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## THE EFFECTS OF FRAUD ON PERFORMANCE OF INSURANCE INDUSTRY: A CRITICAL REVIEW OF LITERATURE

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### ABSTRACT

*Insurance fraud is a challenge confronting the insurance industry in the recent decades. The vice is as old as insurance and is on the increase because of reluctance of the stakeholders like; the regulators and insurers, including the police, to adequately address it. The aim of this literature review was to investigate the effects of fraud on the performance of the insurance industry. This paper adopted a critical review of various related literature. The literature has been arranged in a logical sequence; qualitative and quantitative. A funnel approach was used in reviewing the literature, starting with global, followed by regional and finally local. Some findings of the review gave conflicting findings; while other results show that insurance fraud adversely affects the insurance industry that is; as fraud increases, performance decreases and vice versa, others showed a positive significant relationship. The review revealed conceptual, as well as contextual research gaps for future studies in the area of insurance fraud. From the reviewed literature only one of the studies used three types of fraud (customer, intermediary and internal) as independent variables to establish how they affect financial performance of the insurance industry. Likewise reviewed literatures have not used other measures of performance besides financial measures. Hardly has any research addressed the effects of insurance fraud on financial and non-financial performance of the insurance industry in Kenya. Therefore, this paper recommends future study on the effects of four specific insurance fraud components (Customer, intermediary, employee and third party) on financial and non-financial performance of the insurance industry in Kenya.*

**KEY WORDS:** Fraud, Insurance Industry, Performance, Customer, employee, Intermediary, Third Party

### INTRODUCTION

Fraud can be generally described as a crime for illegitimate financial gain that uses deception as its principal modus operandi. Utah Insurance Department (2015) and the Center for Insurance Policy and Research (2014) expound that insurance fraud in particular happens when a person lies to an insurer, intermediary or any other party involved in the insurance contract in order to make financial gain which they don't deserve, or if an insurer, intermediary, insured, a person outside the insurance contract or service provider makes a willful lie to gain financially. This deception can take place in the form of misrepresentation when individuals are proposing for



insurance coverage or during launch of a claim. This vice has been around as long as insurance has existed and is a major challenge confronting stakeholders in the insurance industry.

The International Association of Insurance Supervisors (I.A.I.S, 2007) as cited by (Akomea-Frimpong, Andoh & Hene, 2016) defines insurance fraud as “an act of omission intended to gain dishonest advantage by the fraudster for the purpose of other parties”. Levi (2008) as cited in Button (2012) explicates that insurance fraud is said to occur if a person or persons lie to an insurer, intermediary or any other party in order to gain advantage, and it can happen either at underwriting stage or during lodging of a claim. This argument agrees with Damage and Hanid (2005) as cited by (Taiwo, Agwu, Babajide, Okafor & Isibor, 2016; C.A.I.F, 2014; The Center for Insurance Policy and Research, 2014).

Ernst & Young (2011) as cited by Buoni (2012) identified three broad categories of fraud: policyholder fraud, intermediary fraud and internal fraud. The first category includes fraud committed by the insured. The second category includes fraud committed by intermediaries (Brokers and Agents) against insurers and/or policyholders, while the third category involves employee(s) in collusion with others. Intermediaries for instance may be fraudsters, diverting premiums and in addition could falsify records (Wharton, 2013 as cited by Lindberg & Seifert, 2016). Kramer (2015) adds that insurance fraud can also be committed by a third party, hence introducing a fourth component of insurance fraud.

Popow (2012) argues that, insurance fraud can be committed by any person that is involved in the insurance transaction or in a claim: policyholder, claimants and service providers can all commit insurance fraud. The International Association of Insurance Supervisors (IAIS, 2007) as cited by Gill and Randall (2016) and Lindberg and Seifert (2016) agree with this assessment, noting that in the micro-insurance industry, just like in traditional insurance, customers’ intermediaries, service providers and insurers’ staff can get involved in insurance fraud, either during insurance application, underwriting or claims processing. All these arguments concerning to the parties who commit insurance fraud agree with the economic contractual theory by Hart and Moore (1988) as cited by Angima and Omondi (2016).

The presence of insurance fraud raises insurance premium, puts pressure on the financial stability of insurance companies and adversely influences accessibility of insurance (Chudgar & Ashthana, 2013). The Association of Certified Fraud Examiners (A.C.F.E, 2012) reveals that averagely organizations lose 5% of their revenue annually due to fraud, which translates to roughly \$3.5 trillion globally. Out of this, insurance fraud accounts for more than \$40 billion per annum, consisting of; premium diversion, policy twisting, asset theft, and employers’ pay-off fraud.



According to Coalition against Insurance Fraud (C.A.I.F, 2015), 10% of the insurance losses and loss adjustment expenses each year are because of insurance fraud. The same report indicates that fraudsters steal \$80 billion per year in all lines of insurance. Efficiency, productivity and innovation of the insurance industry can be affected by fraud, as fraudsters divert resources to non-constructive activities, hence hindering an organization's ability to prosper.

Some theoretical studies envision that, there could be an impaired corporate image with actual repercussions for fraud victim organizations. For instance, financial malpractice should cause a bad relationship between the firm and the customer. Customers may be unwilling to deal with management team of questionable integrity, hence lowering their demand for the fraud firm's services. This negative change in customer behavior can be referred to as a customer reputational sanction (Klein & Leffler, 1981 as cited by Johnson, Xie & Yi, 2013). Tennyson (2008) as cited by Smith (2016) concluded that the effect of fraud on organizations is mistrust of relationship.

The most common indicator of performance in the insurance industry is financial, which can be measured by monitoring profitability levels (Zenios *et al.* 1999, as cited in Omasete, 2014). Garba and Abubakar (2014) add that the commonly used ratios in measuring profitability are; return on assets (ROA) and return on equity (ROE). William, Greene and Segal (2004) as cited by Sambasivam and Ayele, (2013), Slater and Narver (1995) and Kotler and Keller (2009) as cited by Nebo and Okolo (2016) agree with this adding that, profitability is an important requirement for the continuity, advancement and strategic uniqueness of insurers and the most economical source of funds.

Sharma (2015) argues that the current business settings necessitate a superior grasp of customers and their needs, efficient internal business processes and highly proficient workforce. Niven (2005) as cited by Kariuki (2012) disagrees with exclusive dependence of financial measurement and observes that, however crucial these historical measures are, they must be used alongside other measures that signal future financial success. According to (Gizer, 2012) the "Balanced Score Card" goes beyond the historical performance measure and investigates the organization's dealings from four perspectives; financial, customer, internal business processes and learning and growth perspectives. The advantage of the balanced scorecard is that organizations can be able to track financial results, and at the same time observing non-financial measures on how they are building their capabilities with their customers, processes, employees and systems for future advancement and profitability. Magu (2013) argued that use of balanced scorecard as a performance measurement tool in the insurance industry in Kenya is popular and that the system is comprehensive and effective.



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## **JUSTIFICATION**

The SAS institute report (2015) and the IRA, Insurance Fraud Investigation Unit (2016) first quarter report affirm that insurance fraud is on the rise. KPMG (2015) report from the East Africa Insurance Fraud Risk survey sent a clear message that fraud is indeed a significant threat to the sector. The report revealed that regionally insurance fraud is a bigger problem than telecommunication fraud and even banking fraud and this cannot be ignored but rather calls for researches to work towards fixing the problem.

Again the insurance industry has long been known as one that experiences relatively soaring levels of fraud (Clemmons, 2007; Levi, 2008 as cited by Gill and Randall, 2015 & Insurance Fraud Taskforce, 2016). Adding to this is the finding that insurance fraud generally has received limited scholarly attention. Button, Brooks and Lewis (2017) contend that there are many worldwide studies on various forms of fraud committed by persons and or organized crimes in different industries; but restricted research on insurance fraud. Therefore, this area of insurance fraud is still suffering from scarcity of literature and requires more study.

## **LITERATURE REVIEW**

There is a growing interest in research on fraud both in the business world, professionals and academicians alike, particularly in the insurance sector. According to SAS institute (2015), insurance fraud is on the rise. FICO (2013) insurance fraud survey highlights concurs with SAS institute report and revealed further that conservative industry wisdom estimates insurance fraud losses to be about 10% of total claims. However, FICO survey ignores the other hot spots of insurance fraud like underwriting, commission payment and premium misappropriation. With such figures in mind, many insurers should look for ways to improve their fraud defenses by reviewing and enhancing their claims, new business processes and investing on enhanced technologies.

According to the Insurance Fraud Task Force (2016), the amount of known insurance fraud is over £1 billion while the unknown insurance fraud is approximated to cost the UK economy over £2 billion per annum. This is in agreement with “the tip of the iceberg theory” which argues that, what is seen above the surface is less than what is below the surface. The Center for Insurance Policy and Research (2014) newsletter estimated insurance fraud, at more than \$100 billion and argued that, it strains insurers financially and affects their competitive advantage and subsequent sustainability as well as being expensive to the customers and destructive to the economy and society as a whole. This survey however was silent on non-financial implication of insurance fraud and which specific category of fraud causes financial loss.



The second annual insurance fraud conference conducted by South African Insurance Crime Bureau (2014) revealed that 30% of the insurance claims are estimated to be fraudulent. Organizations lose an estimated 5% of the annual revenues to fraud. If left unchecked, fraud and dishonesty would over time substantially increase the claims ratio and ultimately force companies to offset these losses from customers in the form of increased premiums and the victim companies can even close. Whichever way, this alarms the stakeholders in the insurance industry, including academicians and researchers. The conference proceedings failed to give details of methodology used. The focus was on claims fraud, leaving a gap in underwriting and application frauds which are major challenges especially in life and disability insurance (C.A.I.F., 2017).

Dearden (2017) conducted a survey in North Carolina to establish the public's opinion and perception of white-collar crime (whereby insurance fraud is part of it) using self-interest, political affiliation and in-group/out-group characteristics. The survey established that white-collar crime is a major challenge in the recent times, and that it is not being addressed adequately by legislators. It was established that people who are traditionalistic in nature and have greater trust in their economic conditions or are demographically similar to stereotype white-collar criminals; do not see white-collar crime to be a challenge, which is different with individuals without these attributes. The research findings sound an alarm which justifies further research on this area, even though it is supposed to have provided answers as to why regulators have failed to address the problem of fraud. Though valuable, the study has not addressed the effect fraud has on performance of the insurance industry. Even so, it was carried in Carolina.

Button, Blackburn, Lewis and Shepherd (2015) carried out a research on fraud, whose objective was to uncover the covered cost of employee fraud. An investigation of 45 Companies in the UK was done. The researchers organized a "brainstorming" session with counter fraud professionals to gather all possible costs in staff fraud and consequently developed a questionnaire. A twin-track approach of survey and interviews were utilized. Both respondents completed the same questionnaire, although the latter made it possible for an in depth questioning of interviewer. Respondents were drawn from specific sectors including; financial services, retail, construction and the public sector. The results of this study revealed that there are additional costs associated with staff fraud like; the costs of permanent staff replacement, investigation, staff suspensions, internal disciplinary costs, external sanctions, miscellaneous costs as well as intangible costs. This study needed to, further show the effects of these increased costs on performance of the victim organizations.



A study carried out by Omar, Nawawi and Salin (2016) investigated the causes and impact of employee fraud in Malaysia. This was a case study that was based on one automotive company. Qualitative research design was adopted and two techniques were used for data collection. First approach was content analysis on various reports, such as employee fraud reports and disciplinary action records. Secondly semi-structured interviews with employees. The findings of the research revealed that the common employee fraud was misappropriation of company assets like; theft of cash and stock. It was further found out that the causes of fraud were; weak internal controls, lack of supervision, lack of knowledge of fraud and financial pressure. Their result agrees with (Akomea-Frimpong *et al*, 2016; Rawashdeh & Shinglawi, 2016; Omar; *et al*, 2016; Chudgar, 2015). The other findings of this research are that; employee fraud interrupts business operations, wastes time, damage reputation and pecuniary loss. However, the study did not adopt quantitative methods to establish the cause/effect relationship as per its purpose.

A study carried out by Mohamed (2013) sought to investigate the initiatives taken to counter insurance fraud in Malaysia. The researcher adopted a case study where three insurance companies were selected for the study and the nature of data collected was qualitative. A multiple approach was used in data collection which included; interviews, observation, document inspection and follow up survey. Data was analysed by use of CIPFA Rd Book 2. The results revealed that insurance companies in Malaysia have embraced initiatives to counter fraud and that this requires a set of skills and that there is a possibility of losses due to fraud. It was further found out that; there are four categories of insurance fraud; staff fraud, customer fraud, intermediary fraud and insurer fraud. Mohamed argues that insurer fraud is perpetrated by someone on behalf of the underwriter against the customer through policy twisting or miss-selling. This research focused on prevention, detection, investigation, prosecution and deterrence of insurance fraud and more specifically claims fraud. Underwriting fraud and application fraud is not considered. Furthermore, this research never addressed the issue of effects of fraud on performance of the insurance industry.

Flynn (2016) carried out a research whose purpose was to investigate fraud in the private health insurance sector in Australia. A qualitative approach was adopted, and interviews were conducted with the help of fraud experts and managers in the health insurance sector. Results from this study revealed that the health insurance sector needed automation and enhanced levels of staff to control fraud. It was further established that claiming using technology posed a great challenge to the credibility of the insurance mechanism, and that fraud cause losses, consequently forcing private health insurance providers to raise their premium to offset the cost of fraud. The findings also revealed that the Privacy Act was the biggest hindrance to controlling fraud in the health insurance sector in Australia because it discourages information sharing. No



quantitative model is used to show the association between the variables, and the study is based in Australia and on health sector only.

Rawashdeh and Shinglawi (2016) did a study whose aim was to explore the presence of fraud indicators in the insurance industry. The study adopted a qualitative research design and structured questionnaires were used to collect the data. The population of study was the 25 insurance companies of Jordan. The findings indicated that policyholders, intermediaries and service providers (Third parties) are the fraudsters in the insurance industry. The study further revealed that insurance fraud occurs in insurance application, underwriting as well as in claiming and that Jordan insurers have weak internal control systems which provide a fertile ground for fraudulent activities. While the parties identified in this study provide a basis for fraud variables, the study failed to establish whether employees cause fraud as concluded by (Akomea-Frimpong *et al*, 2016; Omar *et al*, 2015; Mohamed, 2013; Chudgar, 2015). Likewise, the study has not addressed the effect of fraud on performance of the insurance industry.

Chudgar (2015) carried out a study on Risk Management in Life Insurance with particular concentration on life insurance fraud in India. The researcher purposed to establish the quantum of the vice and the response of the stakeholders. Both exploratory and descriptive research designs were adopted. Questionnaires and expert interviews were used as instruments of primary data collection, while secondary data was gathered through online database journals and books in the library. The SPSS was used to analyse the data, while t test, correlation and regression analysis were applied to determine the association between the variables. It was found out that four drivers were responsible for fraud in life insurance; weak control, harsh economic conditions, fraudster's view and consumer's view (fraud is acceptable). It was further established that three major parties commit fraud in life insurance sector; internal employees or and agents of the company, the policyholders and lastly involvement of doctors. The study did not come out with the findings on the quantum as well as industry response. It also missed out on the theoretical foundation. Again salaried employees have been grouped together with agents who are usually remunerated on commission basis.

Akomea-Frimpong *et al*. (2016) did a research on "Causes, effects and deterrence of insurance fraud. The purpose was to explore how far the insurance companies in Ghana have been affected financially by the occurrence of insurance fraud and the various measures they can use in fighting the vice. The study adopted descriptive and exploratory research designs and utilized quantitative methodologies to describe the relationship between insurance fraud and its impact on insurance companies. Forty-five insurance companies formed the population of study and random sampling was adopted. Primary data was collected directly from the insurance companies by the use of survey questionnaires.



Secondary data consisted of annual financial statements obtained from the insurers and the regulator. A cross-sectional multiple regression model was used to establish the link between financial performance and insurance fraud variables (Internal fraud, Policyholder fraud and Intermediary fraud). It was established that, insurance fraud has an adverse effect on the annual return on assets of insurers in Ghana. Also, weak internal controls, long term business relationship between employees and outsiders, poor compensation to workers, falsified documents, intentional actions of customers to gain from insurance transaction and insufficient creation of awareness for intermediaries are established to be the determinants of insurance fraud in Ghana. This study ignored, third party fraud as one of the independent variables, as well as non-financial performance as dependent variable and again was undertaken in Ghana.

Angima and Omondi (2016) in their paper on the nature of fraud and its effects in the medical insurance sector in Kenya adopted a cross-sectional research design whose population of study was 48; consisting of medical insurance providers and insurance companies underwriting medical insurance. They carried out a survey and collected data using a semi structured questionnaire that was analysed by use of descriptive statistics. The results revealed that the common types of fraud were; overstated medical bills, concealment of medical history, identity and document theft and finally insurance premium fraud. It was further established that medical insurance leads to increase in the general cost of health care due to the rising insurance cost. Fraud also affects the rate of penetration of medical insurance, poor performance of insurance firms and negative image of the industry. Occurrence of fraud was found to be high with low IT usage and or automation firms. This study focused on health sector only, leaving out the life and general business sectors, which the proposed study aims to cover. Again from the independent variables, it is not clear who the fraudsters are. Further, there is no clear model used to demonstrate the casual link between the dependent and independent variable and the strength of such relationship.

Mutua and Gachunga (2014) under-took a study on the effect of fraudulent activities on the growth of the insurance industry in Kenya. A descriptive research design was adopted and both primary and secondary data were analysed through regression analysis. The research established that misappropriation of the premiums negatively affected the growth of the insurance companies and that misrepresentation of products also affected growth due to cancellations. The independent variables are; premium misappropriation and product misrepresentation, while growth is the dependent variable. The strength of the relationship has also not been established. Generally, this research has not addressed the effect of fraud on performance of the insurance industry.





Odhiambo (2016) carried out a study on fraud management strategies adopted by insurance companies in Kenya. The study applied a cross-sectional descriptive research design where primary and secondary data were analysed. The study established that motor vehicle insurance is more exposed to fraud, followed by Medical Insurance. The study further observed that insurers were unwilling to investigate and where possible, prosecute suspected fraudulent cases, reluctance to compute and publish fraud statistics, reluctance to publicize the list of staff, intermediaries and members of the public involved in fraud or attempted fraud. There was also failure on part of the insurers to monitor and enhance their existing fraud management strategies and implement recommendations made by internal and external auditors. The study centered on managing fraud and not on the effect of insurance fraud and the performance of the insurance industry.

Irungu (2016) investigated the relationship between fraud and financial performance of insurance companies in Kenya. The study adopted a quantitative research where the number of frauds reported and amount were the independent variables, while financial performance was the dependent variable. The findings indicated a strong positive relationship between the amount of fraud and return on assets, while that of the number of cases reported to return on assets was a weak positive relationship. Maina (2016) did a similar study on the insurance Companies and adopted same methodology but replaced number of fraud cases reported with liquidity as an independent variable. The findings show a positive relationship between the independent variables (Fraud and Liquidity) and financial performance of insurance Companies measured by return on assets. The results of these studies are in conflict with those of (Akomea-Frimpong; *et al*, 2016; Angima & Omondi, 2016). This calls for another research to confirm these findings.

## **GENERAL TRENDS IN INSURANCE FRAUD**

There is an increasing curiosity among researchers and practitioners in the line of insurance fraud. Most of the studies on insurance fraud are surveys done by affiliate bodies, consultants and some researchers. Academic papers published and research projects have focused so much on insurance fraud and its effects on financial performance of insurance companies (Akomea-Frimpong; *et al*, 2016; Irungu, 2016; Maina, 2016)

The tendency of the researchers in the reviewed literature has been inclining towards claims section; limited attention is given to other areas of insurance process (Picard & Wang, 2016; Müller, Schmeiser & Wagner, 2012; FICO, 2013; Mohamed, 2013). Likewise quantitative research design seems to be dominating in the empirical literature reviewed as 9 out of the 16 related studies confirm this (Irungu, 2016; Maina, 2016; Mutua & Gachunga, 2014; Angima &



Omondi,2016; Chudgar,2015; Akomea-Frimpong *et al*, 2016; Center for Insurance Policy and Research Newsletter, 2014; Second annual insurance conference, 2014; Odhiambo, 2014)

## **MAJOR GAPS**

From the literature reviewed, studies have majored on fraud and financial performance of the insurance industry in various countries. Chudgar (2015) did a study on life insurance fraud and responses of insurers in India. Akomea-Frimpong, Andoh, Ofosu-Hene (2016) on the other hand purposed to establish the relationship between fraud (Employee fraud, Policyholder fraud and Intermediary fraud) and financial performance of insurance in Ghana. Button *et al.* (2015), Rawshdeh and Shinglawi (2016), Omar *et al.* (2016) and Dearden (2017) also carried the researches outside Kenya.

Angima and Omondi (2016) did their research in Kenya but, focused on fraud in the health sector. Mutua and Gachunga (2014) used premiums and product as their independent variables and growth of insurance industry as the dependent variable. Irungu (2016) adopted the number of frauds and amount of fraud as independent variables, while Maina (2016) used liquidity and fraud amount, but they both had financial performance as the dependent variable. Hardly have relevant studies been done on the effects of fraud on performance of the insurance industry and more specifically the effects of each component of fraud (Customer, Intermediary, Employee and Third part) on Performance of insurance industry (Return on assets and reputation).

## **MAJOR CONTRIBUTIONS**

The multiple regression analysis model adopted in the reviewed literature is relevant to this topic in determining the relationship between insurance fraud variables and performance of insurance industry. A number of the researchers have their studies grounded on major fraud theories like; the fraud triangle theory, the fraud diamond theory, the self-control theory, the economic contractual theory and Adams Equity theory, which are very useful in this area of study in explaining the cause of fraud, as well as, the context within which insurance fraud could be committed.

The key independent variables that comprise insurance fraud and their impact on financial performance have been determined in most of the literature reviewed. The variables identified in this case are; employees, policyholders and intermediaries (Akomea-Frimpon *et al*, 2016). Rawshdeh and Shinlawi (2016), identified; intermediaries, policyholders and third parties as the insurance fraud variables, while, (Omar, *et al*, 2016) used employee. All these fraud variables are important in establishing cause and effect relationships.



The literature reviewed in this paper whose scope was on health sector had similar findings. For instance, Angima and Omondi (2016) established that fraud was causing losses and negatively affecting health insurance penetration. This was in agreement with Flynn (2016). A number of other researches concur that insurance fraud is one of the leading problems of the recent decades. Odhiambo (2016) and Dearden (2017) for example conclude that it is not being addressed by the stakeholders adequately. Dearden (2017) further argues that legislators are not addressing fraud adequately. Odhiambo on the other hand asserts that insurers are unwilling to investigate and even prosecute suspected fraudsters, reluctant to publicize fraud statistics, the list of staff, intermediaries and members of the public involved in fraud or attempted fraud. These findings will form a basis of comparisons when testing hypotheses on future studies.

### **CONCLUSION**

This paper discussed the overall concept of insurance fraud risk and performance of insurance industry. From the literature reviewed, it is clear that there are five determinants of fraud; motivations sometimes referred to as pressures to perpetrate fraud, opportunity to carry out fraud, rationalization to perpetrate fraud, capability and finally perceived unfairness by fraudsters. The first four causes of fraud are explained by the fraud diamond theory and the last factor (perceived unfairness) is explained by Adams equity theory. The amount of fraud detected is far much less than the undetected fraud, as theorized by David McClelland in the tip of the iceberg theory. Therefore, the amount of fraud is bigger than usually seen, and what are recorded in the literature are only estimates.

Insurance fraud is usually caused by parties involved in the insurance contract who can be; the customers, intermediaries, employees and third parties, as explained by the economic contractual theory of fraud. Occurrence of insurance fraud has negative financial effect on the performance of the insurance industry, leads to increased cost of insurance and consequently affects penetration. This could eventually affect the ability of the insurance companies in meeting their obligations and in severe situations can lead to their closure.

When underwriters are engaged in reducing costs, their center of attraction should be detection and prevention of fraud. This can be achieved by employing an adequate fraud risk framework, which include; earnestness in the underwriting process, efficient claims validation, intermediary reviews, employee culture and third party evaluation. More importantly, if the culture of integrity can be inculcated to the society then, the problem of fraud will be eliminated.



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