THE EFFECT OF FORENSIC ACCOUNTING SERVICES ON FRAUD PREVENTION IN THE INSURANCE COMPANIES OF KENYA

BY

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A RESERCH PROJECT SUBMITTED IN PARTIAL FULLFILMENTOF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS IN THE, UNIVERSITY OF NAIROBI

2015

DECLARATION

Student's Declaration

This management research project is my original work and has not been presented for a degree in any other University.

Signed …… Date: ……

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D63/67882/2013

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This management research project has been submitted for examination with my approval as the university supervisors.

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DEDICATION

I dedicate this work to the Almighty God and to my family for their encouragement and support throughout my studies. Special dedication goes to my wife Ann and my two sons Festus and Vincent who have supported me through the entire time of the study.

ACKOWLEDGEMENT

I would like to acknowledge my family members, friends and colleagues whose support made it possible for me to go through the academia process successfully.

I also acknowledge my fellow students and lecturers at the Nairobi University whose wells of knowledge I drew from through the academic period, and have made me a better professional.

I would also like to specially acknowledge my supervisors Dr. Kennedy Okiro who have guided me tirelessly through the research project proposal. Their guidance is invaluable.

ABSTRACT

Fraud is one of the major problems facing insurance industry in Kenya and it impact negatively to the whole insurance sector. Fraud risk in insurance companies is complex matter which affects both insurer as well as policy holders. Frauds increase the cost of insurance resulting to uncompetitive business and at the same time results to policy holders paying high premiums. This study aims at exploring the role of forensic accounting services in combating frauds in the insurance industry in Kenya. The study targeted all 49 insurance companies as listed by Association of Kenya Insurers register of 2013. Primary data was obtained with help of well-structured questionnaires. The data collected was coded and analysed with statistical package for a social science (SPSS).Inferential analysis was done using inferential statistics. Regression model was run to test the effect of forensic accounting in prevention of fraud in insurance companies. Two variables were tested on fraud reduction in insurance companies. The independent variables were investigative services and litigation support services offered by forensic accountants. The study revealed that application of forensic accounting services reduces the number of fraudulent activities in insurance companies.

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LIST OF ABBREVIATIONS

NHIF	National Hospital insurance Fund
ACFE	Association of Certified Fraud Examiners
ISA	International Standard On Auditing
COTU	Central Organization Of Trade Union
AIPCA	America Institutes of Certified Public Accountants
FKE	Federation of Kenya Employers
AKI	Association of Kenya Insurers
PWC	Pricewaterhousecoopers

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The corporate world has continued to experience numerous scandals day by day which have led to loss of assets and money for shareholders. The most notable and current scandal as highlighted by our media in Kenya today is at Mumias Sugar company where millions of shillings cannot be accounted for by the management (*Business daily*,15 August 2015,p.1). The other recent scandal in Kenya was in CMC motors where management was accused of siphoning all the money to an off shore account (*Business daily*, 9 September 2012, p.1). Other major frauds dealings recorded were committed in companies like WorldCom 2002 and Enron ltd (2001). These are examples of financial scandals which resulted from fraudulent activities and fraudulent dealings perpetrated by people who were bestowed with trust to run the companies on behalf of shareholders.

Fraud is an activity that takes place in a social setting and has got severe consequences in the economy, corporations and individuals (Silverstone and Sheetz, 2007).Silverstone and Sheetz (2007) observed that fraud is an opportunistic infection that burst forth when greed meets possibilities of deceptions. Fraud does not always involve the notion of monetary gain; however it can be defined as encompassing a wide variety of corrupt, deceptive, dishonest or unethical behaviours. According to global economic crime survey of PWC (2014) 54% of respondents reported that, their companies experienced frauds in excess of $100,000 with 8% reporting fraud in excess of 5%.Sixty six percent of respondent indicated that the financial impact of economic crime on their organization remained the same or increased in their last 24 months. This indicates that fraud can impact on company's revenue just like any other

business and market forces. The ability to prevent, detect and swiftly respond to fraud can be powerful cost saving tools. By implementing more robust anti-fraud controls, organization can prevent losses and increase saving and profitability.

Different definitions of fraud have been defined where by the bottom line of any fraud is deception. The association of certified fraud Examiners defines occupational fraud as the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets. Fraud is an intentional act by one or more individual among management, those who are charged with governance, employee, or third parties involving the use of deceptions to obtain unjust or illegal advantage (ISA 240). Horward (2007) states that, most of the perpetrators of fraud are people with experience and are placed in position of trust and have opportunity to commit fraud.

Frauds in insurance industry have been associated with the two phenomenon of moral hazard and adverse selections. The concept of adverse selection refers to the situation where before an insurance contract is signed, one party has more accurate and different information than the other party. In most insurance model, clients are assumed to know better their risks than the insurance companies. Non-disclosure of such information to the insurance companies may result on the insurance company underestimating or under-pricing rather riskier policies. Moral hazard on the other hand has been cited as one of factors contributing to losses as result of information asymmetry and dishonesty of clients. Moral hazards are those conditions that increases or severity of losses because of the attitude and character of insured person. In common usage moral hazard suggests a conscious, malicious or even illegal motivation as opposed to unconscious change of behaviour (Denenberg et al, 1968).

In Kenya, the state health insurance fund (NHIF) is the vehicle through which the Government hopes to provide health to all Kenyans. NHIF is primary financed by employee contributions paid for by formal sector workers who also form the main beneficiaries. Over time however NHIF has expanded its contribution from and coverage from informal sectors. Starting April 2015, the contribution was increased making an employee earning Kes 100,000 to contribute Kes 1,700 and an employee earning 5,999 to contribute Kes 150.This was a change from the old rates where most workers contributed Kes 320 since 1988 when the rate were last reviewed. These changes were gazetted in a legal notice dated 6th February 2015(Business Daily 11 August 2015).These changes were initially disputed by trade Unions (COTU) and Federation of Kenya employers (FKE) which was later resolved in the court of law. The disputes emanated from lack of trust by these institutions on NHIF management ability to handle fund following numerous allegation of fraudulent activities. This followed prosecution of the top management officers following loss approximated to Kes 116 million through fraudulent activities (Business daily 2nd October 2013)

1.1.1 Forensic Accounting Services.

Forensic accounting is application of accounting skills and knowledge in circumstances that have legal consequences. There are many circumstances that have legal consequences in which accountancy might be required. The most well-known is investigation of alleged fraudulent activities. Forensic accounting is the whole process of carrying forensic investigation, including preparing an expert report or witness and potentially acting as an expert witness in a legal proceeding. Proper understanding of effective fraud and forensic techniques will help a professional forensic accountant in identifying illegal activities and discovering and preserving evidence (Houk et al 2006).Hence it is important to understand that the role of forensic accountant is differentiated from that of regular auditor. It is well

understood that the role of regular auditor is to determine compliance following specific audit standards and hence probably consider the possibility of fraud. The forensic accountant has got a single minded focus on detection and deterrent of fraud (Crumberly and Apostolous 2005).Forensic accounting relates to deterring, detecting and investigating frauds in financial frauds in financial statement (Kristic, 2009).Horward and Sheetz (2006) define it as process of interpreting, summarizing, and presenting complex financial issues clearly, succinctly and factually often in court of law as an expert.

The integration of accounting, audit and investigation skills yield the speciality known as forensic accounting (Islam,Rahman & Hossan. 2011). Forensic accounting services involves application of specialised knowledge and investigative skills possessed by forensic accountants to collect, analyse and evaluate evidential matters and to interpret and communicate the finding in the courtroom, boardroom or other legal administration forum. The service includes disputes resolution, litigation support, bankruptcy proceedings, and fraud and special investigations. Forensic accounting services utilises the practitioner's specialised accounting, auditing, economic, tax and other business skills to perform number of consulting services. The provision of forensic accounting services requires the practitioner to serve as witness expert depending on the assignment. Disputes resolution services assist with parties with settlement of or determination of disputes. Litigation services involve pending or potential legal or regulatory proceeding before trier of fact in connection with resolution of a dispute between parties. Bankruptcy support services assist debtors, creditors, and other interested parties and court with pending or potential formal legal bankruptcy proceedings. Fraud and special investigations involves investigation of known or suspected frauds or event using recognised forensic techniques (AICPA).

1.1.2 Forensic Accounting and Frauds Prevention

Fraud normally manifest itself through symptoms as it is hard to observe the actual fraudulent activity .The symptoms may not indicate that a fraud has been committed as it may be as a result of human errors. Fraudsters sometimes hide frauds in these human made errors hence making it difficult for forensic accountant to detect them (Albert, 2005). Poor corporate governance and accounting failures have been quoted as some of recipe for frauds. Company officials with the same interest may commit fraud because of lack of well implanted corporate governance policy (Ramaswammy,2005).The auditor perform his duty in ensuring true and fair reporting is observed in order to safeguard the interest of all stake holders. He does not have an absolute duty to unearth frauds and criminal activities which may have been perpetrated by fraudsters in a company. The auditor may only use the skills of a forensic accountant in case he has a reason to suspect that frauds have been committed in an organization. When the top management do not play an active role in fraud prevention, internal controls may not be the best solution for fraud detection and prevention. New methods for prevention and detection of fraud therefore have been devised which involve the use of forensic accountants (Enofe & Atube, 2013).

During the audit planning process, audit tests have been modified by forensic accountants where the risk of fraud by management has been observed to be high. When forensic accountant have been involved in risk management, better results have been obtained (Okoye & Gbegi, 2003).Forensic accountants can be used to detect more frauds than ordinary auditors. Some more research conducted revealed that proactive data analysis using computer based techniques could detect frauds which could have remained in financial reports for many years (Boritz, Kotchetova & Robinson, 2008).

Fraud detection involves the identification of actual or potential fraud in an organization. It relies upon the implementation of appropriate systems and process to spot the early warning signs of fraud. Fraud detection involves proactive risk assessment and reactive to fraud reports. It also includes manual spot audit and enhanced automated data mining. Detection is characterised by action and activities intended to identify and locate fraud prior to, during and subsequent to the completion of fraudulent activities. To detect is to uncover or reveal the existence of the fact of something hidden or obscured. Fraud detection should form part of an organization overall anti-fraud strategy covering prevention, detection and investigation (Webster, 1997).

Fraud deterrent is the removal of the casual enabling factors of frauds. It is based on the premise that fraud is not random but occurs if there exit the right conditions for it to occur. Fraud deterrent is based on improvement of organization procedures as the main best defence against fraud. Successful deterrence is the stopping of fraud before it happen. To deter is defined as to inhabit or discourage through fear or to prevent an action by fear of consequences (Webster, 1997).

1.1.3 Insurance Sector in Kenya

The insurance industry is regulated by Insurance regulatory Authority. This is an autonomous Government institution which was created by an act of parliament to replace department of insurance in 2007.It is led by Board of directors and run by commissioner of insurance who is also the chief Executive officer. The main work of IRA is to ensure effective regulation supervision and development of insurance business in Kenya. As at the end of 2013 there were 48 insurance companies in Kenya, 25 of these companies dealt with non-life insurance, 12 dealt with life insurance while the remaining companies dealt with both non-life and life

business (AKI, 2013).The report indicates that the penetration rate is at 3.44% while the income increased by 17.1% compared to 2012.A survey conducted by KPMG (2015), put Kenya insurance false claims preferences higher than other East African countries. The false claim inflates the Kenya insurance companies' premium by 25%. The survey, which is the first in the region, puts Kenya ahead of Uganda, Tanzania, Burundi, Rwanda and Ethiopia in insurance fraud, with prevalence levels comparable to those in the banking sector (KPMG, 2014).

Chudgar and Asthna (2013) have observed that, insurance fraud is one of the most serious problem facing insurance companies, insurance consumers and insurance regulators. The researcher observes that, such frauds have direct impact on the overall cost of insurance policy and the cost of insurance premiums on insurance policy holders. It encompasses a number of wide range illicit practices and illegal acts. Risk management has been acquiring monumental importance in the insurance industries. Insurance business is of dynamic nature that put an additional onus on risk management. Insurance companies need comprehensive risk management strategies that involve fraud risk assessment and fraud prevention (Chudgar & Asthna, 2013).

In a survey conducted by Ernst &Young in India (2010-11) insurance fraud was defined as a wild range of illicit practices and illegal act involving intentional deception or misrepresentation. The fraud Act 2006 of the law of Kenya defines the offence of fraud as defendant having been dishonest and intending to make gain or cause loss to another. In Kenya, it is estimated that 40% of all claims payments constitute fraudulent payments. AKI's annual report of 2010 showed that the net incurred claims were worth Kes 40.07 billion, 40% which totalled Kes.6.02 billion believed to be fraudulent. According to AKI report

(December 2012) most insurance policies contains clause to the effect that all benefits to the policy are forfeited in the event of a fraudulent claim. In some states like United States of America, insurance fraud has been noted to have increased immensely. This lead to formation of special investigative Unit to handle the fraud cases.(Ghezzi,1983).In United kingdom ,there were evidence of insurance fraud in motor, home and business covers in the late 1980s.(Clarke,1980).

1.2 Problem Statement

The credibility of external audit process has been frequently called in to question in many countries. This is evidenced by wide spread criticism directed to external auditors. The reason for criticism is loss of faith by public to external audit due to many financial scandals and mega frauds which has led to collapse of big corporations leading to loss of investments and loss of properties (Dewing & Russels, 2002).

With increase in volume of transactions and increase in the size of corporations the responsibility of external audit has shifted from determining the true and correctness of financial statement to true and fair reporting. This drifting of responsibility has made detection and deterrent of fraud less feasible. The audit profession asserts that management has primary responsibility of detection and prevention of fraud in the company. Although an audit engagement may be planned with professional scepticism recognizing that fraud may exist which may make financial statement materially incorrect, it does not guarantee the detection of fraud. Failure in statutory audits to detect, prevent and expose frauds has made accountant and legal practitioners find better ways to prevent such fraud from occurring, and expose them when they occur. This has led to the rise of forensic accounting as a profession. Forensic accounting involve the whole process of carrying out forensic investigation,

including preparing an expert report or witness statement and potentially acting as an expert witness in legal proceedings (Ijeoma,2014)

Local researches done on forensic accounting includes the rationale of using forensic accounting on reduction of audit expectation gap (Wanjohi, 2011). He found that the introduction of forensic audit was important mechanism in reducing audit expectation gap. Omondi (2013) sought to find out the impact of forensic accounting services on fraud detection and preventions in the commercial banks of Kenya. He found that, application of forensic accounting services led to increased fraud preventions. Njuguna (2013) sought to establish the response strategy to fraud by the listed commercial banks in Kenya. The studies established that, preventive, training, detection, prosecution and investigation strategy are used by commercial bank in Kenya in managing the fraud menace.

Even though many researches have been done globally and locally on the impact of forensic accounting services in prevention of frauds, none has been done specifically on the impact of forensic accounting services in prevention of frauds in insurance companies in Kenya. With the increase in frauds in insurance companies and resultant losses, my study will seek to establish the importance of forensic accounting services in detecting and combating fraud in the industry. When the public is made known of the concept, then they could actually demand for the service in the insurance companies they invest in. It is from this research gap that my study will seek to answer the following question “Is forensic accounting services useful in prevention of frauds in insurance companies in Kenya?”

1.3 Research Objectives

The specific objective of this study is therefore to:

Establish to what extent forensic accounting services impact on fraud preventions in the insurance companies in Kenya.

1.4 Value of the Study

The finding of this study is likely to impact positively on the following areas and to benefit the following group of people.

Forensic accounting services are important during an insurance legal suit where the insurance company is the defendant. Since forensic accounting is the use of professional accounting skills in matter involving potential or actual civil litigation, the forensic accountant will be engaged by adjuster or lawyer to audit insured books and determine whether the policy holder has sustained loss as defined by insurance policy.

Insurance frauds makes running of Insurance business costly since the frauds impact negatively on the overall cost of business. To mitigate on the risk of frauds, insurance companies price their product highly. This in return makes insurance unaffordable to many people. This research will establish the usefulness of forensic accounting services in insurance companies as a means of detecting and deterring fraud which will bring down the cost of doing business. This in return will make the premium affordable and reachable to many people, by driving down the cost of doing business in case of policy holder.

Shareholders and investors will be comfortable to invest in companies with sound fraud prevention policies. Incorporating forensic accounting services in the policy will boost the confidence of the investors by ensuring the company is free of fraudulent activities.

Since forensic accounting is not a well-developed field in Kenya, this research will assist in fostering the career of a forensic accounting by establishing new opportunities in insurance companies. When the public is made known to the concept, they could actually demand for the service in the company in which they invest in. New job opportunities will be created if the result establishes a positive correlation between forensic accounting services and fraud reductions

This study will also contribute to the existing body of knowledge and suggest possible areas of improvement. The study will also assist other researchers to understand the importance of forensic accounting in insurance fraud strategy.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the various theories behind fraudulent activities in a business setup. The Literature review acts as guidance to the study and set the methodology to be used during the study. Fraud has got an impact on the success of insurance just like any other business forces in the industry. There should be a mechanism to protect insurance companies from fraudulent activities like incorporating the activities of forensic accounting in the control environment. This study therefore considers the use of forensic accounting services as a means of reducing frauds in insurance companies in Kenya.

2.2 Theoretical Review

The study is based on White collar crime theory, Cressy Fraud Triangle theory, fraud scales theory and Hollinger Clark theory. These theories explore the causes of frauds as bases to preventing their occurrences

2.2.1. White Collar Crime Theory

Sutherland (1924) is credited with development of white collar crime theory. The theory argues that crime is not a preserve of poor people as earlier researchers indicated. He argues that poverty was seldom to white collar crimes and hence is not the primary driver of crime. The theory tries to integrate the crime of upper white collar class with economic and business activities. The status of professional within a society creates an atmosphere of both admiration and intimidation. Members of society admire professionals but they are also afraid of tribulation if they antagonise such individuals. Admiration and fear of professionals' leads

to lesser punishments for white's collar criminals. The theory suggests that the traditional criminal justice system is less reliance and over less punishment to white collar criminals. The theory indicates that white collar crime is less obvious than violent crime because the consequences to the public could be diffused for a very long period, spread to many individuals and it could also be hard to identify the victims (Sutherland, 1949)

According to this theory, crime is normally learned from cross interaction with people already engaging in fraudulent activities. Sutherland (1949) asserted that, criminal behaviour is learned in association with those who define such behaviour favourably and in isolation with those who define such behaviour as unfavourable. Later scholars and anti-fraud practitioners have criticized Sutherland's work. As summarized by David Friedrichs (2002) observers charge Sutherland overemphasized on individualistic social psychological factors and largely ignored social structural factors such as capitalism, profit rates, and business cycles. He failed to make clear-cut distinctions among white-collar crimes, and he did not adequately appreciate the influence of corporations over the legislative and regulatory processes. The theory was based on assumption that, a white collar criminal would face a lenient sentence from a court of law than street criminal.

2.2.2 Cressy Fraud Triangle Theory

This theory analyses the personal characteristic of a fraudster in relation to fraud committed in the organization.(Cressy, 1953). Cressy (1953) hypothesised three criteria for criminal violation of trust. These included non-sharable financial problem, knowledge of working of a specific enterprise and opportunity to violate trust, and ability to adjust oneself perception such that violating this trust does not constitute to criminal behaviour in one mind. The theory

came up with what has been termed as fraud Triangle. It consists of elements which are perceived pressure, present of an opportunity and aftermath rationale of the fraud act.

Perceived pressusre from non sharable finacial need creats a motive for fraud.Individual may be facing finacial or other personal problems such as gambling,drug abuse,alcohalic or extreme medical bills.He could also be leaving an expensive life style which is not sustainable with one income.Shear greed could also be a motivator for fraud .

Opportunity is ability to commit fraud.Fraudsters commits frauds with belief that,their activities will not be detected.Opportunities are created by weak internal controls,poor management oversight and through use of one postion and authority.Opportunities to commit fraud may occur if there is a failure to establish a dequate procedures to detect fraudulent activities.Of the three elements of the fraud traingle,opportunity is the only controllable element by an organization. According to the fraud triangle,the threat of likely detection is one of the most powerful detection factor in fraud prevention because it eliminates the fraudster perceived opportunity (ACFE, 2012).

Rationalization is crucial componet in most frauds.Rationalization involves apersob reconciling his/her behaviour with commonly notion of decence and trust.It is easier for those people who are generally dishonest to rationalize fraud than those people with high moral standard.Common rationalization includes making up for being underpaid or replacing bonus that was deserved but not received.Afraudster may convince himself that he is just borrowing the money from a company and will return in one day.Other believe since the company treat it employee badly there is no harm in stealing the money.

The Fraud Triangle theory provides an efficient conceptual model that has broadly served as an aid to the fraud examiners in understanding the antecedents to fraud (ACFE ,2009). Research in the area of fraud has indicated that, there existed conditions of fraud triangle within companies where fraud schemes have been perpetrated. Fraud examiners have used the fraud triangle as a standard method since the 1950s to understand fraudsters' motivations. (Bell and Carcello 2000.,& Hogan et al. 2008). Lasalle (2007) demonstrated that the use of fraud triangle could lead to improved risk assessment. However, the triangle is inadequate for deterring, preventing and detecting fraud because pressure and rationalization cannot be observed and do not adequately explain every occurrence of fraud. Although Cressy fraud Triangle theory was suppoted by audit regulators or professional,it was higly critisized by other researchers.The model alone was found to inadequet tool for detering ,preventing,investigating and detecting frauds (Albret et al 1984,Wolfe & Hermanson 2004).

2.2.3 Fraud Scales Theory

The fraud scale theory was developed by Dr.Steve Albretch while studying frauds in corporates as an alternative to fraud triangle theory.Albretch et al (1984) developed the fraud scales by ranking situational pressure perceived opportunities and personal integrity.Albert argued that occupational fraud is is likely to occur when situational pressure and perceived opportunity are high with low personal integrity.He argued that the opposit of this is true.He described situational pressure as immediate problem within an environment usullay high persoanl debts or finacial issues.Opportunity to commit fraud arose by deficiecy or complete lack of internal controls.Personal integrity refered to a person code of coduct an individual adopts.The theory was an augrade of the fraud triangle which was seen as inadequate.The fraud scale theory introduced personal integrity instead of rationalisation and it is particulary applicable to financial reporting fraud where sources of presure are more observed.According

to Albert,personal integrity can be observed through observing both aperson's decision as well as decision making process.That person's commitment to ethical decision making can be observed and this can help assesing integrity and thus the likelyhood of an individual committing fraud.

Albrecht et al.(1984) argued that unlike rationalization in fraud triangle theory,personal integrity can be observed in both an individual decision and decision making process which can help in assecing integrity and determing the likelyhood that an individual will commit fraud.Lack of personal integrity or other moral reasoning may lead an individual in committing frauds and engaging in other unethical behaviours as moral and ethical norms play essential roles in an individual's decision making process (Dorminey et al., 2010,Rae & Subramaniam,2008). Appelbaum et al.,(2006) noted that individual with low level of of ethical development were likely to commit frauds than those with higher levels.He also noted that those individual with higher level of ethical development were still calpable of commiting frauds but not under the same conditions with those individuals with low level of ethical development.

2.2.4 Hollinger Clark Theory

Hollinger conducted a reseach on 10,000 employee and concluded that employee steal from their employer as aresult of internal organization conditions.He argued that external factors like finacial needs could play arole but the structure and behavioral norms at workplace are the most motivator for a fraud.He arguerd that an employee who is disastisfied at work place may commit fraud regardless whether he is facing any immediate financial need.The research found that the single most effective way to prevent theft was to raise the chances or the

employee perception of chances of being caught.The stronger the perception that theft would be detetected the less the likely hood that the employee would engage in deviant behaviour.

According to Hollinger,social controls could be used to deter or prevent frauds from occuring.Social control consist of both formal and informal control.Formal control is described as internalization by employee of group norms.Informal control consist of external pressurres both positive and negatives sactions.The researcher concluded that as ageneral preposition,informal social control provided the best deterent of deviant actions through loss of respect among the acquitances (Dorminey et al,2012).

2.3 Determinant of Frauds Prevention

Fraud control is normally a complex issue and usually difficult than it is presumed (Sparrow, 1998). There some impediments which acts as determinants of fraud controls. The present of such impediment may largely affect the effectiveness of a fraud prevention strategy.

Fraud is not self-revealing as the whole transaction is processed like any other normal transaction. This means that fraud has to be looked for to be discovered. Unless fraud is detected promptly it is likely to go unnoticed. Fraud control is subject to constrain of speedy detection and minimal investigative lead time. This is one of profound implication of automation and the increasing use of powerful information and communication technology.

The legal process of proving fraud is sometimes difficult because mere suspicion of fraud may not act as legal proof in a court of law. The warning signs that trigger suspicion may be suggestive of a degree of risk but often fail as definite proof beyond the reasonable doubt principle. This make insurers contemplating for legal course of action to invest in specialised investigation. Considering the seriousness of the case solid high standard legal evidence of fraud is required. An insurance company therefore may find it appropriate to settle the claim

if by calculation it find the amount being moderately low, rather than take aggressive stance and risk being sued for bad faith(Clarke,1989).

Fraud is normally dynamic and evolves as business evolves especially in the current internet economy. It thrives on the complexities and dynamisms of business environment. To effectively deal with fraud, an agile fraud control apparatus is required in order to stop sophisticated fraudsters who capitalise on latest technological opportunity. Technology hence is another factor which determines fraud prevention.

The challenge of fraud control is to effectively prevent and investigate fraud in an automated high volume online transactions processing environment without jeopardizing the advantage of automation in term of efficiency, timeliness and customer services. Automated prevention systems are installed as part of internal control system with aim of protecting electronic transactions, by implementing up front edit and audit that check for procedural correctness in with objective of keeping frauds out of system. Such electronic systems ignores the fundamental nature of fraud control (Sparrow, 1997)

Chakrabali (2014) in his work on the factors affecting forensic practice and fraud in developing countries cited some specific issues affecting the field. He noted that, some companies find it costly in case of financial defalcation in which expert witness is required in court of law. He stated that most companies would prefer to settle the issue outside the court to shun the expensive cost and the risks of bad publicity on their corporate image. He also noted that the fast changing world of information technology and exponential increase use of computers systems pose a challenge to forensic accounting profession. This is because technology used by criminal and fraudsters keep on changing constantly and it would require

accountants with good experience to detect and prosecutor such fraudsters. This sometimes is difficult because it is hard to find forensic accountants with good information technology savvy.

2.4 Empirical Review

Various researches have been conducted on the impact of forensic accounting on fraud detection and deterrent in organization. The research confirms that there is appositive correlation between forensic accounting and prevention of frauds.

Islam, (2011) conducted a research in Bangladesh on forensic accounting profession and corruption reduction in Bangladesh. He sought to find out whether forensic accounting skills could be used as a tool to curtail frauds and corruption in Bangladesh. Out of his sample of chartered accountants, 94.14% confirmed that they had used the skills of forensic accounting to detect frauds.

Eyesi and Ezuwore (2014) conducted a research on the impact of forensic accounting on corporate Governances. This was a theoretical research conducted on secondary data .The conclusion of the research was that, financial auditor is not obliged to detect fraud during their financial audits, the responsibility of internal controls rest with management and hence management has sought the skills of forensic accountant to safe guard the internal control system. The forensic accountants have done this by incorporation of computer software in data processing and in the computer information system to detect frauds and errors. This has help management improve accountability to the all stake holders.

Eyesi and Ezuwore (2014) also found that forensic accountant assist audit committee to carry on oversight functions by providing better tools to evaluate the quality of normal financial statements produced by external auditors. The research found that forensic auditors have used fraud detection tools pro-actively unlike the financial auditors who use traditional tools which are reactive to fraud detections.

Gbegi (2013) carried out a study on the involvement of forensic accountants in planning management fraud risk detection procedures. The study revealed that forensic accountants effectively modify the extent and nature and audit test when the risk of management fraud is high .Forensic accountants proposes unique procedures that are not proposed by auditor when the risk of management fraud is high. Forensic accountants can enhance the effectiveness of an audit plan when the risk of management fraud is high and by involving them, the risk fraud assessment process leads to better results rather than just consulting them.

Luke (2013) conducted a research to establish whether the application of forensic accounting services could be used as a tool to increase confidence in auditors report. In the analysis of data, descriptive statistics was used in the study. He administered 400 questionnaires on firms of auditors, legal practitioners' and computer experts.

One of the questions sought to establish whether application of forensic audit could detect frauds perpetrated through thumb prints and signatures.

Data was analysed using Chi –Square statistic techniques. The calculated x^2 was 32.48 which were greater than x^2 of 7.81 at 4 degree of freedom and at 0.05 level of significance. The null hypotheses was therefore rejected and alternative hypotheses was accepted which stated that

application of forensic audit can significantly detect frauds perpetrated through thumb print and signatures.

Luke (2013) also sought to establish whether forensic audit could help to detect intentional misrepresentation made to financial auditors in the course of their duties. He set the following hypotheses to test his assertion.

Using the same degree of freedom at 0.05 level of significant he the calculated x_2 was 12.68 which was greater than 7.81.This made him to reject the null hypotheses and accept the alternative hypotheses that stated that, application of forensic audit can significantly detect intentional misrepresentation made to financial auditors in the course of their duties.

Modugu (2013) pointed out that fraud has become real and prevalent in the contemporary business environment. His study found that there is significant agreement among stakeholders on the effectiveness of forensic accounting in fraud control, improving financial reporting and internal controls. He noted that forensic accountants can provide significant assistants in preventing, investigating and resolving such issues. He recommended for the formalization and specialization of the profession by the National Association of Accountants in Nigeria.
Locally there has also been research conducted on the subject and results tend to confirm the positive corrections between forensic accountings services and reductions of frauds as indicated by below researchers.

Kyalo, Kalio and Ngahu (2014) conducted a research to establish the role of fraud prevention in enhancing financial reporting in county governments in Kenya. They used Nakuru County as study case. The results indicated that fraud prevention improved on financial reporting.

Omondi (2013) conducted a research on the impact of forensic accounting services on fraud prevention in the commercials banks in Kenya. The result confirmed that there existed a positive correlation on forensic accounting services and frauds reduction in the commercial banks in Kenya.

Muthee (2012) examined factors influencing utilization of forensic accounting in fraud detections with reverence to the banking industry in Kenya. The study establish that although the benefits of forensic accounting are numerous, the commercial bank do not use the services due to low awareness, unavailability of the forensic accountants, unqualified forensic accountants and high costs associated with engagement of forensic accountants.

Wanemba (2010) did a study on the strategies employed by commercial banks in Kenya to combat frauds. She found that it is necessary for banks to have anti frauds strategy key a mong them being regular audits. She also pointed that it is necessary for bank to invest in advance technology.

2.5 Summary of Literature Review

This chapter was aimed at reviewing the various theories of fraud and application of forensic accounting services in prevention of frauds. These theories are in relation to the purpose of the study which seeks to establish the importance of forensic accounting services in prevention of frauds in Insurance companies. While some theories have suggested understanding of the frauds as the bases for prevention of frauds, many researchers tend to belief that the proactive application of forensic accounting services could be the main factor that could prevent frauds from occurring. Hence the chapter therefore reveal that forensic

accounting services are relevance in combating frauds and malpractices. These studies do not show why insurance companies don't proactively use the services of forensic accountants in combating and reducing frauds in their normal operations. Hence there is a need to intensify study in the area of forensic accounting and insurance frauds in order to fill the gap and make the information available to all stakeholders.

CHAPTER THREE

RESERCH METHODOLOGY

3.1 Introduction

This chapter provide an overview on the research methodology that will be used in course of the research process. It discusses the research design, identification of the population and the sample of the study. It also establishes the tool to be used in data collection and the method of data analysis.

3.2. Research Design

The objective of this research was to answer the research questions and establish whether there is relationship between forensic accounting services and fraud prevention in insurance companies in Kenya. This therefore was a descriptive research in nature which tried to establish the relationship between forensic accounting services and frauds detection and deterrent. Descriptive survey design assist in solving questions concerning the current status of the objects under review (Mugenad & Mugenda 2003).A survey is method of collecting information about a phenomenon. In a survey, direct or indirect contact is made with the subjects of the study by use of specially designed tools like questionnaire, structured interviews and focused groups (Cooper & Schidler, 2003). Primary data was collected using questionnaires and hence survey method as the mode of data collection was appropriate for the research.

3.3 Population and Sample of the study

Population is the whole set of measurement or counts a bout which a researcher wants to draw a conclusion while sample is a subset of the population (Rees, 1995).The target

population was the insurance companies whose headquarters were based in Nairobi. According to AKI report 2013 there were 49 registered insurance companies in Kenya. All of these insurance are under supervision of the insurance regulatory authority.

Hussey and Hussey (1997) and Robson (1993) agree that there is no ideal or prescribed sample size. They states that the sample size depends on the discipline the level of confidence expected in the answers and anticipated response rate. All the 49 insurance companies will be considered for data collections.

3.4 Data Collection Methodology

Data collection involves information gathering which try to answer the question which prompted the undertaking of the research project (Kothari, 2003). The study will use primary data as the source of information.

Questionnaire was used to collect the primary data required for the research project. List of standard questions were prepared to fit the inquiry of the study. The questions were structured in 3 parts to cover the three areas under review. The questionnaire forms were sent to senior finance officers of the selected companies using emails where applicable. Where this was not possible the questionnaire forms were delivered physically. Accompanying the questionnaire form was an introductory letter explaining the purpose of the study.

3.5 Data Analysis

After the receipt of questionnaires from the respondents, they were edited to ensure completeness and consistency.Coding was done on the data to enable processing of the responses. Descriptive analysis was used where applicable. This included tables, charts,

graphs and percentage. Multiple regressions was used to analyses quantitative data and where by Statistical Package for social science was used to analyse the data

3.6 Conceptual Model

The study hypothesised that, fraud prevention in insurance companies was a function of various forensic accounting variables. The study used indicators of forensic accounting services such as Investigation and litigation support services as independent variables. Fraud Red flags frequency occurrence was used as proxy for Fraud prevention. The fraud occurrence was measured by how often reds flags were observed in the organisation. The relationship between the variables is represented by the model below on equation 1.

Fraud Prevention) = β_0 + β1 (Investigation Services) + β2 (Litigation Services) + μ…… …..1

3.7 Analytical Model

The regression model is shown below and therefore the definition and measurement for variables. Multiple regression analysis using Statistical Package for social science (SPSS) will be used to establish the effect of forensic accounting services on fraud reduction in the insurance companies. Correlation Analysis will also be carried out to confirm the kind of relationship that exist between the dependent variable (Fraud Prevention) and independent variables (Forensic Accounting services)

The Variables were measured in the following ways

Fraud Prevention was measured by the Frequency of Fraud Red Flags occurrence.

We expected that, the more forensic accounting services were applied, the fewer Red Flag would be observed.

Investigation services were measured by Level of effectiveness of forensic accounting investigative techniques in frauds detection.

Litigation Services was measured by degree of support given by forensic accountant during fraud case proceedings

The model algebraic specification is shown below.

FP=f (IV, LS)……..2

FP= $\beta_0 + \beta 1$ (IV) $+ \beta 2$ ($LS_) + \mu$…… ….. 3

Where:

FP=Fraud Prevention

β_0=Represents constant and intercept of the model and indicates the magnitude of fraud without the impact of forensic accounting

β_1 = this is coefficient of investigation of fraud and it indicate the degree of change on fraud prevention by applying forensic accounting services through investigation.

β_2= this co-efficient of litigation support and it indicate the degree of change on fraud prevention by applying forensic accounting through litigation support

FP=Fraud Prevention

IV=Investigation services

LS=Litigation support

μ=Error Term of the Model

The effect of Investigation services and Litigation support and on detection and deterrent of frauds in insurance companies was determined by use of questionnaires. The effects were measured and were based on indices obtained from responses derived from Likert's scale questions.

3.8 Test of Significance

Pearson correlation coefficient was used to test the relationship between Forensic Accounting services (independent Variables) and fraud prevention (Dependent Variable) in insurance company. These inferences were conducted at 95% confidence level. The result Obtained was tested for correlation coefficient .The higher the correlation coefficient the test retests reliability.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETAION

4.1 Introduction

This chapter presents a detailed analysis of the data collected through questionnaires. For appropriate analysis, the questionnaires were sorted and coded to ensure completeness. The data was analysed using statistical package for social science (SPSS version 17.0).The data was analysed and presented inform of frequencies percentages, tables charts. Data was collected from finance staffs, risk departments and internal audit department of insurance companies.

4.2 Response Rate

The study targeted 49 insurance companies in Kenya, from which primary data was collected. The study obtained data from 42 companies which represented 85 % of the whole population. According to Mugenda and Mugenda (1999), response rate of 50% is adequate for analysis and reporting. Hence 85% was adequate representative of the whole population.

4.2.3 Ownership

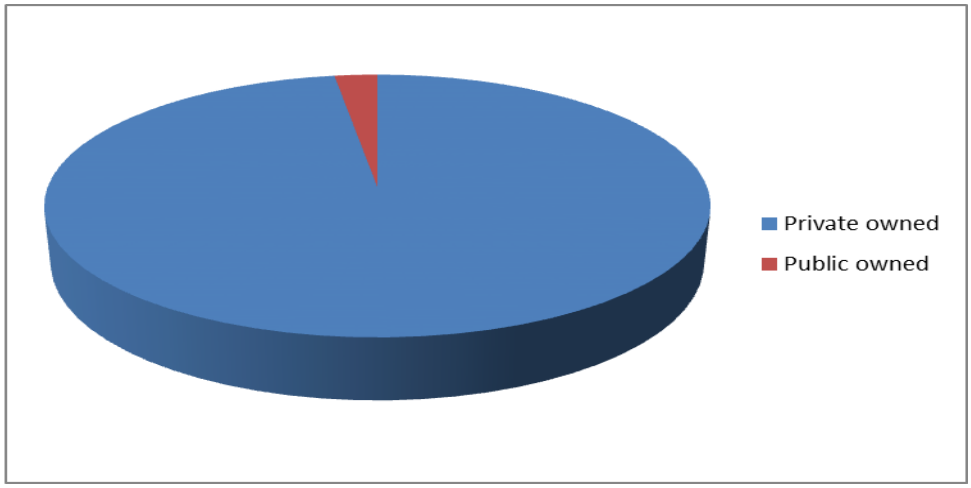

Table 4.1: Ownership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private owned	41	97.6	97.6	97.6
	Public owned	1	2.4	2.4	100.0
	Total	42	100.0	100.0	

A big number of insurance companies have private ownership at 97.6% while only 2.4% of insurance companies are public owned. This was meant to measure the distribution of insurance fraud risk in case there was a major fraud. In the above analysis, it means that the cost of fraud would be distributed to a few individuals or to single investor in case of a major insurance fraud.

4.2.4 Annual Turnover

Table 4.2: Annual Turnover

	Turn Over	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	100-500M	5	11.9	11.9	11.9
	500M-1Billion	5	11.9	11.9	23.8
	Over 1 Billion	32	76.2	76.2	100.0
	Total	42	100.0	100.0	

(Source: Research Data 2015)

The respondents were requested to classify the size of their companies in terms of Turnover. This was meant to gauge the level of transactions assuming high turnover corresponded with high number of activities while low turnover corresponded with a low number of activities.

About 76.2% of insurance companies have their turnover above Kes 1 billion indicating the high level of activities in these companies.

4.2.4 Importance of Frauds Risk Management

Table 4.3: Frauds Risk Management

Description	N	Mean Rating
Ethical requirements	42	4.0238
Organization reputation	42	4.4286
Compliance to IRA	42	4.8333
Direct Cost control	42	4.8571

(Source: Research Data 2015)

Results from Table 4.2 indicates that majority of respondents believed compliance with ethical requirement, Organization reputation, compliance with Insurance Regulatory authority, and direct cost control were importance aspect of fraud risk management with means of 4.02,4.42,4.83 and 4.85 respectively.

4.2.5 Indicators of Frauds in Insurance Companies

Table 4.4: Insurance Frauds Indicators

Description	N	Mean
Employee reluctant to take their leave days, working long hours with indication of permanent stress	42	2.1190
Un explained wealth	42	2.4048
Raising company costs with no corresponding immediate drivers	42	3.2143
Close long-term relationship between employees and contractors	42	3.8333
Increased in customers complains	42	4.5000
Valid N (listwise)	42	

(Source: Research Data 2015)

Respondents were requested to indicate how they identified frauds in insurance companies. The results in Table 4.3 indicate that, increase in customer complains was a major indicator of fraudulent environment followed by, long term close relationship between employees and clients, raising company costs with no corresponding immediate drivers, un explained employee wealth and employee reluctant to take their leave days, working long hours with indication of permanent stress in that order with means of 4.5, 3.8, 2.4 and 2.1

4.2.6 Fraud Frequency (Red Flags Occurrence)

Table 4.5: Fraud Frequency

	N	Mean
Multiple policies on one property	42	1.6667
The claim is made a short time after inception of the policy.	42	3.2381
High Number of other recent claims.	42	3.8571
Recent increase in coverage.	42	4.2143
Insured is overly pushy for quick settlement	42	4.2857
Valid N (listwise)	42	

(Source: Research Data 2015)

Respondents were requested to indicates how often specific fraudulent activities occurred in organization. From result on table 4.5, multiple policies on one property were the least occurring fraud. Others were, claim made within a short time after inception of the policy, high number of other recent claims, client recent increase in coverage, and client overly pushy for quick settlement in that order with means of 1.6, 3.2, 3.8, 4.2, 4.2 respectively.

4.2.7 Effectiveness of Forensic Accounting Investigative Techniques

Table 4.6: Effectiveness of Forensic Accounting Investigative Techniques

	N	Mean
Insurance coverage analysis	42	3.2143
Calculation of statistical parameters like averages	42	3.3571
Witness Interviews	42	3.6667
Identification of missing values through gap testing.	42	4.2381
Identification of an usual entries through stratifications	42	4.3333
Previous insurance claim search	42	4.6190
Classification of entries to find data patterns	42	4.6667
Identification of duplicate entries such as payment and claims	42	4.8810
Valid N (listwise)	42	

Respondents were requested to indicate the effectiveness of specific forensic accounting investigative techniques in fraud control. Identification of duplicate entries such as payment and claim was one of the major technique used by forensic accountant to control fraud followed by classification of entries to find data pattern, previous insurance claim search, identification of an usual entry though stratifications, identification of missing values through gap testing, witness interviews, calculation of statistical parameters like averages and insurance coverage analysis in that order.

4.2.8 Litigation Support in Court Case Preceding

Table 4.7: Litigation Support

Description	N	Mean
Proper calculation of complex and disputed business values.	42	3.1667
Analyzing transaction flow will for proper advice on possibility of fraud during litigation.	42	3.5000
Preparation and presentation of expert opinion during the court case proceeding.	42	3.7619
Records examination and reconstruction of financial statement for correct consequential claims.	42	4.2619
Discovery, interrogatory preparation and request for production of evidence in court of law.	42	4.9762
Valid N (listwise)	42	

(Source: Research Data 2015)

From table 4.6, results indicates that discovery, interrogatory and request for production of evidence in in court of law was major litigation support provided by forensic accountants with a means of 4.9. Records examination and reconstruction of financial statements for correct values in consequential claims was also a major litigation support with a mean of 4.2.The other litigation support were preparation and presentation of expert opinion during court case preceding, analyzing transaction flow for proper advice in court of law, proper calculation of complex disputed values with means of 3.7, 3.5 and 3.1 respectively.

4.2.9 Regression Model

Table 4.8: 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	.406[a]	.165	.122	.81920	.165	3.845	2	39	.030

a. Predictors: (Constant), Litigation services, Investigation Services

The adjusted R of 12.2 % indicates the variation in dependent variable due to change in independent variables. It means that fraud would reduce by 12.2% by application of forensic accounting activities. The P values are less than 0.05 which means that forensic accounting services are significant in fraud prevention in insurance companies.

Table 4.8: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.161	2	2.581	3.845	.030[a]
	Residual	26.172	39	.671		
	Total	31.333	41			

Dependent variable (Fraud Prevention)

4.2.10 Correlation Analysis

Correlation is astatically measure that can show whether and how strong pairs of variables are related. Correlation is measured by (r) where which ranges from -1.0 to 1.0. When r is close to zero, it means there is no relation between variables. When r is close to one, it means a positive movement in one variable would cause a positive movement in the other variable. When r is negative and close to -1, it means a movement in one variable would cause a reduction in the other variable.

Table 4.9: Pearson Correlation Coefficients between Fraud Prevention and Independent Variables

		Fraud Prevention
Fraud Prevention	Pearson Correlation	1
	Sig. (2-tailed)	
	N	
Investigation Services	Pearson Correlation	-0.31
	Sig. (2-tailed)	0.04
	N	42
Litigation Services	Pearson Correlation	-0.2
	Sig. (2-tailed)	0.1
	N	42

The analysis above shows that, Fraud prevention Services has the strongest negative correlation coefficients of -0.31, P values 0.04 influence on fraud reduction in insurance companies. Litigation services have got Pearson correlation of -0.21

Table 4.10: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	13.250	4.652		2.848	.007	3.840	22.660
Identification of duplicate entries such as payment and claims	-.872	.391	-.327	-2.231	.032	-1.663	-.081
Discovery, interrogatory preparation and request for production of evidence in court of law.	-1.472	.830	-.260	-1.773	.084	-3.152	.208

Dependent Variable (Fraud Prevention)

FP=13.250-.872Investigation Services-1.472 Litigation Support

From the above regression analysis, it indicates that fraud prevention is inversely related to forensic accounting services. It indicate that a unit increase in forensic accounting investigation would reduce fraud by a factor of 0.872 and a unit increase in litigation services would reduce fraud by a factor of 1.472

4.2.11 Common Frauds in Insurance Companies

Table 4.11: Common Frauds in Insurance Companies

	N	Mean
Billing for a non-covered service as a covered service.	42	1.6429
Incorrect reporting of diagnoses or procedures	42	1.9762
Arson-for-Profit by owner	42	2.3095
The Fake Injury Scam	42	2.6429
Personal Injury Schemes by corrupt attorneys/lawyers	42	3.0476
False or unnecessary issuance of prescription drugs.	42	3.1429
Property Fraud by owner buying numerous policies and consequently damaging property later	42	3.3333
False Statement -Agent or insurer making a false statements	42	3.3571
Overutilization of services.	42	3.4762
Misrepresenting Facts to Receive Payments	42	3.4762
Staged managed car accidents	42	3.5238
Falsifying theft Reports	42	3.5476
Creating a Fraudulent Claim	42	3.7381
Exaggerated Claims overstating the amount for loss	42	3.7381
Fake/False Documents-Agents or insurer issuing fake policies and certificates,	42	3.8095
Pocketing Premiums by agents/brokers	42	3.9048
Exaggerated repair costs after a car accident	42	4.0238
Corruption (kickbacks and bribery).	42	4.6429
Valid N (listwise)	42	

(Source: Research Data 2015)

Results from table 4.9 indicates that corruption and Kick back top the list of the most preferred frauds in insurance companies followed by exaggerated of repair costs after car accident with means score of 3.9. Other major fraudulent schemes includes, pocketing of premium by insurance brokers/agents with means score 3.9, fake documents and fake policies with means score of 3.8, overstated claims with means score of 3.7, creating fraudulent claim with means score of 3.7, falsifying reports with mean score of 3.5, stage managed car

accidents 3.5, misrepresentation of facts to receive payments with mean score of 3.4 and over utilization of service with mean score of 3.4,

Other fraudulent schemes includes false or unnecessary issuance of prescription drugs, personal injury Schemes by corrupt attorneys/lawyers, personal injury schemes by corrupt attorneys/lawyers, and arson-for-Profit by owner with means of 3.3, 3.1, 3.0 2.6 and 2.3 respectively. Incorrect reporting of diagnoses or procedures and billing for a non-covered service as a covered service are the two least fraudulent schemes with means of 1.9 and 1.6 respectively.

4.3 Discussion of Data Analysis

The study examined the effect of forensic accounting services on fraud prevention in insurance companies. The result indicated that there is an inverse relationship between fraud reduction and Forensic Investigative services and litigation services hence fraud prevention.

From the research findings, it is clear that there exist a negative correlation between dependent variable (Fraud Prevention represented by fraud reductions) and independents variables (Investigation services and Litigation services)

An increase in a unit of Forensic accounting investigative services would reduce frauds by -0.87 and a unit increase in Litigation service would reduce fraud by 1.1472 hence fraud prevention. The study also revealed that insurance companies were interested in controlling frauds with costs reduction being the most important reason for fraud prevention with a mean score of 4.8.Increase in customer complains was considered as the most indicative of a fraudulent environment with a mean score of 4.5 while employee reluctant to take leave days and working long hours as the least indicative of fraudulent environment with a mean score of 2.1.Forensic accounting services had the highest impact on reducing multiple policies on

one property since the means score on this red flag was the least with a score of 1.6. The most common fraud in insurance companies was considered to be corruption and Kick back followed by exaggerated repair cost on damaged vehicles with a mean score of 4.6 and 4.0 respectively while billing for non-covered service as covered service was the least with a mean score of 1.6

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMEDATION

5.1 Introduction

The chapter presents the summary of the result of the study and the main conclusion drawn from the analysis from the data. The following discussion, conclusion and recommendations were made from the data collected and analysed. The main objective of the study was to determine the effect of Forensic accounting services in fraud prevention in insurance companies hence recommendation conclusion and recommendation was based on this objective.

5.2 Summary of Finding

The study objective was to establish the effect of forensic accounting services on fraud prevention in insurance companies of Kenya. Primary data was collected from finance, audit and risk departments of insurance companies. Regression analysis was done to determine the effect of forensic accounting services and fraud prevention. Fraud red flags occurrence was used as a proxy for fraud prevention. The study revealed that there was an inverse relationship between fraud reduction and both forensic accounting investigation services and forensic accounting Litigation support services hence fraud prevention. The study found that identification of duplicate entries such as payment and claim was one of the major forensic accounting investigative techniques which impacted on fraud prevention most. Discovery interrogatory, preparation on request for production of evidence in court of law was identified as the most litigation activity performed by forensic accounting during a litigation support in court of law. Forensic accounting services were very effective in reduction of multiple policies on one property while the services could not be used to stop clients pushing for the

payment of their claim. This means client overly pushing on payment of their payment was not considered as one of a red flag for fraud in insurance companies. Corruption and kick back was identified as the most for of fraudulent scheme in insurance companies while billing of non-covered services was considered as least form of fraud.

5.3 Conclusion

The study therefore concludes that the role of forensic accountant in fraud prevention in insurance companies is vital. Forensic accountants help lawyers, courts and regulatory body through application of accounting principles, auditing and investigative procedures in solving certain legal problems. This is because forensic accountants possess skills and experience in accounting, auditing, taxation business operations, management and internal controls. The impact of fraudulent activities on insurance companies is a major setback on company's performance since it overstates the cost of doing business. Fraud prevention therefore is a major aspect of daily business activities which should be performed through engagement of forensic accountants. Most company sighted the cost control as the major reason for fraud controls among others. This indicates that fraudulent activities increases the cost of companies hence impact negatively on company performance.

5.4 Policy Recommendation

The following recommendations have been made in relation to forensic activities in insurance companies of Kenya. These recommendations are in congruence with the literature review conducted in chapter three.

Insurance company should stop relying on reactive measures like whistle-blowers during fraud detections and instead they should take a more hands on approach to fraud detection

and prevention. For insurance companies to realise the full potential of forensic accounting services, organization needs to have distinct structures within their department separating the roles of forensic accountant from that of the auditor. This is because the roles of the two are completely different with different objectives. This will enhance complementary between the two departments while at the same time avoiding any conflict between them. Forensic accountants may use the work of the auditor and vice versa.

While forensic accountants work proactively to prevent frauds from occurring, organization management need foster a specific tone at the top in relation to frauds. This should be form part of companies' policies and procedures and it should be communicated to all stake holders. The tone at the top should form part of the company culture regarding frauds. This will ease the work of forensic accountants and will encourage whistle blowing among employee in case any employee notice something unusual.

Proper training should be done to senior management and other employee. In order to detect and prevent fraud, employees must first know what to look for, and then what to do about it. Employee should be thoroughly trained about the company policy and procedures. It should be ensured that, they know and follow all rules and guidelines. It should also be ensured that, they understand the repercussions of committing a fraud up to and including criminal prosecution.

5.5 Limitation of the study

Fraud is a sensitive issue especially in corporate organization and therefore getting correct and accurate information was subjective because it depended on respondent's honesty. In some instances the respondents declined to give such information altogether, relating to fraud citing prohibition by the organization policy and procedures.

The dataset used in the study did not include other variables, which may affect the used of forensic accounting services such as availability of services and the cost of such services to the organization.

The fraud environment is dynamic and keeps on changing due to factors like advancement of technology, regulatory requirements and corporate governance principle. The finding may therefore not truly reflect the effect of application of forensic accounting in frauds prevention.

5.6 Suggestion for Further Research

The study sought to establish the effectiveness of forensic accounting services in fraud prevention in insurance companies in Kenya. It only concentrated on 49 insurance companies as per Association of Kenyan Insurance register of 2013. However there are many players in insurance companies which include brokers, Agents and Government. Therefore other studies should focus on the whole sector and find the effect of such sectors on fraud management in insurance industry.

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Appendix I: Questionnaire

Questionnaire

This study is aimed at exploring the relevance of Forensic accounting services in curbing frauds in the insurance industry in Kenya. You are kindly requested to fill **(Tick online)** your best suitable answers on the space provided. **(Please email back your responses to the email provided at the bottom of questionnaire**).The Answers to the questions will be treated with at most confidentiality.

PART A General Business Information

PART B. Fraud Awareness

PART C. Forensic Accounting Services and frauds occurrences in Insurance companies

Questionnaire number…….. Click here to enter text.

Date……Click here to enter a date.

PART A: General Business information

1. What is the type of ownership represented by your company (Tick appropriately)

Private company [□] Public owned [□]

2. What is your company's Turn over/Revenue per year?

1-100 million [□] 100-500 million [□] 500-1 Billion [□] Over 1 Billion [□]

PART B: Fraud Awareness

1. In Likert's scales 1-5 kindly indicates the importance of fraud risks management in your company.

Key: 1-Not Important 2-Less important 3- Important 4-Very Important 5-Extremely Important

Indicators	1	2	3	4	5
1. Direct Cost control	☐	☐	☐	☐	☐
2. To Enhance Organization reputation	☐	☐	☐	☐	☐
3. Compliance to IRA	☐	☐	☐	☐	☐
4. Alignment with Ethical requirements	☐	☐	☐	☐	☐

2. In Likert's scales of 1-5 kindly indicates the level of importance of these attributes as indicators of frauds in your organization.

Key: 1-Not Important, 2-Less Important, 3- Important, 4-Very Important, 5-Extremely Important

Indicators	1	2	3	4	5
1. Un explained wealth by employee	☐	☐	☐	☐	☐
2. Increased in customers complains	☐	☐	☐	☐	☐
3. Raising company costs with no corresponding immediate drivers	☐	☐	☐	☐	☐
4. Close long-term relationship between employees and contractors	☐	☐	☐	☐	☐
5. Employee reluctant to take their leave days, working long hours with indication of permanent stress	☐	☐	☐	☐	☐

PART C: Fraud Frequency and Forensic Accounting Services.

Section One: Fraud Occurrence

Red Flags indicates the presence of Fraud

Indicate how often the following red flags are observed in your organization.

Key: 1-Very rarely, 2-Rarely 3-Occassionally 4-Frequently 5-Very frequently

No	Description	1	2	3	4	5
1	The claim is made a short time after inception of the policy.	☐	☐	☐	☐	☐
2	Insured is overly pushy for quick settlement	☐	☐	☐	☐	☐
3	Recent increase in coverage.	☐	☐	☐	☐	☐
4	Multiple policies on one property	☐	☐	☐	☐	☐
5	High Number of other recent claims.	☐	☐	☐	☐	☐

Section Two –Investigation

Indicate the effectiveness of the following investigative techniques provided by Forensic accountant in fraud prevention in your organization.

Key: 1-Very ineffective 2-Ineffective 3-Average 4-Effecive 5-Very Effective.

No	Description	1	2	3	4	5
6	Calculation of statistical parameters like averages	☐	☐	☐	☐	☐
7	Classification of entries to find data patterns	☐	☐	☐	☐	☐
8	Identification of an usual entries through stratifications	☐	☐	☐	☐	☐
9	Identification of duplicate entries such as payment and claims	☐	☐	☐	☐	☐

10	Identification of missing values through gap testing.	☐	☐	☐	☐	☐
11	Insurance coverage analysis	☐	☐	☐	☐	☐
12	Previous insurance claim search	☐	☐	☐	☐	☐
13	Witness interviews	☐	☐	☐	☐	☐

Section Three: Litigation Services.

To what extent do you agree with the following attributes as the way litigation services by forensic accountant bolster/strengthen a fraud case preceding in a court of law?

Rate your agreement with the following statements on Likert scale of 1-5

Key 1-Can't Tell 2-Strongly disagree 3-Disgree 4-Agree 5-Strongly agree.

No	Description	1	2	3	4	5
14	Proper calculation of complex and disputed business values.	☐	☐	☐	☐	☐
15	Analyzing transaction flow will for proper advice on possibility of fraud during litigation.	☐	☐	☐	☐	☐
16	Records examination and reconstruction of financial statement for correct consequential claims.	☐	☐	☐	☐	☐
17	Preparation and presentation of expert opinion during the court case proceeding.	☐	☐	☐	☐	☐
18	Discovery, interrogatory preparation and request for production of evidence in court of law.	☐	☐	☐	☐	☐

Part: D Common Types of insurance frauds

The following statement tests the most common type of frauds in insurance industry.

To what extent do you agree with occurrence of the following frauds? Please tick appropriately

Key: 1- Never, 2- Rarely, Some Times, 4- Very Often, 5- Always

Description	1	2	3	4	5
1. Billing for a non-covered service as a covered service.	☐	☐	☐	☐	☐
2. Incorrect reporting of diagnoses or procedures	☐	☐	☐	☐	☐
3. Overutilization of services.	☐	☐	☐	☐	☐
4. Corruption (kickbacks and bribery).	☐	☐	☐	☐	☐
5. False or unnecessary issuance of prescription drugs.	☐	☐	☐	☐	☐
6. The Fake Injury Scam	☐	☐	☐	☐	☐
7. Fake/False Documents-Agents or insurer issuing fake policies and certificates,	☐	☐	☐	☐	☐
8. False Statement -Agent or insurer making a false statements	☐	☐	☐	☐	☐
9. Pocketing Premiums by agents/brokers	☐	☐	☐	☐	☐
10. Arson-for-Profit by owner	☐	☐	☐	☐	☐
11. Creating a Fraudulent Claim	☐	☐	☐	☐	☐
12. Exaggerated Claims overstating the amount for loss	☐	☐	☐	☐	☐
13. Falsifying theft Reports	☐	☐	☐	☐	☐
14. Misrepresenting Facts to Receive Payments	☐	☐	☐	☐	☐

15. Personal Injury Schemes by corrupt attorneys/lawyers	☐	☐	☐	☐	☐
16. Property Fraud by owner buying numerous policies and consequently damaging property later	☐	☐	☐	☐	☐
17. Staged managed car accidents	☐	☐	☐	☐	☐
18. Exaggerated repair costs after a car accident	☐	☐	☐	☐	☐

Filled in by (Optional) Click here to enter text.

Designation ……Click here to enter text.

Thank you for your time in answering the questions

Appendix II: List of Registered Insurance Companies – 2013

No.	Company Address
1	A P A Insurance Limited
2	Apollo Life Assurance Limited
3	CIC General Insurance Limited
4	G A Insurance Limited
5	ICEA LION General Insurance Company Limited
6	ICEA LION Life Assurance Company Limited
7	The Jubilee Insurance Company of Kenya Limited
8	AAR Insurance Kenya Limited
9	Africa Merchant Assurance Company Limited
10	AIG Kenya Insurance Company Limited
11	British-American Insurance Company (Kenya) Limited
12	Cannon Assurance Limited
13	Capex Life Assurance Company Limited
14	CFC Life Assurance Limited
15	CIC Life Assurance Limited
16	Continental Reinsurance Limited
17	Corporate Insurance Company Limited
18	Directline Assurance Company Limited
19	East Africa Reinsurance Company Limited
20	Fidelity Shield Insurance Company Limited
21	First Assurance Company Limited
22	Gateway Insurance Company Limited
23	Geminia Insurance Company Limited
24	Intra Africa Assurance Company Limited
25	Invesco Assurance Company Limited
26	Kenindia Assurance Company Limited
27	Kenya Orient Insurance Limited
28	Kenya Reinsurance Corporation Limited
29	Madison Insurance Company Kenya Limited
30	Mayfair Insurance Company Limited

31 Mercantile Insurance Company Limited
32 Metropolitan Life Insurance Kenya Limited
33 Occidental Insurance Company Limited
34 Old Mutual Life Assurance Company Limited
35 Pacis Insurance Company Limited
36 Pan Africa Life Assurance Limited
37 Phoenix of East Africa Assurance Company Limited
38 Pioneer Assurance Company Limited
39 Real Insurance Company Limited
40 Resolution Insurance Company Limited
41 Shield Assurance Company Limited
42 Takaful Insurance of Africa Limited
43 Tausi Assurance Company Limited
44 The Heritage Insurance Company 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