

**EFFECT OF ADOPTING RISK BASED SUPERVISION ON FINANCIAL
PERFORMANCE OF INSURANCE COMPANIES IN KENYA**

BY

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DECLARATION

This research project is my original work and has not been submitted for a degree in any other university or institution of higher learning.

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DEDICATION

This project is dedicated to my parents who have been a constant source of inspiration. They have given me the drive and discipline to tackle any task with enthusiasm and determination. To my wife Njoki who has been on my side whenever I needed her. To God for his blessings all through.

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ABSTRACT

The purpose of this study was to trace the effect of the adoption of risk based supervision on financial performance of insurance companies in Kenya. The target population of the study constituted of 47 respondents who were risk and compliance managers, internal auditors, finance managers and accountants at insurance companies in Kenya. The study administered questionnaires which included structured and unstructured questions to all the respondents since it was the most appropriate tool to gather information. Descriptive statistics such as mean, standard deviation and frequency distribution were used to analyze the data. Data presentation was done by the use of pie charts and tables for ease of understanding and interpretation. 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. The study recommends that management in insurance companies should ensure effective risk management through proper risk assessment; training staff on risk based supervision and ensure that risk based supervision standards are achieved and maintained.

LIST OF ABBREVIATIONS

AKI	-	Association of Kenya Insurers
RBA	-	Retirement Benefits Authority
IRA	-	Insurance Regulatory Authority
GDP	-	Gross Domestic Product
SBF	-	Superintendencia de Bancos instituciones Financieras
RBS	-	Risk Based Supervision
ROA	-	Return on Assets
CBK	-	Central Bank of Kenya

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CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Insurance companies in Kenya usually operate in a heavily regulated market, in view of their economic and social importance and impact on the population and for such there is need for a strong supervisory framework and efficient monitoring to promote healthy market development while protecting policy holders. In Kenya the insurance regulatory authority is the body mandated to regulate and supervise the insurance sector.

Risk based supervision was introduced in Kenya by the central bank of Kenya to regulate and supervise the banking sector. It has in the past few years increasingly extended to other areas of the sector including the insurance companies. The insurance sector through various revision of the insurance Act and the retirement benefits authority through similar changes have changed their approach to supervision with emphasis changing from a compliance based approach to the more proactive risk based approach. This is to ensure stability is maintained in the industry and proper reporting and structures are maintained in the industry.

Financial performance is considered in terms of measures like profitability, liquidity ratios, and the ease with which the entity settles its financial obligations and in terms of financial accountability. According to Dixon et al., (1990) appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives. Financial performance can also be said to be the ability to operate efficiently, profitability, survive, grow and react to the environmental opportunities and threats.

An insurance company's primary objective is to restore the insured / policy holder back to the condition the insured was in before a loss and to spread risk through reinsurance. However, an insurance company's main role is to make a profit as they in business

1.1.1. Risk Based Supervision of Insurance Companies

Risk is anything that can jeopardize the achievement of organizational goals and can be controlled or mitigated by the internal audit function in an organization. Risk management is the process of controlling risks, the severity and likelihood of adverse events in order to improve performance (Mainelli, 2001). Risk management deals with identifying risk exposure, quantifying the risk exposure, evaluating alternatives actions and managing the various risks hindering an enterprise from maximizing returns (Marx et al., 2003)

According to (Thompson, 2008), Risk Based approach to supervision of pension funds 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 pension funds 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.

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)

1.1.2. Financial Performance of Insurance Companies

One of the most fundamental facts about businesses is that the operating performance of the firm shapes its financial structure. The main objective of every firm is maximizing profits but preserving liquidity of the firm is also an important objective too (Runyora, 2012). Financial statements are therefore important diagnostic tools to show performance of a firm. It can be assessed using several parameters and ratios i.e. the liquidity, solvency, profitability and company's efficiency. Firms with too little current assets may incur shortages and difficulties in maintaining smooth operations (Horne, 2000). Risk Based Supervision will affect the asset set up of a company due to change in the manner of classification and therefore may in the long run affect the financial performance of a company.

Financial performance in the insurance industry is calculated or highlighted in relation to the gross domestic product (GDP). The profitability of insurance companies is driven significantly by the investment income and reduction in the number of total claims and expenses paid out. The financial performance growth is measured through the gross earned premium, reinsurance ceded and net incurred claims. Main source of funding of insurance companies are the premiums received and increase in contributions arises when there is an increase in scheme membership and number of policies issued. As the growth of the insurance industry improves, the financial performance also improved because of the opportunities presented by the growth of the industry.

1.1.3. Risk Based Supervision and Financial Performance

Better performance through improved measurement and accountability can be achieved through Risk Based Supervision as it 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 (Weiner 2010). Therefore adoption of RBS is expected to have a positive impact on the financial performance of insurance companies.

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)

1.1.4. Insurance Companies in Kenya

There are 47 operating insurance companies as at the end of 2013. 23 companies wrote non-life insurance business only, 11 wrote life insurance business only while 12 were composite (both life and non-life), one company is currently under receivership. There are 170 licensed insurance brokers, 24 medical insurance providers and 4862 insurance agents. The penetration of insurance in Kenya is estimated at 3.16%. Initiatives such as improved regulatory framework, innovative products, adoption of alternative distribution channels, enhanced public education and use of

technology have contributed to the improved penetration level in Kenya (AKI Insurance industry annual report, 2012)

1.2. Research Problem

Recent corporate collapses and financial scandals have provoked worldwide concern with corporate governance highlighting apparent failures of accountability (Spira & Page, 2003) and subsequent new laws and regulations in response to them providing compelling evidence that risk based supervision serves as part of good and sound corporate governance. Insurance companies in Kenya have in the recent past experienced a number of corporate failures which has necessitated the need for increased and stricter regulations in the sector.

Muingo (2007) through a study on the impact of introduction of regulations into the retirement benefits sector in Kenya, identified that financial performance of pension funds had improved over the period the regulations had been in force. He however noted that the impact was still low thereby introducing a need for further regulations and supervision of pension funds. Effective risk management by financial institutions and effective risk based supervision by regulators is highly dependent on the implementation of adequate corporate governance and the risk based supervision. Kenyan insurance sector is not fully matured in terms of risk based supervision and despite the recent attention focused on RBS, research on the existence or extent of this in the financial institutions has been scant.

A study carried out on the implementation of risk based supervision by the CBK found that it considered the risk based methodology to have improved evaluation of risks among financial institutions, which resulted to a reduction in costs (Momanyi, 2009). However it was faced with many challenges which included lack of proper training, skills and experience. A knowledge gap

was identified on similar approaches in other financial sectors in order to improve financial performance due to improved risk management.

Good corporate governance, supervision and risk management practices in the insurance companies will enhance stability and security of the insurance sector which will thereby enhance the confidence of the public. Given the dynamics of the insurance sector and knowing that the penetration of insurance in Kenya is low subsidiary legislations have come in place trying to amend the existing rules and regulations. This has resulted in a research gap as the regulators try to catch up with the market dynamics in the country in terms of the impacts they will have on the insurance sector.

Following from the theory of economic regulation, some regulations could have a negative effect on the industry (Stigler, 1971). Regulations of the insurance sector by both the IRA and RBA in Kenya has brought about some limitations in the operations of the insurance companies example entry of new players into the sector is controlled by the requirement of the insurance regulatory authority where companies must comply with the strict requirements.

Risk based regulations have led to increase in administrative costs of insurance companies as companies are required to have a fully operational audit and risk management department. They also need to have actuarial function in the company and the costs associated with these key functions are huge. The companies also need to ensure training of the critical staff to ensure they understand and are in compliance with the regulations. Example is the training requirements for company directors where all the directors need to attend the training which tries to ensure corporate governance is maintained in the insurance sector.

Adoption of RBS by the Retirement Benefits Authority and the Insurance Regulatory Authority is aimed at improving sustainability and independence in the management of the insurance Companies in Kenya. Most studies have focused on the effects and the experience of implementing risk based supervision but there appears to be a knowledge gap on the impact of this on financial performance of insurance companies. This study sets out to analyze whether the enactment of the risk based regulations to govern the insurance sector by the RBA and IRA has had an impact on the financial performance of insurance companies in Kenya. It sought to answer the question, has the implementation of RBS had any impact on the financial performance of insurance Companies in Kenya?

1.3. Objective of the Study

The objective of the study was to assess the effect of the adoption of risk based supervision on financial performance of insurance companies in Kenya.

1.4. Value of the Study

After the adoption of the risk based supervision for insurance companies it would be important to assess thus far whether indeed the regulations have led to an improvement in the financial performance of insurance companies. The different stakeholders of the insurance sector would benefit from findings of the study in the following ways.

The government being the body that enforces regulations it would be interested to know whether the regulations have so far achieved the objectives which had necessitated their adoption. Further the insurance sector has become one of the largest institutional investors and their performance would impact the performance of the financial markets in general. Due to this it has become increasingly important for the government to ensure that regulation and governance of such

funds is adequate so as to safeguard both the investors and the customers of the companies. Also to ensure financial stability thereby avoiding large scale contingent fiscal liabilities arising from pressures for public bailouts of failing insurance companies.

The insurance regulatory authority being the body given the mandate to supervise the insurance sector will be a key participant in wanting to find out whether the regulatory environment is having an effect on performance of the insurance sector. The regulatory body will be interested in this study as it will help it have a better and clear understanding of the effects of the regulations on the companies. The study will also help the regulator when developing new regulations as it will have an analysis of the key effects of these regulations on a company.

The industry players are the companies that are involved in the insurance business. The industry players will also be interested and will gain an understanding of how the regulations have affected the company's performance. The association of Kenya insurers will benefit in that the study will provide a basis of further studies and analysis and assist in the future changes of regulations as the body will have an appreciation of the effects that change in regulation has on businesses. The body will want to find out whether the regulations will have impacted negatively on the performance of the companies and industry at large.

The employees of the insurance companies will also benefit from this study. The employees are directly affected by the performance of the company as certain remuneration is pegged on performance. The governance team will also benefit as the study will help show the effect their daily work has on the bottom line of the companies this will help them in better management and also more research and studies to improve the performance of the companies.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This section will discuss and summarize information in the topic of risk based supervision and performance of insurance companies and will help provide a deeper understanding of the topic being studied. Literature review might give a new interpretation of old material or combine new with old interpretations. It will also give or trace the intellectual progression of the field including major debate.

2.2. Theoretical Review

This section will review and outline several theories that guide this study

2.2.1. Theory of Economic Regulation

Government intervention in the market is known as or called ‘economic regulation’ (Posner, 1974) it refers to taxes and subsidies of all sorts as well as to explicit legislative and administrative controls over rates entry and part of economic activity. Two main theories of economic regulation have been proposed. One is the public interest theory which was offered by a previous generation of economists to the present generation. It holds that regulation is necessitated in response to the demand of the public to allow for the correction of inefficient and inequitable market practices. The second theory is the capture theory which is backed by odd mixture of welfare state liberals, Marxists and free market economists. It holds that regulation is offered in response to the demands of interest groups working among themselves to maximize their incomes.

According to Posner two assumptions seem to have typified thought about economic policy, one assumption was that economic markets were very fragile and opt to operate very inefficiently if left alone and the second assumption was that government regulation was virtually costless. If however the theory of regulation was correct, we would find regulation imposed in highly concentrated industries i.e. where monopolistic tendencies are greatest and in industries that generate substantial external costs.

Stigler (1971) observed that the government with all its powers and machinery was a potential resource or threat to every industry in the market. With powers to prohibit or compel, to take or give money the government could selectively help or hurt a large number of industries. The critical element of the theory of economic regulation is the integration of the analysis of political behaviour with the larger body of economic analysis (Peltzman, 1976) this means that the interested groups can influence the outcome of the regulatory process by providing financial and other support to politicians or regulators. According to Stigler the central task of the theory is to explain who will receive the benefits or costs of regulations, which form it will take and the effects of regulation upon the allocation of proper and enough resources.

Stigler also gave two views of regulation that are widely held till today. First the regulation is instituted for protection and for the benefit of the public or a section of the public. Second that essentially the political process defies rational explanation and that there are regulations whose key effect upon the regulated industry is that the regulations have a negative effect on the industry.

The regulation theory (Stigler, 1971) further notes that the political process erects certain limitations upon the exercise of policies by an industry. First the distribution of control of the industry among the firms in the industry is changed. In an unregulated industry each firm's influence upon price and output is proportional to its share of industry output.

2.2.2. Private Empowerment Theory

The private empowerment theory states that financial institutions' supervisory strategies should focus on enhancing the ability and incentives of private parties to overcome information barriers and give corporate control on financial institutions and also curb the powers of the supervisory agencies. Therefore the private empowerment theory tries to limit the powers of the supervisory agencies such that the government is unable to use financial institutions' supervision to achieve other ends. The private empowerment theory also at the same time seeks to provide the supervisors with sufficient power to ensure accurate information disclosure to enable easier monitoring of financial institutions (Hay & Shleifer, 1998) the second issue of the private empowerment theory stresses incentives where private creditors will more effectively ensure corporate governance of financial institutions and therefore enhance corporate financing if the government doesn't distort incentives.

2.2.3. Independent Supervision Theory

The independent supervision theory argues that creating an independent agency is a useful mechanism for balancing the market and also political failures. This theory holds that if the supervisors are independent from the government and they have proper incentives it will reduce the possibility that politicians will use the supervisory agencies to force financial institutions to offer credit to favoured ends. Also if the supervisory agency is independent from financial

institutions and if they have proper incentives then the probability that financial institutions will capture supervisors is lowered. Therefore the independent supervision view proposes a compromise to create a supervisory agency that has the resources to overcome the information asymmetries and that is sufficiently independent so that it avoids political and regulatory capture. In such instances the independent supervision can enhance the corporate governance of financial institutions and lower firms external financing obstacles, (Beck, Kunt, & Levine, 2003).

2.3. Review of Empirical Studies

The impact of risk based supervision on financial performance of firms has been done by various scholars. Overly it can be deduced that there is a significant relationship between performance and risk based supervision. The risk based model originates from the supervision of banks in Kenya. It has in the recent past increasingly extended to other types of financial intermediaries including insurance companies.

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, he identified various challenges during the implementation process. He found that the challenge of competing demand for scarce resources was the most prevalent followed by the human resource competence.

In Chile, the Superintendencia de Bancos instituciones Financieras (SBF) the banking authority adopted the risk based supervision as a methodology of supervising banking institutions in the year 2000. They based their approach on the Canadian model. The model emphasised on the solvency of the banking institutions and market discipline. In 2005 a survey was conducted in that country to determine benefits and the challenges of risk based supervision and whether it had achieved its intended objective in supervision of the banks and micro institutions in Chile. The study noted huge increase in costs for the year 2000 and 2001 where these costs were attributed to training of its bank supervision teams and the consultancy fees that were levied. Also the cost of new infrastructure was cited as being very high. The Infrastructure enabled the Chilean banking authority to collect and analyse filed bank returns in a timely fashion. (Superintendencia De Valores y Seguros of Chile, 2006)

Hassan (2009) made a study on risk management practices of Islamic banks of Brunei Darussalam to assess the degree to which the Islamic banks in Brunei Darussalam implemented risk management practices and carried them out by using different techniques to deal with various kinds of risks. The study showed that like the conventional banking system, Islamic banking was also subjected to a variety of risks due to the unique range of products offered in addition to the conventional products. The results showed that there was a remarkable understanding of risk and risk management by the staff working in the Islamic Banks of Brunei Darussalam, which showed their ability to pave way towards successful risk management. The major risks that were inherent in these banks were foreign exchange risk, credit risk and operating risk. A regression model was used to elaborate the results which showed that the risk identification and risk assessment and analysis were the most influencing variables and more

attention was needed on these variables to make their risk management practices more effective through proper understanding of Basel II accord.

Wanjiru (2011) carried out a study on the relationship between risk management practices and financial performance of microfinance institutions in Nairobi. The study showed that risk management 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.

Due to the financial landscape worldwide changing drastically during the last decade through the advent of electronic trade matching systems, the integration of financial markets through improved communication networks, the lifting of exchange control in many countries have all radically changed investor's behaviour and how stock market operates. Due to this stock markets are coming under intense competitive pressure to match world class standards of operations and develop more efficient and transparent trading systems and improve the quality and flow of stock market information (Brainsford et al., 1999) the insurance regulator has therefore had to adopt the risk based supervision model to enable the insurance sector improve its operations and ensure that early signs of risk in a company are identified and stability of the sector is maintained.

Mutua (2003) studied the extent of compliance with the Retirement Benefits Act in Kenya. The objective of the study included finding out the extent of compliance, identifying difficulties faced by the schemes that had not fully complied and finding the relationship between the extent of compliance and the financial performance of pension schemes. He used the fund balances for year 2000 and 2001 to measure the financial performance of schemes. She analysed these compliance parameters including extent of submission of trust deeds and rules, submission of

investment management agreements, annual audited accounts and actuarial report. Findings from this study indicated that there was a relationship between compliance and financial performance of retirement benefit schemes.

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 are 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.

Risk based supervision demonstrates the benefits of moving away from an approach based on strict compliance and specific rules towards an approach that is geared towards the identification and management of risks (Njuguna, 2012) regulators in the financial sector have previously used the rule based system and relied less on financial ratios as a mode of supervision. However it has been realized that relying on financial ratios alone is not an effective tool for preventing financial crisis in the sectors. This has led to the emergence of the risk based supervision method which is aimed at ensuring transparency, early warning signals and encouraging self regulation at regular intervals (Odera, 2010). The risk based supervision of the Retirement Benefits sector in Kenya was adopted from the Australian model whose goal is to measure the solvency of the

defined benefits schemes and investment portfolio risk of the defined contribution schemes this is based on the RBA risk based supervision guideline for 2010.

2.4. Chapter summary

Risk based supervision has become key in regulation in Kenya. Risk based supervision methods are gaining acceptance as they offer better prospects to a company relative to other approaches. Risk based supervision ensures that there is better allocation of scarce resources improving performance (Brunner et al., 2009). Risk Based Management has become the main means of attaining higher performance which is the main goal all companies.

Risk Based Supervision has therefore become a key ground for research by many scholars. Njuguna (2012) carried out a study on financial performance of pension funds and concluded that pension funds performance improved in the period risk based approach was adopted in relation to the previous approach.

Through the empirical studies done it is clear that risk based supervision has an impact on the financial performance of a company and that positive changes are seen, however there are several challenges that have been faced during its implementation mostly through higher costs due to training of staff and also increase in staffing requirements in the companies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

Research methodology section describes the methods and the procedures that were used to carry out the study. It explains the research design, population of interest, the basis of sample selection, data collection, the sources of data, the technique of analysis used and the data analysis.

3.2. Research Design

The researcher adopted a descriptive research design. Mugenda and Mugenda (1999) identified descriptive research as the process of collecting data in order to answer questions regarding the current status of the subjects study. Descriptive design seeks to establish factors associated with certain occurrences, outcomes and conditions this is why descriptive design was deemed appropriate as this study aimed at determining the effect of adopting risk based supervision on financial performance of insurance companies.

3.3. Population

A population is the total collection of elements from which the researcher wishes to make some inference Donald (2000) the target population of this research was all the 47 insurance companies in Kenya.

3.4. Sample

According to Ngugi (2012) a well developed sampling design plays a critical role in ensuring that data is sufficient to draw the conclusions needed. The sample for the study was focused on

the life insurance companies and general insurance companies. Random sampling technique was used in choosing the sample.

3.5. Data Collection

The study utilized both the primary and secondary data. Secondary data was based on annual financial statements and industry reports from the association of Kenya insurers, insurance regulatory authority and the retirement benefits authority. Primary data collection used questionnaires as an interview guide and focused on the effectiveness and influence of risk based supervision on financial performance of insurance companies in Kenya. The questionnaire contained both structured and semi structured questions which were based on the research objectives.

3.6. Data Analysis

Data collected through questionnaires was proofread and edited for accuracy, completeness and consistency to ensure validity of the data collected. Quantitative data was coded and summarized in a table to facilitate basic statistical analysis using the statistical package for social science (SPSS). Descriptive statistics such as mean, frequencies and percentages was used to rank the effectiveness and influence of risk based supervision. Tables and charts were used for further representation of the data for ease of understanding and analysis. The return on assets is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earning by its total assets.

A regression model relating each of the three risk based supervision indicators as proxied by Tobin's Q and Book-to-market ratio was specified.

To test the effect of adopting risk based supervision on financial performance of insurance companies in Kenya, Tobin model was used in data analysis, which is a regression technique suited to analyze limited (censored) dependent variables (Spekle' *et al.* 2007). The return on assets (ROA) percentage was used to indicate the financial performance measure of the insurance company.

The response on Risk Based Supervision practices was measured by computing responses derived from the Likert-Scaled questions. Prior research has examined the effect of corporate governance on financial performance using linear regression models (Cohen and Hanno, 2000).

The relationship equation is represented in the linear equation below.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y= Return on Assets

X₁= Risk Based Supervision Capacity

X₂= Risk Based Supervision Standards

X₃= Risk Management

ε= Standard Error

β= Coefficient

α= Constant

The model treated financial performance of insurance companies as the dependant variable while the independent variable was the risk based supervision approach which included risk based supervision capacity, risk based supervision standards and risk management. The risk based supervision approach was measured by computing responses which were derived from the likert-scaled questions. Return on Assets is an indicator of how profitable an insurance company is relative to its total assets. ROA 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. Risk based supervision capacity is the level at which the regulators are able to use risk based supervision approach and the level of knowledge and skills that the staffs of insurance companies have in relation to RBS. Risk based supervision approach standards are the key tools and level of supervision that the regulators use in carrying out the risk based supervision.

The indicators of risk based supervision standards were; frequency of risk assessment, efficiency and effectiveness of risk based supervision, control environment adopted example risk management board committee. Indicators for risk based supervision capacity were; presence of training, frequency of the training and adequacy of the training and awareness programmes adopted. Risk management indicators were frequency of risk assessment, assessment of impact of risk management on financial performance and the changes on the premium collected, claims handled or reported and the number of new customers in the insurance companies.

3.7. Data Validity and Reliability

Reliability is synonymous with repeatability and is the extent to which measures yield consistent results over time (Njuguna, 2012) validity indicates that degree to which the instrument measures the constructs under investigation (Mugenda & Mugenda, 2003) a pilot study was carried out by taking some questionnaires to staff of insurance companies which were filled by some

respondents at random. From this pilot study the researcher was able to detect questions that needed editing and those that were ambiguous. The final questionnaire was then be printed and used to collect data.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter discusses how data was analysed, interpreted and offers presentations of the findings. The objective of this study was to determine the effect of adoption of risk based approach on financial performance in insurance companies in Kenya. This chapter focused on data analysis, interpretation and presentation and the discussions and conclusions of the study seeking to answer the research question. The target population of the study was 47 Insurance companies where 44 responded and returned questionnaires which constituted 95.65% response rate. This response rate was considered appropriate based on Mugenda & Mugenda (2003) who indicated that respondents of 50%, 60%, and 70% response rate was sufficient for a study.

4.2 Data presentation

Data analysis was guided by the objective of the study in establishing effect of adopting risk based approach on financial performance of insurance companies in Kenya. Both primary and secondary data were obtained for the same insurance companies to enhance consistency. Questionnaires were distributed to all insurance companies in Kenya and this was done via email contacts and physical delivery. Data received from questionnaires was then proofread and coded into summarized table to facilitate analysis.

4.2.1 Operational years of the Insurance Company

Table 1: Operational years of the insurance company

	Frequency	Percentage
Over 30 Years	25	57%
21 to 30	12	27%
11 to 20 Years	5	11%
1 to 10	2	5%
Total	44	100%

Source: Author (2014)

The study sought to investigate the years in which their Company had been in operation. The study found that majority (57%) of the respondents indicated that the Insurance company had been in operation for over 30 years, 27% indicated that their Company had been in operation for 21 to 30 years, 11% of the respondents indicated that their Company had been in operation for 11 to 20 years while 5% indicated that their company had been in operation between 1 to 10 years. This implied that majority insurance companies had been in operations for a very long time.

4.2.2 Risk based assessment and financial performance

Table 2: Risk based assessment

	Frequency	Percentages
Yes	32	73%
No	12	27%

Total	44	100%
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Source: Author (2014)

The study sought to know whether risk based assessment affects financial performance in insurance companies. From the findings, 73% of the respondents indicated that risk based assessment affects financial performance their companies while 27% of the respondents indicated that risk based assessment does not affect financial performance in their insurance companies. This implied that risk based assessment affects financial performance in Insurance companies.

4.2.3 Effect of risk based approach on financial performance

Table 3: Rating how risk assessment affects financial performance in insurance companies

Risk assessment	Average extent	Great extent	Very great extent	Total	Mean	Std deviation
Consideration of risk assessment in the detection of errors	4	11	29	44	4.67	0.73
Employees understanding of the insurance company risk	7	17	20	44	4.79	0.83
Difficulty and costs to assess risks at the insurance company	1	10	33	44	4.87	0.77

Company management structure changes after adoption of risk based supervision	4	28	12	44	4.11	0.23
Training of staff in the company on risk based supervision	8	17	19	44	4.47	0.67

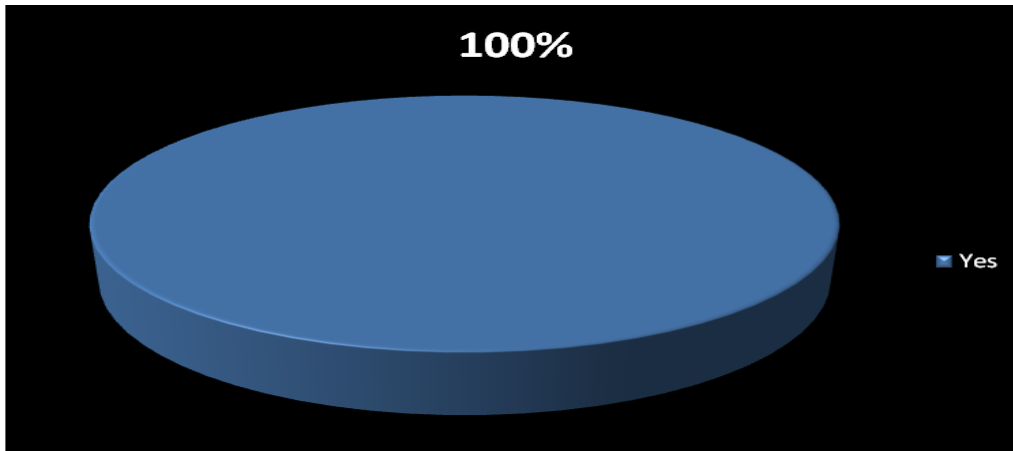
Author (2014)

The study sought to know the extent the given factors affect risk assessment on financial performance of insurance companies in Kenya. From the findings Consideration of risk assessment in the detection of errors, Employees understanding of the insurance company risk, Difficulty and costs to assess risks at the insurance company, Company management structure changes after adoption of risk based supervision, Training of staff in the company on risk based supervision affected risk assessment and financial performance at insurance companies in Kenya to a very great extent as indicated by a mean of 4.67, 4.79, 4.87, 4.11 and 4.47 and a standard deviation of 0.73, 0.83, 0.77, 0.23 and 0.67.

4.2.4 Whether management of risks influence financial performance in the insurance companies

Figure 1: Whether management of risks influence financial performance

Risk management influence on financial performance



Source: Author (2014)

The figure above indicates the response on whether the management of risks influence financial performance at insurance companies in Kenya. From the findings all 100% of the respondents indicated that managing of risks influence financial performance at insurance companies in Kenya. This implied that the risk based approach involves management to a far greater extent.

4.2.5 Risk based practices influence on return on assets of insurance companies.

Table 4: Rating risk based practices influence on return on assets of insurance companies

	Very great extent	Great extent	Average extent	Total	Mean	Std deviation
Active and independent risk board committee	31	8	5	44	4.78	0.64
Effectiveness of the risk management unit	26	13	5	44	4.41	0.39
Effectiveness of the internal audit departments	24	14	6	44	4.19	0.41

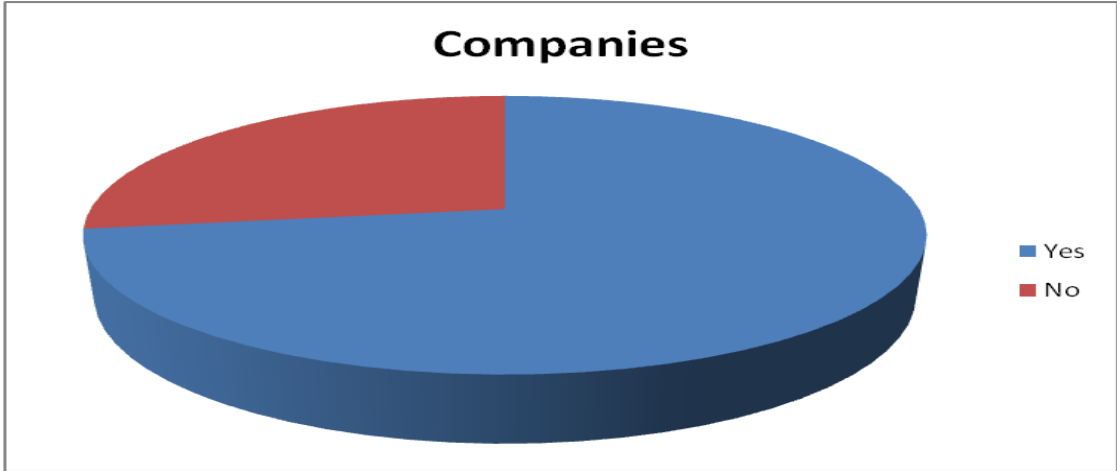
Effectiveness of the risk management framework	30	10	4	44	4.68	0.55
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Source: Author (2014)

The study sought to find out the extent to which risk based practices were significant in influencing return on assets of insurance companies. From the findings majority of the respondents indicated that active and independent risk board committee, effectiveness of the risk management unit, effectiveness of the internal audit departments and effectiveness of the risk management framework affected the insurance companies financial performance to a very great extent as indicated by a mean of 4.78, 4.41, 4.19 and 4.68 with a standard deviation of 0.64, 0.39, 0.41 and 0.55

4.2.6 How risk based supervision affected premium, claims and increase in number of new policies

Figure 2: Risk based supervision influence on Premium, Claims and Number of new customers.



Source: Author (2014)

The figure above indicates the response on Risk based supervision influence on Premium, Claims and Number of new customers. From the finding 73% of the respondents indicated that risk based supervision had an influence on the premiums received, claims and number of new customer while 27% of the respondents indicated that RBS did not have an effect on the premium received, claims and number of new customers. This implied that risk based supervision had an impact on the performance of their companies.

4.2.7 Regression Analysis

A multivariate regression model was applied to test the relationship between the risk based approach and the financial performance of insurance companies in Kenya. The logistic regression used in this model was

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y= Return on Assets

X₁= Risk Based Supervision Capacity

X₂= Risk Based Supervision Standards

X₃= Risk Management

ε= Standard Error

β= Coefficient

α = Constant

Model Summary

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std Error of the Estimate	Change statistics				
					R square change	F change	Df1	Df2	Sig. F change
1	.877(a)	.769	.761	.19456	.945	719.412	46	234	0.01(a)

Source: Author (2014)

A Predictor: (Constant), Risk management, Risk Based Supervision Capacity and Risk Based Supervision Standards

B Dependent variable: Return on assets

From the table above the value of adjusted R^2 (coefficient of determination) and gives the extent to which return on assets varies with variations in factors influencing financial performance at insurance companies in Kenya. From table above the value of adjusted R^2 is 0.761. This implies that, there was a variation of 76.1% of return on asset, which varied with variation in factors influencing financial performance in insurance companies in Kenya. These factors were risk

management, risk Based Supervision Capacity and risk Based Supervision Standards at a confidence level of 99.95%. The unexplained variations could be attributed to other factors not included in the model as well as random factors.

Table 6: ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig. Change
	Regression	37.421	46	8.124	719.412	0.01(a)
	Residual	6.987	234	.039		
	Total	62.264	264			

Source: Author (2014)

A Predictor: (Constant), Risk management, Risk Based Supervision Capacity and Risk Based Supervision Standards

B Dependent variable: Return on assets

The strength of variation of the predictor values influence the financial performance of insurance companies in Kenya variable at 0.01 significant levels.

Table 7: Coefficients (a)

Model		Unstandardized coefficients		Standardized coefficients	T	Sig Change
		B	Std Error	Beta		
1	(Constant)	4.000	346		3.126	0.01
	Risk management	0.637	.129	.5254	3.451	0.04
	Risk based capacity	0.537	0.147	.4648	1.472	0.02

	Risk based supervision standards	0.443	.194	.4188	1.472	0.03
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Source: Author (2012)

A Predictor: (Constant), Risk management, Risk Based Supervision Capacity and Risk Based Supervision Standards

B Dependent variable: Return on assets

$$Y = 4.00 + 0.637X_1 + 0.537X_2 + 0.443X_3$$

Where X_1 = Risk management, X_2 = Risk based supervision capacity, X_3 = Risk based supervision standards

From the regression model above it was found that return on asset in insurance companies would be at 4.000 holding risk management, risk based supervision capacity and risk based supervision standards constant. A unit increase in effective risk management would lead to increase in return on asset in insurance companies by factor of 0.637 with a P Value of 0.04, a unit increase in Risk Based Supervision Capacity would lead to increase in return on asset in banks by factor of 0.537 with a P Value of 0.2, a unit increase in risk based supervision standards would lead to increase in return on asset by a factor of 0.443 with a P Value of 0.03. This indicates that there is a positive relationship between return on asset and risk based supervision factors influencing financial performance in insurance companies in Kenya.

4.3 Summary and Interpretation of Findings

The adjusted R^2 is 0.761 indicating that there was a variation of 76.1% of return on asset with variation in risk based supervision practices. This reveals that there exists a strong positive relationship between return on assets and risk based supervision influencing financial performance in insurance companies in Kenya clearly indicating that effective risk management, higher risk based capacity and risk based supervision standards influence financial performance in insurance companies in Kenya as they were statistically significant with a P-Value of 0.04, 0.02 and 0.03 at 95% confidence level.

The findings above positively related with a study done by Njuguna (2012) where he assessed impact of risk based supervision on financial performance of pension funds. He concluded that Risk based supervision had a positive impact on financial performance of pension funds. The positive impact was due to the fact that better risk evaluation led to improved mitigation strategies thus increasing returns. However, he noted that the impact was not intense which lead him into concluding that the extent of adoption of RBS is still at preliminary stages and there is still room for improvement and exploration to acceptable level. Njuguna (2012) did a survey on skills and competency which indicated that a larger percentage of trustees have not received training and support of risk management committees is even much lower. This could have been brought about by lack of proper planning and resources to manage the process and general lack of appreciation and understanding in the industry.

The study found out that risk based supervision influenced return on assets in insurance companies in Kenya. The findings were similar to Chen (2003) who investigated the relationship between corporate governance and risk taking behaviour in Taiwanese banking industry. He took a sample consisting of 39 domestic banks and of the sample 24 completed responses were

returned therefore having had a response rate of 61.54%. 13 of the respondents i.e. 54.1% of the credit unions reported more than 60% of their internal audit as risk oriented.

From the findings, difficulty and costs related to assessment of risks, employees understanding of the insurance companies risk and consideration of risk assessment affected financial performance at the insurance companies in Kenya to a very great extent. The relationship between risk based supervision and an effective internal audit function are positively related. This concurred with Millichamp (2002) who indicated that internal audit major roles are required in risk management in determining processes and their objectives, identifying risks that hinder the processes with management, reporting where risks are not sufficiently mitigated by controls and assure management that risks are mitigated to an acceptable level.

The study established employees understanding of the insurance company's risk, Company management structure changes after adoption of risk based supervision and training of staff in the company on risk based supervision were very significant in influencing judgment of risk at insurance companies in Kenya as indicated by a mean of 4.79, 4.11 and 4.47. This implied that the management need to bear the responsibility for managing risks. This concurred with AL Tamini (2002) who found that many risks will be very significant to the organisation and the discussion of their controls will involve more senior managers and directors than might be involved in traditional finance oriented audits.

The study revealed that risk based supervision had a positive impact on the financial performance of insurance companies and this was study concurred with Muingo (2007) through a study on the impact of introduction of regulations into the retirement benefits sector in Kenya,

identified that financial performance of pension funds had improved over the period the regulations had been in force.

The findings showed that risk based supervision affected premium, claims and lead to an increase in the number of new policies in insurance companies. 73% of the respondents indicated this positive influence while only 27 % of the respondents indicated there was no relationship between RBS and the premiums received, claims and number of new customers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The objective of the study was to determine the effect of the adoption of risk based supervision on financial performance in insurance companies in Kenya. The study addressed risk based supervision which included risk management, risk based supervision standards and risk based supervision capacity.

This study adopted Correlation research design for it describes the specific phenomenon in its current trends, current events and linkages between different factors at the current time. The target population for the study constituted of 46 insurance companies in Kenya. The study administered the questionnaires which included structured and unstructured questions to all the respondents since it was the most appropriate tool to gather information. Descriptive statistics such as mean, standard deviation and frequency distribution were used to analyze the data. Data presentation was done by the use of pie charts and tables for ease of understanding and interpretation. The study sought to fill the knowledge gap by establishing the effect of Risk based supervision on financial performance in insurance companies in Kenya.

The study established that there existed a positive relationship between return on asset and risk based supervision factors influencing financial performance in insurance companies in Kenya clearly indicating that effective risk management, risk based supervision standards adopted and risk based supervision capacity influence financial performance as they were statistically significant with a P-Value of 0.04, 0.02 and 0.03 at 95% confidence level.

5.2 Conclusions

The study established that risk based supervision through risk management, risk based supervision standards and risk based supervision capacity when enhanced enable the firm to detect risks on time thereby enhancing financial performance. Risk based supervision helps management in assessing the risks and recommending corrective measures for improvement. It also improves reporting and a larger pool of information pool before decision making is done. The regulator understanding of insurance company's risk, consideration of risk assessment and the top management involvement in managing the risk evaluation process influence the financial performance of the companies.

From the findings the study concluded that management of risks influence financial performance to a very large extent and the implementation of the risk based supervision is the prerogative of management who should strive to ensure compliance. The study also conclude that the management should ensure all staff are trained and understand what risk based approach is, the benefits that will be derived and how to change their daily operations to ensure efficiency, accuracy, completeness, timelines and clarity is achieved. This is because if the capacity of all staff is enhanced the financial performance will be influenced positively.

The study concluded that there exists a positive relationship between return on asset and risk based supervision influencing financial performance in insurance companies in Kenya, clearly indicating that effective risk management, risk based supervision standards and risk based supervision capacity influence financial performance in insurance companies in Kenya.

5.3 Recommendations to Policy and Practise

From the findings and conclusions, the study recommends that risk based supervision should be enhanced through adoption of better risk management, risk based supervision standards that will yield the best results in our environment and enhancement of the risk based capacity so as to achieve success in financial performance in insurance companies in Kenya.

The study recommends that management of the insurance companies in Kenya should emphasize on management and staff understanding of the risk based supervision, risk assessment in the different areas of the companies, company environment in risk assessment, involvement of management in risk evaluation process and identification of changes in order to effectively control and improve operations of the company and its financial performance.

Management in insurance companies in Kenya should bear the responsibility of ensuring training of its employees, risk based annual plans, adequate resources for risk assessment being provided, ensuring returns and required records are submitted to the insurance regulatory authority which leads to improved efficiency in the company. The management should also develop and retain adequate quality professionals in order to ensure quality of work, professional skills and the readiness to embrace change and other competences needed to perform individual responsibilities.

Finally the study recommend that management of insurance companies should adopt effective ways of ensuring risk assessment, risk management and the capacity of its staff is enhanced to ensure effectiveness and efficiency is achieved in the performance of insurance companies in Kenya.

5.4 Limitations of the study

The study faced a limitation where it proved difficult to obtain signed copies of the organization's financial statement. The management was hesitant to provide and reveal such information. The researcher followed up to ensure data was collected without too much delay.

The study also faced limitations where some respondents were found to be uncooperative because of the sensitivity of information required for the study. The researcher therefore had to explain that the information they provided was to be held confidentially and for academic purposes only.

The study also faced a challenge of time resource which limited the study from collecting information for the study particularly in cases where the respondents delayed in providing the filled questionnaire and also the time for travelling to collect the filled questionnaire.

The study also faced a limitation whereby it only concentrated on insurance companies in Kenya. The study would have covered more institutions across all sectors so as to provide a more broad based analysis especially on the financial sector however, resource constraints placed this as a major limitation.

5.5 Suggestions for further studies

This study determined the effect of the adoption of risk based supervision on financial performance of insurance companies in Kenya.

A further study should be carried out to determine challenges affecting implementation of risk based supervision focusing on insurance companies in Kenya.

The study further recommends that a study should be carried out to determine the relationship between risk-based supervision and financial performance in insurance companies.

The study recommends that a study be carried out to determine the challenges of implementing risk based supervision in insurance companies.

A study should be undertaken to assess the relationship between risk based supervision as adopted by the insurance sector and risk based supervision adopted by the banking sector. This would lead to revealing of the similarities and differences in the two sectors.

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APPENDIX I: QUESTIONNAIRE

This questionnaire is prepared for the sole purpose of collecting data for research project in partial fulfilment of the requirement for an award of master of business administration degree and all information will be handled confidentially.

1. Name of insurance company.....

2. What is your current designation.....

3. How many years have you been in operation

Over 30 years () 21-30 years () 11-20 years () 1-10 years ()

4. Does risk based assessment affect financial performance at your Insurance Company

YES ()

NO ()

5. In your opinion to what extent do the following factors on risk assessment affect financial performance for insurance companies?

	Very great extent	Great extent	Average extent	Low extent	Very low extent
Consideration of risk assessment in the detection of errors					
Employees understanding of the insurance					

companies risks					
Difficulty and costs to assess risks at the insurance company					
Company management structure changes after adoption of risk based supervision					
Training of staff in the company on risk based supervision					

6. Does management of risks in your company influence financial performance?

YES ()

NO ()

7. In your opinion to what extent do the following risk based practices influence return on assets in your company?

	Very great extent	Great extent	Average extent
Active and independent risk board committee			
Effectiveness of the risk management			

department			
Effectiveness of the internal audit department			
Effectiveness of the risk management framework			

8. Does risk based supervision have an effect on premium received, claims and number of new customers.

Yes () NO ()

9. How often does your company interact with the IRA

Hardly ever () occasionally () frequently () Almost always ()

APPENDIX II: INSURANCE COMPANIES IN KENYA

- 1 AAR INSURANCE KENYA LTD
- 2 AIG KENYA INSURANCE CO LTD
- 3 AMACO
- 4 APA INSURANCE LTD
- 5 APOLLO LIFE ASSURANCE LTD
- 6 BRITAM
- 7 CANNON ASSURANCE LTD
- 8 CAPEX LIFE ASSURANCE CO LTD
- 9 CFC LIFE ASSURANCE LTD
- 10 CIC GENERAL INSURANCE LTD
- 11 CIC LIFE ASSURANCE LTD
- 12 CORPORATE INSURANCE CO LTD
- 13 DIRECTLINE ASSURANCE LTD
- 14 FIDELITY SHIELD INSURANCE LTD
- 15 FIRST ASSURANCE CO LTD
- 16 GA INSURANCE LTD
- 17 GATEWAY INSURANCE LTD
- 18 GEMINIA INSURANCE LTD
- 19 HERITAGE INSURANCE LTD
- 20 ICEA LION GENERAL INSURANCE
- 21 ICEA LION LIFE ASSURANCE
- 22 INTRA AFRICA ASSURANCE LTD

- 23 INVESCO ASSURANCE LTD
- 24 JUBILEE INSURANCE CO LTD
- 25 KENINDIA ASSURANCE LTD
- 26 KENYA ALLIANCE INSURANCE
- 27 KENYA ORIENT INSURANCE LTD
- 28 MADISON INSURANCE CO LTD
- 29 MAYFAIR INSURANCE CO LTD
- 30 MERCANTILE INSURANCE
- 31 METROPOLITAN LIFE INSURANCE
- 32 OCCIDENTAL INSURANCE CO LTD
- 33 OLD MUTUAL LIFE ASSURANCE CO
- 34 PACIS INSURANCE CO LTD
- 35 PAN AFRICA LIFE ASSURANCE LTD
- 36 PHOENIX ASSURANCE CO LTD
- 37 PIONEER ASSURANCE CO LTD
- 38 REAL INSURANCE CO LTD
- 39 TAKAFUL INSURANCE OF AFRICA
- 40 TAUSI ASSURANCE CO LTD
- 41 THE MONARCH INSURANCE CO LTD
- 42 TRIDENT INSURANCE CO LTD
- 43 UAP INSURANCE CO LTD
- 44 UAP LIFE ASSURANCE CO LTD
- 45 XPLICCO INSURANCE CO LTD

46 RESOLUTION INSURANCE CO LTD

47 SHIELD ASSURANCE CO LTD