of insurance companies. The working capital management intersection firm characteristics ( $X_1*X_6$ ) was computed and used in the regression model  $Y = \beta_0 + \beta_1 X_1 * X_6 + \beta_1 X_1 + \epsilon$ .

The results of coefficients were used to generate the line,  $Y=3.417+0.039X_1*X_6+-0.013X_1$  showed that the coefficient of working capital management intersection firm characteristics was significant since it had a p-value of 0.004 which was less than 0.05 as shown on Table 4.114. Since the coefficient of  $(X_1*X_6)$  was significant, it implied that firm characteristics had a moderating effect on the relationship between working capital management and financial performance of insurance companies.

	Unstandardized Coefficients Std.		Standardized Coefficients	Т	Sig.		
	В	Error	Beta				
(Constant)	3.417	0.277		12.324	0.000		
$X_1X_6$	0.039	0.013	0.222	2.923	0.004		
Working Capital							
Management	-0.013	0.091	-0.011	-0.141	0.888		
Dependent Variable: Financial Performance							

Table 4.114: Moderating effect of firm characteristics on relationship betweenworking capital management and financial performance of insurancecompanies

# 4.14.2 Regression analysis on the moderating effect of firm characteristics on relationship between capital budgeting techniques and financial performance

A regression analysis was done to determine the effect of firm characteristics on the relationship between capital budgeting techniques and financial performance of insurance companies. The capital budgeting techniques intersection firm characteristics ( $X_2*X_6$ ) was computed and used in the regression model  $Y = \beta_0 + \beta_2 X_2*X_6 + \beta_2 X_2 + \epsilon$ .

The results of coefficients were used to generate the line,  $Y=4.146+0.023X_2*X_6+-0.136X_2$  showed that the coefficient of capital budgeting techniques intersection firm characteristics was significant since it had a p-value of 0.045 which was less than 0.05 as shown on Table 4.115. Since the coefficient of  $(X_2*X_6)$  was significant, it implied that firm characteristics had a moderating effect on the relationship between capital budgeting techniques and financial performance of insurance companies.

	Unstandardized Coefficients		t	Sig.
В	Std. Error	Beta		
4.146	0.224		18.549	0.000
0.023	0.011	0.126	2.009	0.045
-0.136	0.052	-0.165	-2.622	0.009
	4.146 0.023 -0.136	4.146         0.224           0.023         0.011	4.146         0.224           0.023         0.011         0.126           -0.136         0.052         -0.165	4.146         0.224         18.549           0.023         0.011         0.126         2.009           -0.136         0.052         -0.165         -2.622

 Table 4.115: Moderating effect of firm characteristics on relationship between

 capital budgeting techniques and financial performance of insurance companies

## 4.14.3 Regression analysis on the moderating effect of firm characteristics on relationship between capital structure decisions and financial performance

A regression analysis was done to determine the effect of firm characteristics on the relationship between capital structure decisions and financial performance of insurance companies. The capital structure decisions intersection firm characteristics  $(X_3*X_6)$  was computed and used in the regression model  $Y = \beta_0 + \beta_3 X_3 * X_6 + \beta_3 X_3 + \epsilon$ .

The results of coefficients were used to generate the line,  $Y=3.368+0.023X_3*X_6+0.056X_3$  showed that the coefficient of capital structure decisions intersection firm characteristics was significant since it had a p-value of 0.042 which was less than 0.05 as shown on Table 4.116. Since the coefficient of  $(X_3*X_6)$  was significant, it implied that firm characteristics had a moderating effect on the relationship between capital structure decisions and financial performance of insurance companies.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
	B	Std. Error	Beta					
(Constant)	3.368	0.279		12.066	0.000			
$X_3X_6$	0.023	0.012	0.122	1.990	0.042			
Capital Structure								
Decisions	0.056	0.068	0.052	0.825	0.410			
Dependent Variable:	Dependent Variable: Financial Performance							

 Table 4.116: Moderating effect of firm characteristics on relationship between

 capital structure decisions and financial performance of insurance companies

## 4.14.4 Regression analysis on the moderating effect of firm characteristics on relationship between claims management policies and financial performance

A regression analysis was done to determine the effect of firm characteristics on the relationship between claims management policies and financial performance of insurance companies. The claims management policies intersection firm characteristics ( $X_4*X_6$ ) was computed and used in the regression model

 $Y = \beta_0 + \beta_4 X_4 * X_6 + \beta_4 X_4 + \varepsilon.$ 

The results of coefficients that were used to generate the line,  $Y=1.917+0.202X_4*X_6+0.444X_4$  showed that the coefficient of claims management policies intersection firm characteristics was significant since it had a p-value of 0.020 which was less than 0.05 as shown on Table 4.117. Since the coefficient of  $(X_4*X_6)$  was significant, it implied that firm characteristics had a moderating effect on the relationship between claims management policies and financial performance of insurance companies.

	Unstandardized Coefficients Std.		Standardized Coefficients	t	Sig.			
	В	Error	Beta					
(Constant)	1.917	0.305		6.276	0.000			
$X_4X_6$	0.202	0.012	0.118	11.640	0.020			
Claims								
Management								
Policies	0.444	0.101	0.319	4.420	0.000			
Dependent Varia	Dependent Variable: Financial Performance							

 Table 4.117: Moderating effect of firm characteristics on relationship between

 claims management policies and financial performance of insurance companies

## 4.14.5 Regression analysis on the moderating effect of firm characteristics on relationship between corporate governance and financial performance

A regression analysis was done to determine the effect of firm characteristics on the relationship between corporate governance and financial performance of insurance companies. The corporate governance intersection firm characteristics ( $X_5*X_6$ ) was computed and used in the regression model  $Y = \beta_0 + \beta_5 X_5 * X_6 + \beta_5 X_5 + \epsilon$ .

The results of coefficients that were used to generate the line, Y=1.087+ -  $0.023X_5*X_6 + 0.826X_5$  showed that the coefficient of corporate governance intersection firm characteristics was significant since it had a p-value of 0.043 was less than 0.05 as shown on Table 4.118. Since the coefficient of ( $X_5*X_6$ ) was significant, it implied that firm characteristics had a moderating effect on the relationship between corporate governance and financial performance of insurance companies.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
	В	Std. Error	Beta				
(Constant)	1.087	0.206		5.280	0.000		
$X_5X_6$	-0.023	0.011	-0.150	-2.029	0.043		
Corporate							
Governance	0.826	0.080	0.765	10.361	0.000		
Dependent Variable: Financial Performance							

Table 4.118: Moderating effect of firm characteristics on relationship betweenCorporate Governance and financial performance of insurance companies

## 4.14.6 Joint Regression analysis after Moderation of Firm Characteristics

The sixth objective was to determine the moderating effect of firm characteristic on relationship between financial management practices and financial performance of insurance companies in Kenya. Hypothesis six was stated that Firm characteristic had no significant moderating effect on relationship between financial management practices and financial performance of insurance companies in Kenya.

Regression analysis was performed by using the composites of the variables including the moderator. The results presented in Table 4.119 presents the fitness of model used in the regression model in explaining the study phenomena. The composite variables were found to be satisfactory variables in explaining financial performance of insurance companies in Kenya. This is supported by coefficient of determination, R square of 0.712. This means that joint variables after moderation explain 71.2% of the variations in the dependent variable which is financial performance of insurance companies in Kenya. This results further means that the model applied to link the relationship of the variables was satisfactory.

Further, the results imply that the independent variables are good predictors of financial performance of insurance companies in Kenya. This was supported by an F statistic of 433.929 and the reported p=0.000 which was less than the conventional probability of 0.05 significance level.

Regression of coefficients results after moderation in Table 4.119 presents the results of the coefficients to the model

$$Y = 3.674 - 0.016X_1 * X_6 - 0.078X_2 * X_6 - 0.056X_3 * X_6 + 0.035X_4 * X_6 + 0.135X_5 * X_6.$$

The model coefficients were all significant at the 0.05 level of significance. Since the coefficient of the overall regression model was significant, it implied that the independent variables and the moderating variable had a joint effect on financial performance of insurance companies in Kenya.

## Table 4.119: Regression model after moderation

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
	В	Std. Error	Beta					
(Constant)	3.674	0.150		24.521	0.000			
$X_1X_6$	-0.016	0.014	-0.090	-11.159	0.025			
$X_2X_6$	-0.078	0.015	-0.427	-5.225	0.000			
$X_3X_6$	-0.056	0.016	-0.300	-3.541	0.000			
$X_4X_6$	0.035	0.015	0.204	2.314	0.021			
$X_5X_6$	0.135	0.014	0.893	9.767	0.000			
R (R <sup>2</sup> )	0.884 (0.712)							
F (p-value)	433.929 (0.00	)())						
Dependent Variable: Financial Performance								

Moderation is supported since the calculated p value of the interaction is less than 0.05. Thus, the null hypothesis that firm characteristic has no significant moderating effect on relationship between financial management practice and financial performance of insurance companies was rejected.

## 4.15 Revised Conceptual Framework

Based on the outcomes of the joint regression coefficients, the joint regression optimal model was as shown below. The revised conceptual framework was arranged based on the coefficient values.

 $Y = 0.106 + 0.643X_1 + 0.384X_2 + 0.099X_3 + 0.089X_4 + 0.042X_5$ 

Where;

Y= Financial Performance

X<sub>1</sub>= Corporate Governance

X<sub>2</sub>= Claims Management Policies

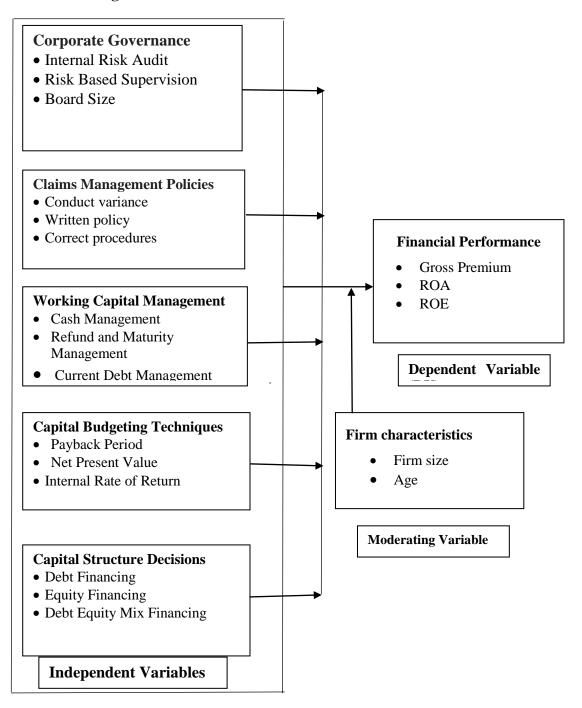
X<sub>3</sub>= Working Capital Management

X<sub>4</sub>= Capital Budgeting Techniques

X<sub>5</sub>= Capital Structure Decisions

Therefore, Figure 4.23 presents the revised conceptual framework from the above optimal regression model. It ranks financial management practices according to order of optimality.

## **Financial Management Practices**



4.23: Revised Conceptual Framework

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## **5.1 Introduction**

This chapter presents the summary of major findings of the study, relevant discussions, conclusions and the necessary recommendations. The study sought to examine the effects of financial management practices on financial performance of insurance companies in Kenya. The summary of key findings, conclusions and recommendations is done in line with the objectives of the study based on the output of the descriptive and inferential statistical analyses guided to test the research hypothesis of the study.

## **5.2 Summary of the Findings**

The main purpose of this study was to empirically establish the effects of financial management practices on organization performance of insurance companies in Kenya. The data for the study was collected from 49 registered insurance companies. The respondents who took part in the study, on behalf of their firms, were top and middle level management staff. The number of questionnaires that was administered were 282 and a total of 221 questionnaires were properly filled and returned representing a response rate of 78.37%.

# 5.2.1 Relationship between Working Capital Management and Financial Performance

The first objective of the study was to examine the relationship between working capital management and financial performance of insurance companies in Kenya. This objective gave rise to hypothesis one  $(H_1)$  which predicted that working capital management had no effect on financial performance of insurance companies in Kenya. Ordinary least squares regression was carried out to determine the relationship between working capital and financial performance.

The regression model  $Y = \beta_0 + \beta_1 X1 + \varepsilon$  was thus fitted to the data and the model was found to be significant. The value of R and R<sup>2</sup> were 0.414 and 0.171 respectively. The R value of 0.414 showed that there was a positive linear relationship between working capital management and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.171.

This meant that 17.1% of the variation in financial performance was explained by the model  $Y = \beta 0 + \beta 1X1 + \epsilon$ . An F statistic of 4.891 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The results of coefficients to the model Y= 3.332 + 0.158 X1 estimates were both significant at the 0.05 level of significance. This was because the significance was 0.028, which was less than 0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between working capital management and financial performance of insurance companies in Kenya. The constant term implied that at zero working capital management, the financial performance of insurance companies in Kenya performance of insurance companies. The coefficient 0.158 implied that improvement in working capital management by one unit, increases financial performance by 0.158 units.

Further regression was done to determine the effect of working capital management on gross premium, return on assets and return on equity. The coefficient 0.328 obtained implied that improvement in working capital management by one unit increases gross premium by 0.328 units. The results was significant at the 0.05 level of significance because the significance was 0.004, which was less than 0.05. The coefficient 0.160 implied that improvement in working capital management by one unit increases ROA by 0.160 units. The results was significant at the 0.05 level of significance because the significance was 0.007, which was less than 0.05. The coefficient 0.828 implied that improvement in working capital management by one unit increases ROA by 0.828 units. The results of coefficients to the model was insignificant at 0.05 level because the significance was 0.123, which was more than 0.05.

# 5.2.2 Relationship between Capital Budgeting Techniques and Financial Performance

The second objective of the study aimed at establishing the relationship between capital budgeting techniques and financial performance of insurance companies in Kenya. Hypothesis two (H2) was generated from this objective which predicted that Capital budgeting techniques had no effect on financial performance of insurance companies in Kenya. Ordinary Least Squares was carried out to determine the relationship between capital budgeting techniques and financial performance. The regression model  $Y = \beta 0 + \beta 2X2 + \epsilon$  was thus fitted to the data and the model was found to be significant.

The value of R and R<sup>2</sup> were 0.352 and 0.124 respectively. The R value of 0.352 showed that there was a positive linear relationship between capital budgeting techniques and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.124. This meant that 12.4% of the variation in financial performance was explained by the model  $Y = \beta 0 + \beta 2X2 + \epsilon$ . An F statistic of 5.743 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The results of coefficients to the model Y = 4.351 + 0.125 X2 estimates were both significant at the 0.05 level of significance because the significance was 0.042, which was less than 0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between capital budgeting techniques and financial performance of insurance companies in Kenya. The constant term implied that at zero capital budgeting techniques, the financial performance of insurance companies in Kenya performs at 4.351 units. The coefficient 0.125 implied that improvement in capital budgeting techniques by one unit, increases financial performance by 0.125 units.

Further regression was done to determine the effect of capital budgeting techniques on gross premium, return on assets and return on equity. The coefficient 0.025 obtained implied that improvement in capital budgeting techniques by one unit increases gross premium by 0.025 units. The results was significant at the 0.05 level of significance because the significance was 0.004, which was less than 0.05. The coefficient 0.055 implied that improvement in capital budgeting techniques by one unit increases ROA by 0.055 units. The results was significant at the 0.05 level of significance because the significance was 0.038, which was less than 0.05. The coefficient 0.054 implied that improvement in capital budgeting techniques by one unit increases ROE by 0.054 units. The results of coefficients to the model was significant at 0.05 level because the significance was 0.007, which was less than 0.05.

## 5.2.3 Relationship between Capital Structure Decisions and Financial Performance

The third objective was intended to examine the relationship between capital structure decisions and financial performance of insurance companies in Kenya. This objective gave rise to hypothesis three ( $H_3$ ) which predicted that capital structure decisions had no effect on financial performance of insurance companies in Kenya.

Ordinary least squares regression was carried out to determine the relationship between capital structure decisions and financial performance. The regression model  $Y = \beta_0 + \beta_3 X 3 + \varepsilon$  was thus fitted to the data and the model was found to be significant. The value of R and R<sup>2</sup> were 0.298 and 0.089 respectively. The R value of 0.298 showed that there was a positive linear relationship between capital structure decisions and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.089. This meant that 8.9% of the variation in financial performance was explained by the model Y=  $\beta 0$  +  $\beta 3X3+\varepsilon$ . An F statistic of 5.298 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The results of coefficients to the model  $Y= 3.542 + 0.198X_2$  estimates were both significant at the 0.05 level of significance. This was because the significance was 0.012, which was less than 0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between capital structure decisions and

financial performance of insurance companies in Kenya. The constant term implied that at zero capital structure decisions, the financial performance of insurance companies in Kenya performs at 3.542 units. The coefficient 0.198 implied that improvement in capital structure decisions by one unit, increases financial performance by 0.198 units.

Further regression was done to determine the effect of capital structure decisions on gross premium, return on assets and return on equity. The coefficient 0.174 implied that improvement in capital structure decisions by one unit increases gross premium by 0.174 units. The results was significant at the 0.05 level of significance because the significance was 0.042, which was less than 0.05. The coefficient 0.109 implied that improvement in capital structure decisions by one-unit increases ROA by 0.109 units. The finding was significant at the 0.05 level of significance because the significance was 0.003, which was less than 0.05. The coefficient 0.119 implied that improvement in capital structure decisions by one unit increases ROE by 0.119 units. The results was significant at the 0.05 level of significance because the significance was 0.003, which was less than 0.05. The coefficient 0.119 implied that improvement in capital structure decisions by one unit increases ROE by 0.119 units. The results was significant at the 0.05 level of significance was 0.036, which was less than 0.05.

# 5.2.4 Relationship between Claims Management Policies and Financial Performance

The fourth objective aimed at investigating the relationship between claims management policies and financial performance of insurance companies in Kenya. Based on this objective, hypothesis four (H<sub>4</sub>) was formulated which predicted that claims management policies had no significant relationship with financial performance of insurance companies in Kenya. Ordinary least squares regression was carried out to determine the relationship between claims management policies and financial performance. The regression model  $Y = \beta_0 + \beta_4 X4 + \varepsilon$  was thus fitted to the data and the model was found to be significant. The value of R and R<sup>2</sup> were 0.396 and 0.157 respectively.

The R value of 0.396 showed that there was a positive linear relationship between claims management policies and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.157.

This meant that 15.7% of the variation in financial performance was explained by the model  $Y = \beta 0 + \beta 4X4 + \epsilon$ .

An F statistic of 5.976 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The results of coefficients to the model Y= 1.804 + 0.552 X4 estimates were both significant at the 0.05 level of significance. This was because the significance was 0.000, which was less than 0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between claims management policies and financial performance of insurance companies in Kenya. The constant term implied that at zero claims management policies, the financial performance of insurance companies in Kenya performance of insurance companies. The coefficient 0.552 implied that improvement in claims management policies by one unit increases financial performance by 0.552 units.

Further regression was done to determine the effect of claims management policies on gross premium, return on assets and return on equity. The results of coefficients 0.153 implies that improvement in claims management policies by one unit increases gross premium by 0.153 units. The results was significant at the 0.05 level of significance because the significance was 0.028, which was less than 0.05. The coefficient 0.017 implied that improvement in claims management policies by one-unit increases ROA by 0.017 units.

The estimates were significant at the 0.05 level of significance as shown by significance level of 0.009, which was less than 0.05. The results of coefficients 0.142 implied that improvement in claims management policies by one-unit increases ROE by 0.142 units. The results was significant at 0.05 level of significance because the significance was 0.006, which was less than 0.05.

#### 5.2.5 Relationship between Corporate Governance and Financial Performance

The fifth objective was to examine the relationship between corporate governance and financial performance of insurance companies in Kenya. This objective gave rise to hypothesis five (H<sub>5</sub>) which predicted that corporate governance had no significant relationship with financial performance of insurance companies in Kenya. Ordinary least squares regression was carried out to determine the relationship between corporate governance and financial performance. The regression model  $Y = \beta_0 + \beta_5 X5 + \varepsilon$  was thus fitted to the data and the model was found to be significant. The value of R and R<sup>2</sup> were 0.647 and 0.416 respectively. The R value of 0.647 showed that there was a positive linear relationship between corporate governance and financial performance of insurance firms. The R<sup>2</sup> value indicated that the explanatory power of the independent variables was 0.416. This meant that 41.6% of the variation in financial performance was explained by the model Y=  $\beta_0 + \beta_5 X5 + \varepsilon$ . An F statistic of 21.114 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The results of coefficients to the model  $Y= 1.242 + 0.698X_5$  estimates were both significant at the 0.05 level of significance. This was because the significance was 0.000, which was less than 0.05. This indicated that the null hypothesis was rejected hence there was a significant relationship between corporate governance and financial performance of insurance companies in Kenya. The constant term implied that at zero corporate governance, the financial performance of insurance companies in Kenya performs at 1.242 units. The coefficient 0.698 implied that improvement in corporate governance by one unit increases financial performance by 0.698 units.

Further regression was done to determine the effect of corporate governance on gross premium, return on assets and return on equity. The coefficient 0.198 implies that improvement in corporate governance by one unit increases gross premium by 0.198 units. The results was significant at 0.05 level of significance because the significance was 0.002, which was less than 0.05.

The coefficient 0.109 implies that improvement in corporate governance by one unit increases ROA by 0.109 units. The results was significant at 0.05 level of significance because the significance was 0.015, which was less than 0.05. The coefficient 0.108 implies that improvement in corporate governance by one unit increases ROE by 0.108 units. The results was significant at 0.05 level of significance because the significance was 0.017, which was less than 0.05.

## 5.2.6 Relationship between Firm Characteristics and Financial Performance

The sixth objective was to determine the moderating effect of firm characteristic on relationship between financial management practices and financial performance of insurance companies in Kenya. Hypothesis six (H<sub>6</sub>) which predicted that Firm characteristic had no significant moderating effect on relationship between financial management practices and financial performance of insurance companies in Kenya. Ordinary least squares regression was carried out to determine the relationship between firm characteristics and financial performance. The regression model  $Y = \beta_0 + \beta_6 X6 + \epsilon$  was thus fitted to the data and the model was found to be significant. The value of R and R<sup>2</sup> were 0.236 and 0.07 respectively. The R value of 0.236 showed that there was a positive linear relationship between firm characteristics and financial performance of the independent variables was 0.07. This meant that 7% of the variation in financial performance was explained by the model Y=  $\beta 0 + \beta 6X6 + \epsilon$ . An F statistic of 7.626 indicated that the overall model was significant as it was more than the critical F value of 3.88 with (1, 219) degrees of freedom at the P=0.05 level of significance.

The results of coefficients to the model  $Y = 1.312 + 0.031X_6$  estimates were both significant at the 0.05 level of significance. This was because the significance was 0.000, which was less than 0.05. This indicated that the null hypothesis was rejected hence firm characteristic had significant moderating effect on relationship between financial management practices and financial performance of insurance companies in Kenya.

The constant term implied that at zero firm characteristics, the financial performance of insurance companies in Kenya performs at 1.312 units. The coefficient 0.031 implied that improvement in firm characteristics by one unit increases financial performance by 0.031 units.

Further regression was done to determine the effect of firm characteristics on gross premium, return on assets and return on equity. The coefficient 0.153 implies that improvement in firm characteristics by one unit increases gross premium by 0.153 units. The results was significant at 0.05 level of significance because the significance was 0.028, which was less than 0.05. The coefficient 0.017 implies that improvement in Firm Characteristics by one-unit increases ROA by 0.017 units. The results was significant at 0.05 level of significance because the significance was 0.009, which was less than 0.05. The coefficient 0.142 implies that improvement in firm characteristics by one-unit increases ROE by 0.142 units. The results was significant at 0.05 level of significance because the significance was significant at 0.05 level of significance because the significance was 0.006, which was less than 0.05.

## **5.2.7 Joint Regression before Moderation**

The regression results before moderation obtained R-square results of 0.508. This meant that working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance explained 50.8% of the variations in the dependent variable which was financial performance of insurance companies in Kenya. Regression of coefficients results showed that working capital management had a positively and significant influence on financial performance of insurance companies ( $\beta$ =0.099, p=0.045).

Capital budgeting techniques had a positively and significantly influence on financial performance of insurance companies ( $\beta$ =0.089, p=0.012), capital structure decisions had a positively and significantly influence on financial performance of insurance companies ( $\beta$ =0.042, p=0.037), claims management policies had a positively and significantly influence on financial performance companies ( $\beta$ =0.384, p=0.000). It was also established that corporate governance positively and

significantly influenced financial performance of insurance companies ( $\beta$ =0.643, p=0.000).

## 5.2.8 Moderation effect of firm Characteristics

A regression analysis was also done to determine the effect firm characteristics had on the relationship between working capital management and financial performance of insurance companies in Kenya. The results of coefficients showed that the coefficient of working capital management intersection with firm characteristics was significant since it had a p-value of 0.004 which was less than 0.05. Since the coefficient of intersection was significant, it implied that firm characteristics had a moderating effect on the relationship between working capital management and financial performance of insurance companies in Kenya.

The study further investigated the effect that firm characteristics variable had on the relationship between capital budgeting techniques and financial performance of insurance companies in Kenya. The introduction of the moderator, firm characteristics, significantly influenced financial performance of insurance companies in Kenya. The results provided evidence to support the moderation of firm characteristics on the relationship between capital budgeting techniques and financial performance of insurance companies in Kenya. The results provided evidence to support the moderation of firm characteristics on the relationship between capital budgeting techniques and financial performance of insurance companies in Kenya. The coefficient of capital budgeting techniques intersection firm characteristics was significant since it had a p-value of 0.045 which was less than 0.05, therefore it implied that firm characteristics had a moderating effect on the relationship between capital budgeting techniques and financial performance of insurance companies in Kenya.

Further to this, interaction term was introduced in the regression equation along with firm characteristics, capital structure decisions and financial performance of performance of insurance companies in Kenya. The interaction between firm characteristics and capital structure decisions had a significant influence on financial performance of insurance companies in Kenya. The coefficient of capital structure decisions intersection with firm characteristics was significant since it had a p-value of 0.042 which was less than 0.05, therefore it implied that firm characteristics had a moderating effect on the relationship between capital structure decisions and financial performance of insurance companies in Kenya.

The interaction between firm characteristics and claims management policies had a significant influence on financial performance of insurance companies in Kenya. The coefficient of claims management policies intersection firm characteristics was significant since it had a p-value of 0.020 which was less than 0.05, thereby implying that firm characteristics had a moderating effect on the relationship between claims management policies and financial performance of insurance companies in Kenya.

The interaction between firm characteristics and corporate governance had a significant influence on financial performance of insurance companies in Kenya. The coefficient of corporate governance was significant since it had a p-value of 0.043 which was less than 0.05 implying that firm characteristics had a moderating effect on the relationship between corporate governance and financial performance of insurance companies in Kenya.

Finally regression analysis was performed by using the composites of the variables including the moderator. The composite variables were found to be satisfactory variables in explaining financial performance of insurance companies in Kenya. This was supported by coefficient of determination, R square of 0.712. This meant that joint variables after moderation explained 71.2% of the variations in the dependent variable which was financial performance of insurance companies in Kenya. This results further meant that the model applied to link the relationship of the variables was satisfactory.

Further, the results implied that the independent variables were good predictors of financial performance of insurance companies in Kenya. This was supported by an F statistic of 433.929 and the reported p=0.000 which was less than the conventional probability of 0.05 significance level.

## 5.3 Conclusion

The study found that there exist a relationship between working capital management and financial performance of insurance companies in Kenya. The results showed that working capital management had a positive and statistically significant effect on financial performance of insurance companies in Kenya. The results of coefficients showed that firm characteristics had a moderating effect on the relationship between working capital management and financial performance of insurance companies in Kenya. From the forgoing, it can be concluded that an improvement in working capital management leads to a positive improvement in financial performance of insurance companies in Kenya.

The second objective of the study was to establish the effect of capital budgeting techniques on financial performance of insurance companies in Kenya. It was found that there was a relationship between capital budgeting techniques and financial performance of insurance companies in Kenya. The results also provided sufficient statistically significant evidence to signify a moderation of firm characteristic relationship relationship between capital budgeting techniques and financial performance of insurance companies in Kenya.

The results provide sufficient statistically significant evidence to justify the relationship between capital structure decisions and financial performance of insurance companies in Kenya. The results did also confirm firm characteristics moderating the relationship between capital structure decisions and financial performance of insurance companies in Kenya. In light of the above, it is concluded that insurance companies in Kenya ensure capital structure decisions is factored in in financial management practice to enhance financial performance.

The results on the forth objective of the study showed that the effect of claims management policies on financial performance is moderated by firm characteristics. The results of tests provided sufficient statistical evidence in support of a moderation. It is the claims management policies that may lead to sustained superior financial performance of insurance companies.

The study found there exist a relationship between corporate governance and financial performance of insurance companies in Kenya. The results showed that corporate governance had a positive and statistically significant effect on financial performance of insurance companies in Kenya. The results of coefficients showed that firm characteristics had a moderating effect on the relationship between corporate governance and financial performance of insurance companies in Kenya. From the forgoing, it can be concluded that an improvement in corporate governance leads to a positive improvement in financial performance of insurance companies in Kenya.

The results revealed that the joint effect of working capital management, capital budgeting techniques, capital structure decisions, claims management policies and corporate governance, is greater than the individual effect of financial management practices on financial performance insurance companies in Kenya. From the foregoing it can be concluded that this are clear variables that may lead to better and sustained superior performance if insurance companies adequately adopt this financial management practices that ensure financial performance. Firms have to continuously seek to improve these variables revealed by this study as failure to do so may make the firm perform at a lower than the optimum possible level of financial performance.

#### **5.4 Recommendations of the study**

Based on the results, findings and conclusions the following recommendations have been deciphered. It is therefore recommended that the management of insurance companies to consider putting in place the recommended steps seen as probable ways of ensuring that their financial management practices are improved for better financial performance. For instance, the insurance companies should enhance the process of managing premium arrears as this could be a key to increased gross premium for respective companies. The insurance companies should also prepare cash-flow forecasts as this could help in identifying future surpluses and deficits. This will enable the insurance companies maintain optimal cash balances which will enable them meet their financial obligations as they fall due. Secondly, insurance companies should evaluate the viability of new projects including new products launch in terms of their profitability. The projects or products which promises good returns should be undertaken first. This way projects or products shall be ranked accordingly with projects or products with low returns being undertaken last or not undertaken at all.

Thirdly, the insurance companies should maintain optimal capital structure and ensure that the companies fully utilize their debt facility according to their capabilities. Further, it is suggested that insurance companies to formulate capital structure decisions that shall enhance tax savings to the company. Insurance companies should put in place sound claims settlement procedures as this will help reduce fraudulent activities. On the same breath IRA to recommend heavy penalties to those found perpetuating fraudulent activities in the insurance industry. This will act as a deterrent for anyone who may wish to commit such a crime in future.

Fourthly, to ensure corporate governance positively impacts on performance in a sustained way it would be important for insurance firms to adopted risk based supervision by hiring competent risk manager, set up policies that define what entails discharging of responsibilities by the board of directors that are risk based preventive measures. Insurance companies therefore need to focus on policies that will facilitate organizational corporate governance and hence improve financial performance. The insurance companies should have in place a good leadership and management structure that would support corporate governance.

Finally, regulators such as CMA, IRA and CBK shall use the findings of this study to add value to insurance companies by exploiting the joint effect of variable in the study. They may focus their guidance towards building the capacity of firms by setting policies on Risk Based Supervision, Electronic Regulatory Systems and also Risk Based Capital regulations to improve on their financial management practices. The financial management systems need to be supported by all the stakeholders in the insurance industry in order to ensure prudent management of funds and hence enhanced financial performance by the insurance companies.

## **5.5 Areas for Further Research**

In this section, suggestions for further research in areas related to this study are given. In future, it is recommended that research be done to address the limitations of this study. This study considered only insurance companies in Kenya, future researchers could consider carrying out a similar study in a different sector or sectors to assess any variation in responses. It would be interesting to explore how the results obtained when the methods applied in this study are applied in other contexts for example in other countries at higher or lower stages of development. It would be worthwhile establishing the extent to which the findings of this study are generalizable to other industries, sectors or settings.

Future researchers could also introduce different variables other than the one used and test for moderation or mediating effect of such variables on the relationship between financial management practices and financial performance. Studies using other additional variables, such as leadership style, government regulation as moderators or mediators can be carried out to gain further insights into the relationship.

The current study was cross-sectional other scholars can carry out the study as a longitudinal study. Since it is recommended to have continuous financial management practices in place, a longitudinal study may show whether the findings vary over time. It could also reveal how financial management practices affects performance over time. Further research could also carry out in-depth studies on specific companies or groups of companies to analyze further the reasons for certain results specific to them.

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#### **APPENDICES**

#### **Appendix I: Introduction Letter**

Date.....

Chief Executive Officer Insurance Company P.O Box ..... Nairobi.

Dear Sir,

#### **RE: ACADEMIC RESEARCH PROJECT**

I' am a Phd student at the University of Jomo Kenyatta and Technology University (JKUAT). I wish to conduct a research entitled "*effect of financial management practices on financial performance of insurance companies in Kenya*". A questionnaire has been designed and will be used to gather relevant information to address the research objectives of the study. The purpose of writing to you is to kindly request you to grant me permission to collect information on this important subject from randomly selected members of staff.

Please note that the study will be conducted as an academic research and the information provided will be treated in strict confidence. Strict ethical principles will be observed to ensure confidentiality and the study outcomes and reports will not include reference to any individuals.

Your acceptance will be highly appreciated.

Yours Sincerely

#### <u>Mes hack Nakitare</u>

#### **Appendix II: Questionnaire**

This questionnaire is meant to gather information regarding the effect of financial management practices on financial performance of insurance companies in Kenya.

#### **CONFIDENTIALITY CLAUSE:**

The responses you provide will be used for academic purposes and will be strictly confidential.

#### SECTION 1: GENERAL /DEMOGRAPHIC DATA

1. Kindly indicate your gender

a)	Male	
b)	Female	

2. Please indicate the highest level of education you have ever attained

- a) Secondary level
  b) College level
  c) University level
  d) Post graduate level

  3. How many years have your worked in the insurance firm

  a) Less than 2 years
  b) 3 to 5 years
  c) Over 5 years
- 4. Please indicate the level of management you are in.
  - a) Senior Management
  - b) Middle Management

#### **SECTION 2: FINANCIAL MANAGEMENT PRACTICES**

#### Section A: Working Capital Management

This section aims at establishing the effect of working capital management on financial performance of insurance companies in Kenya. Please indicate your agreement or otherwise with the following statements using the following likert scale. Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Good management of premium in arrears is key to having increased gross premiums for the company					
2	Creditors are used to manage cash flow deficits and avoid loss of good performance					
3	Optimal cash balances are maintained by the company at all times					
4	Prepares cash flow forecasts to identify future surpluses and deficits					
5	Working capital is key to achieving high profits					
6	Our institution has enough cash to meet its obligations effectively as and when they fall due					

7. In your view, does good working capital management affect the performance of your insurance firm?

Yes [] No []

8. If yes above, how has this good working capital management affected performance of your insurance firm?

.....

9. If no in 7 above, how do you think working capital management would affect performance of your insurance firm?

10. What extra measures can be put in place in order to maximize working capital management in your insurance firm.

#### Part B: Capital Budgeting Techniques

This section aims at finding out whether capital budgeting techniques influences financial performance of insurance companies in Kenya. Please indicate your agreement or otherwise with the following statements using the following likert scale. Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Payback period is considered before investing in projects					
2	Before projects on gross revenue are undertaken, accounting rate of return is factored in					
3	Net present value is considered before introducing new projects by the company					
4	New branches are set and opened while the consideration is made on both discounting and non- discounting techniques.					
5	Projects invested on are given priority depending on their profitability indexes					

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6	Capital budgeting decision has been vital to the firm's financial performance.					
7	Capital budgeting decision often involves significant capital outlay to acquire fixed assets					

8. In your view has capital budgeting techniques in your insurance firm affected its performance?

Yes [] No []

9. If yes above, how has capital budgeting techniques in your insurance firm affected its performance?

10. If no in 8 above, how do you think capital budgeting techniques in your insurance firm affected its performance?

11. How else do you think your company can use capital budgeting techniques to maximize return on investment of your insurance firm.

#### **Part C: Capital Structure Decisions**

This section aims at investigating the effect of capital structure decisions on financial performance of insurance companies in Kenya. Please indicate your agreement or

otherwise with the following statements using the following likert scale. Key:

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The capital structure of the company is appropriate					
2	The company has fully utilized the debt facility according to its capabilities					
3	The company relies on equity capital than any other capital					
4	Capital structure decisions are formulated based on tax savings					
5	Management conduct yearly budget cost variance analysis on capital structures					

### 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree

7. Does capital structure decisions in your insurance firm affect its performance?

Yes [] No []

8. If yes above, how does capital structure decisions in your insurance firm affect its performance?

.....

.....

9. How else in your opinion do you think capital structure decisions may improve

financial performance in your insurance company.

\_\_\_\_\_

#### **Part D: Claims Management Policies**

This section aims at finding out whether claims management policies affect organizational performance of insurance companies in Kenya. Please indicate your agreement or otherwise with the following statements using the following likert scale.

T7 1 4 1 1º		; 4= agree; 5= strongly agree
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$\mathbf{N}_{\mathbf{V}}$ , $\mathbf{I}_{\mathbf{S}}$	2 - uisagi cc. J - iicuti ai	
	<b>_</b> ,	

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Production of monthly financial statements is important in monitoring claims management of the company					
2	Our company management is particular about monthly targets for each department as guided by departmental targets					
3	Management in my company conduct variance analysis every month as a way of monitoring performance					
4	Our company has put in place claims settlement policies to curb fraud					
5	My company ensures that the correct procedures are followed in settling claims					
6	Claim management policies is a key driver of company's financial performance					

7. In your opinion does claims management policies affect performance of your insurance firm in any way?

Yes [] No []

8. If yes above, how does claims management policies affect performance of your insurance firm?

.....

11. In what other ways do you think claims management policies affect performance of your insurance firm?

#### **Part E: Corporate Governance**

This section aims at exploring the effect of corporate governance on financial performance of insurance companies in Kenya. Please indicate your agreement or otherwise with the following statements using the following likert scale. Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree

N	Statements	Strongly	Disagree	Neutral	Agree	Strongly
No		Disagree				Agree
	My company has put in place a					
1	functional audit department.					
	The audit functions are not					
	influenced in discharging their					
2	duties.					
	My company is transparent and					
	accountable. It does ensure					
	transparency by allowing its					
3	books of accounts to be audited					
	My company has a good					
	leadership and managements					
	structure which support					
4	corporate governance					
	My company has implemented					
5	risked based supervision as					

	Statements	Strongly	Disagree	Neutral	Agree	Strongly
No		Disagree				Agree
	required by the regulator					
	Board of directors and top-level					
	management are trained on					
6	corporate governance					
	My company has effective					
7	systems of detecting fraud					

10. In your considered opinion does your firm have a good corporate governance?

Yes [] No []

11. If yes above, how do good corporate governance affect performance of your

insurance firm?

# .....

12. If no in 10 above, how do you think good corporate governance performance of your insurance firm?

.....

#### **Part F: Firm characteristics**

This section aims at exploring the moderating effect of firm characteristics on financial performance of insurance companies in Kenya.

1. Kindly indicate the number of branches of your firm over the last five years

Year	Number of branches
2015	
2014	
2013	
2012	
2011	

- 2. Kindly indicate the number of years the company has been in operations.
  - a. Between 5 years to 10 years
  - b. Between 10 years to 15 years
  - c. Between 15 years to 20 years
  - d. Over 20 years
- 3. In your opinion, does Firm Size influences organization performance of the organization?
- (a) Yes
- (b) No

- 4. If the answer to the above is yes, how did the Firm Size influence the organization performance?
- a) Improved financial performance by over 75%
- b) Improved financial performance by between 50% to 75%
- c) Improved financial performance by between 25% to 50%
- d) Improved financial performance by below 25%

#### **SECTION 3: Financial Performance**

This section aims at exploring financial performance of insurance companies in Kenya. Please indicate your agreement or otherwise with the following statements using the following likert scale. Key: 1=strongly disagree, 2= disagree; 3=neutral;

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Our firm financial leverage has increased over the last five years					
2	Our firm has experienced an increase in gross premiums collected over the last 5 years					
3	Our firm has experienced an increase in assets over the last 5 years					
4	Our firm has a higher market value					
5	The interest expense to total operating revenue ratio is low (meaning the firm may be less reliant on overdraft)					
6	The insurance company is more inclined to decisions that enhance returns on its physical capital rather than relational capital					
7	We have competitive advantage and superior firm performance					
8	The firm budget outrun ratio is low ( meaning the firm always spent less than it had budgeted)					

#### 4= agree; 5= strongly agree

## Appendix III: Secondary Data Collection Sheet

Please indicate the level of performance for the following years

Statement	Gross Premium	Return on Assets	<b>Return on Equity</b>
2011			
2012			
2013			
2014			
2015			

#### **Appendix IV: List of Licensed Insurance Companies**

- 1. AAR Insurance Kenya Limited
- 2. APA Insurance Limited
- 3. Africa Merchant Assurance Company Limited
- 4. Apollo Life Assurance Limited
- 5. AIG Kenya Insurance Company Limited
- 6. British-American Insurance Company (Kenya) Limited
- 7. Cannon Assurance Limited
- 8. Capex Life Assurance Company Limited
- 9. CFC Life Assurance Limited
- 10. CIC General Insurance Limited
- 11. CIC Life Assurance Limited
- 12. Continental Reinsurance Limited
- 13. Corporate Insurance Company Limited
- 14. Directline Assurance Company Limited
- 15. East Africa Reinsurance Company Limited
- 16. Fidelity Shield Insurance Company Limited
- 17. First Assurance Company Limited
- 18. G A Insurance Limited
- 19. Gateway Insurance Company Limited
- 20. Geminia Insurance Company Limited
- 21. ICEA LION General Insurance Company Limited
- 22. ICEA LION Life Assurance Company Limited
- 23. Intra Africa Assurance Company Limited
- 24. Invesco Assurance Company Limited
- 25. Kenindia Assurance Company Limited
- 26. Kenya Orient Insurance Limited
- 27. Kenya Reinsurance Corporation Limited
- 28. Madison Insurance Company Kenya Limited
- 29. Mayfair Insurance Company Limited

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

#### Source. IRA Website

## **Appendix V: Study Population**

No	Name of Company	Senior Management	Middle Management	Total
1	AAR Insurance Kenya Limited	5	15	20
2	APA Insurance Limited	8	18	26
3	Africa Merchant Assurance Company Limited	5	9	14
4	Apollo Life Assurance Limited	7	15	22
5	AIG Kenya Insurance Company Limited	6	18	24
6	British-American Insurance Company (Kenya) Limited	12	31	43
7	Cannon Assurance Limited	5	8	13
8	Capex Life Assurance Company Limited	4	8	12
9	CFC Life Assurance Limited	12	34	46
10	CIC General Insurance Limited	9	16	25
11	CIC Life Assurance Limited	6	15	21
12	Continental Reinsurance Limited	5	8	13
13	Corporate Insurance Company Limited	5	7	12
14	Directline Assurance Company Limited	7	15	22
15	East Africa Reinsurance Company Limited	5	13	18
16	Fidelity Shield Insurance Company Limited	6	14	20
17	First Assurance Company Limited	8	14	22
18	G A Insurance Limited	5	11	16
19	Gateway Insurance Company Limited	6	12	18
20	Geminia Insurance Company Limited	5	11	16
21	ICEA LION General Insurance Company Limited	9	23	32

No	Name of Company	Senior Management	Middle Management	Total
22	ICEA LION Life Assurance Company Limited	8	20	28
23	Intra Africa Assurance Company Limited	5	11	16
24	Invesco Assurance Company Limited	6	21	27
25	Kenindia Assurance Company Limited	8	18	26
26	Kenya Orient Insurance Limited	6	11	17
27	Kenya Reinsurance Corporation Limited	8	17	25
28	Madison Insurance Company Kenya Limited	7	16	23
29	Mayfair Insurance Company Limited	5	13	18
30	Mercantile Insurance Company Limited	5	12	17
31	Metropolitan Life Insurance Kenya Limited	5	8	13
32	Occidental Insurance Company Limited	4	7	11
33	Old Mutual Life Assurance Company Limited	7	16	23
34	Pacis Insurance Company Limited	5	13	18
35	Pan Africa Life Assurance Limited	7	15	22
36	Phoenix of East Africa Assurance Company Limited	5	12	17
37	Pioneer Assurance Company Limited	6	18	24
38	Real Insurance Company Limited	5	14	19
39	Resolution Insurance Company Limited	6	19	25
40	Shield Assurance Company Limited	5	9	14
41	Takaful Insurance of Africa Limited	6	13	19
42	Tausi Assurance Company Limited	5	11	16
43	The Heritage Insurance Company Limited	9	18	27
44	The Jubilee Insurance Company of Kenya Limited	11	31	42

No	Name of Company	Senior Management	Middle Management	Total
45	The Monarch Insurance Company Limited	5	11	16
46	Trident Insurance Company Limited	4	13	17
47	UAP Insurance Company Limited	12	33	45
48	UAP Life Assurance Limited	8	27	35
49	Xplico Insurance Company Limited	3	7	10
	Total	316	749	1,065

(Source: Human Resource Records, Insurance Companies 2011-2015)

No	Name of Company	Senior Management Percent	Middle Management Percent	Senior Managemen t	Middle Manage ment	Total
1	AAR Insurance Kenya Limited	0%	1%	1	4	5
2	APA Insurance Limited	1%	2%	2	5	7
3	Africa Merchant Assurance Company Limited	0%	1%	1	2	4
4	Apollo Life Assurance Limited	1%	1%	2	4	6
5	AIG Kenya Insurance Company Limited	1%	2%	2	5	6
6	British-American Insurance Company (Kenya) Limited	1%	3%	3	8	11
7	Cannon Assurance Limited	0%	1%	1	2	3
8	Capex Life Assurance Company Limited	0%	1%	1	2	3
9	CFC Life Assurance Limited	1%	3%	3	9	12
10	CIC General Insurance Limited	1%	2%	2	4	7
11	CIC Life Assurance Limited	1%	1%	2	4	6
12	Continental Reinsurance Limited	0%	1%	1	2	3
13	Corporate Insurance Company Limited	0%	1%	1	2	3
14	Directline Assurance Company Limited	1%	1%	2	4	6
15	East Africa Reinsurance Company Limited	0%	1%	1	3	5
16	Fidelity Shield Insurance Company Limited	1%	1%	2	4	5
17	First Assurance Company Limited	1%	1%	2	4	6
18	G A Insurance Limited	0%	1%	1	3	4
19	Gateway Insurance Company Limited	1%	1%	2	3	5
20	Geminia Insurance Company Limited	0%	1%	1	3	4
21	ICEA LION General Insurance Company Limited	1%	2%	2	6	8
22	ICEA LION Life Assurance Company Limited	1%	2%	2	5	7
23	Intra Africa Assurance	0%	1%	1	3	4

## Appendix VI: Study Sample Distribution

No	Name of Company	Senior Management Percent	Middle Management Percent	Senior Managemen t	Middle Manage ment	Total
	Company Limited					
24	Invesco Assurance Company Limited	1%	2%	2	6	7
25	Kenindia Assurance Company Limited	1%	2%	2	5	7
26	Kenya Orient Insurance Limited	1%	1%	2	3	5
27	Kenya Reinsurance Corporation Limited	1%	2%	2	5	7
28	Madison Insurance Company Kenya Limited	1%	2%	2	4	6
29	Mayfair Insurance Company Limited	0%	1%	1	3	5
30	Mercantile Insurance Company Limited	0%	1%	1	3	5
31	Metropolitan Life Insurance Kenya Limited	0%	1%	1	2	3
32	Occidental Insurance Company Limited	0%	1%	1	2	3
33	Old Mutual Life Assurance Company Limited	1%	2%	2	4	6
34	Pacis Insurance Company Limited	0%	1%	1	3	5
35	Pan Africa Life Assurance Limited	1%	1%	2	4	6
36	Phoenix of East Africa Assurance Company Limited	0%	1%	1	3	5
37	Pioneer Assurance Company Limited	1%	2%	2	5	6
38	Real Insurance Company Limited	0%	1%	1	4	5
39	Resolution Insurance Company Limited	1%	2%	2	5	7
40	Shield Assurance Company Limited	0%	1%	1	2	4
41	Takaful Insurance of Africa Limited	1%	1%	2	3	5
42	Tausi Assurance Company Limited	0%	1%	1	3	4
43	The Heritage Insurance Company Limited	1%	2%	2	5	7
44	The Jubilee Insurance Company of Kenya Limited	1%	3%	3	8	11

No	Name of Company	Senior Management Percent	Middle Management Percent	Senior Managemen t	Middle Manage ment	Total
45	The Monarch Insurance Company Limited	0%	1%	1	3	4
46	Trident Insurance Company Limited	0%	1%	1	3	5
47	UAP Insurance Company Limited	1%	3%	3	9	12
48	UAP Life Assurance Limited	1%	3%	2	7	9
49	Xplico Insurance Company Limited	0%	1%	1	2	3
	Total	30%	70%	84	198	282

(Source: Human Resource Records, Insurance Companies 2011-2015)

	Middle Mar	nagement	Senior Man	agement
Name of Company	Frequency	Percent	Frequency	Percent
AAR Insurance (Kenya)	3	1%	2	1%
Africa Merchant	5	2%	1	0.13%
AIG Kenya Insurance	3	1%	3	1%
APA Insurance Life	5	2%	1	0.13%
Apollo Life Assurance	3	1%	3	1%
British-America Insurance	6	3%	0	0%
Cannon Assurance	2	1%	3	1%
Capex Life Assurance	3	1%	2	1%
CFC Life Assurance	4	2%	1	0.13%
CIC General Insurance	3	1%	2	1%
CIC Life Assurance	5	2%	0	0%
Continental Reinsurance	3	1%	2	1%
Corporate Insurance	3	1%	2	1%
Directline Assurance	1	0.13%	3	1%
East Africa Reinsurance	3	1%	1	0.13%
Fidelity Shield	3	1%	1	0.13%
First Assurance	3	1%	1	0.13%
G A Insurance Life	4	2%	0	0%
Gateway Insurance	2	1%	2	1%
Geminia Insurance	3	1%	1	0.13%
ICEA LION General	3	1%	1	0.13%
ICEA LION Life	3	1%	1	0.13%
Intra Africa Assurance	3	1%	1	0.13%
Invesco Assurance	3	1%	1	0.13%
Kenindia Assurance	3	1%	1	0.13%
Kenya Orient Insurance	3	1%	1	0.13%
Kenya Reinsurance	1	0.13%	3	1%
Madison Insurance	2	1%	2	1%
Mayfair Insurance	1	0.13%	3	1%
Mercantile Insurance	4	2%	0	0%

## Appendix VII: Management Levels

	Middle Mar	nagement	Senior Manageme		
Name of Company	Frequency	Percent	Frequency	Percent	
Metropolitan Life	4	2%	0	0%	
Occidental Insurance	1	0.13%	3	1%	
Old Mutual Life	2	1%	2	1%	
Pacis Insurance	2	1%	2	1%	
Pan Africa Life	3	1%	1	0.13%	
Phoenix of East Africa	2	1%	2	1%	
Pioneer Assurance	2	1%	2	1%	
Real Insurance	3	1%	1	0.13%	
<b>Resolution Insurance</b>	3	1%	1	0.13%	
Shield Assurance	3	1%	1	0.13%	
Takaful Insurance	3	1%	1	0.13%	
Tausi Assurance	2	1%	2	1%	
The Heritage Insurance	4	2%	1	0.13%	
The Jubilee Insurance	4	2%	1	0.13%	
The Monarch Insurance	5	2%	0	0%	
Trident Insurance	4	2%	1	0.13%	
UAP Insurance Company	3	1%	2	1%	
UAP Life Assurance	2	1%	3	1%	
Xplico Insurance	2	1%	2	1%	
Grand Total	147	67%	74	33%	

(Source: Human Resource Records, Insurance Companies 2011-2015