

## **THE EFFECT OF INTERNAL CONTROL MEASURES ON FRAUD IN SECURITY FIRMS IN KENYA**

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## **ABSTRACT**

Management, not the auditor is responsible for setting up and monitoring of the internal control system. Internal control system cannot fully be regarded as effective not even when the design and implementation is properly done; this is because the effectiveness of an internal control system depends on the competency and dependability of the people using it. Security firms failures and widespread losses over the past two decades, have clearly pointed out the picture of how fraud has penetrated the financial strength of these institutions; it has however, elevated the importance of effective internal control system within the formal financial sector worldwide. Organizations set up internal control system most at times because they are required by law to do so; but then, how many have actually made it a point of duty to train and educate employees on how to use these internal control system since its effectiveness depends on the competency and dependability of the people using it. The research delves into the impacts of these measures on fraud and there efficacy in general. The first chapter highlights the background of the study, the objectives, the research question, significance and the scope of the study. The second chapter reviewed three theories put forth by early scholars related to the study and shows the relationship between the dependent and independent variables. The third chapter outlines the research methodology that the researcher used to collect data for study. This includes research design, target population, sampling design, data collection instruments and procedure, data analysis,

research limitations and research ethics. The primary data was obtained through the use of structured questionnaires and data was analyzed using Statistical Package for Social Science (S.P.S.S) versions 17 and presented inform of tables and figures. The researcher also conducted multiple regression analysis to determine the contribution of various forms of internal control measures to fraud and applied correlation to measure the strength of the relationship between the four forms of fraud. The study concludes that assets custody control, system monitoring, finance duties segregation and authorization of processes highly influence fraud management in Kenyan security firms. It was established that 51.50% of variation in fraud management in security firms in Kenyan is explained by assets custody control, system monitoring, finance duties segregation and authorization of processes. The study first recommends that Kenyan security firms should enhance their assets custody control policies to improve the fraud management, strengthen and ensure efficiency of their system monitoring to avert any foreseen and unforeseen loophole and hence effective fraud management, implement finance duties segregation polices and reviewed their policies on authorization of processes to improve the fraud management. The study found that 51.50% % of variation in fraud management in security firms in Kenyan is explained by assets custody control, system monitoring, finance duties segregation and authorization of processes. This means that there are other factors that account for the remaining 48.50%. So the study recommends that other studies should be conducted to establish

what influence the 48.50% change of fraud management.

**Key Words:** *internal control measures, fraud, security firms, Kenya*

## **INTRODUCTION**

Management, not the auditor is responsible for setting up and monitoring of the internal control system. Internal control system cannot fully be regarded as effective not even when the design and implementation is properly done; this is because the effectiveness of an internal control system depends on the competency and dependability of the people using it (Cole, 2012).

In many countries around the world, it is a time of austerity with swingeing cuts to public expenditure occurring. In some countries, overseas aid has been shielded from the full extent of austerity, and the UK is one of these, where the aid budget has been set to increase substantially (from £8.1 billion in 2011-2012 to £10.6 billion during 2014-2015) (DFID, 2012). This expansion is occurring in many countries at high risk of fraud and corruption. As the House of Commons Public Accounts Committee (2011) in the UK noted: Overseas aid in developing and transition countries is generally at high risk of fraud and corruption (Transparency International, 2006; and Fletcher and Herrmann, 2012). The increase in aid is also occurring against a backdrop of some political and media opposition to the increase (Martin and Groves, 2012).

Therefore, it is essential – particularly for supporters of overseas aid – that fraud and corruption is kept to a minimum. The first part of any strategy to deal with a problem should be to define the nature and size of it. However, much of the interest amongst donors has been upon measuring corruption (Kenny, 2009; Reinekka and Svensson, 2010 and Reinekka and Smith, 2010; Seligson, 2010). Fraud and corruption overlap, but there are differences between the two problems. Both face significant but different challenges in measuring (Samford et al., 2010; Levi and Burrows, 2012). Fraud has also spawned a variety of measures to gauge the size of the problem, beyond the basic detected statistics (see, Levi and Burrows, 2010). However, one method which is gaining wider use for measuring fraud is the process of fraud loss measurement (FLM) (Presidential Documents, 2010; Gee et al., 2011a; Tunley, 2011; and Button et al., 2012). FLM has begun to become commonly used in the measurement of fraud in social security payments, health insurance, procurement payments, payroll, tax returns, to name some (Gee et al., 2011b and 2011c). From this sample, levels of fraud, error and correctness are estimated according to a particular range and level of statistical confidence. It is based on the principle that in a pyramid of transactions, there will be a small number of detected frauds at the top, a large number of correct transactions at the bottom and a number of undetected frauds in between, which can be detected when subjected to more rigorous scrutiny.

## **STATEMENT OF THE PROBLEM**

The regularity of fraud and misappropriation of funds is creating fear, anxiety, and a loss of confidence in the minds of Kenyan security firms' customers. Also, poor internal control system leads to increase in the organization losses. On October 30, 2013 the daily newspapers reported

that Banks want private security companies involved in cash-in-transit business to introduce new internal measures to curb money theft. It has emerged that some of the security firms' vehicles do not have tracking devices as required. Some staff have also been getting prior information on the amount of cash on transit contrary to the rules. It is only the control managers in the security firm and bank who are supposed to know the amount of cash. Following the incidents, a special squad has been established to escort cash. Central Bank of Kenya and other stakeholders prefer Administration Police officers. In internal control sense while it's important to have a bookkeeper, making that person solely responsible for all the entity's financial transactions makes it less likely those mistakes in financial statements or possibly a record of embezzlement will be noticed.

Despite significant advances in fraud detection technologies, fraud losses continue to pose a significant problem to many industries, including telecommunications, banking and finance, insurance, health care, Internet merchants, brokerage and securities, and many others. Since internal controls operate in an environment which influences its operations, proper care must be exerted into the implementation of these systems in order to achieve the utmost aim of the organization. This heightened interest in internal controls is, in part, a result of significant losses incurred by several banking organizations. An analysis of the problems related to these losses indicates that they could probably have been avoided had the security firms maintained effective internal control systems. Such systems would have prevented or enabled earlier detection of the problems that led to the losses, thereby limiting damage to the banking organization. Management is required to set up an internal control system but this system varies significantly from one organization to the next, depending on such factors as their size, nature of operations, and objectives. Since internal controls operate in an environment which influences its operations, proper care must be exerted into the implementation of these systems in order to achieve the utmost aim of the bank

### **GENERAL OBJECTIVE**

The general objective of the study was to analyze the impact of internal control measures on fraud management in security firms in Kenya.

### **SPECIFIC OBJECTIVES**

1. To analyze the effects of assets custody control on fraud management
2. To establish the effects of system monitoring and fraud management
3. To determine how finance duties segregation affects fraud management.
4. To find out how authorization of processes impacts on fraud management

## **THEORETICAL ORIENTATION**

### **The Fraud Triangle Theory**

The fraud triangle theory identifies the elements that lead perpetrators to commit fraud. According to Dorminey, Fleming, Kranacher, and Riley (2010), the origin of this theory dates to the works of Sutherland, who coined the term white collar crime and Cressey, one of Sutherland's former students. Cressey focused his research on the circumstances that lead individuals to engage in fraudulent and unethical activity; his research later became known as the fraud triangle theory. The fraud triangle theory consists of three elements that are necessary for theft or fraud to occur these are, perceived pressure, opportunity, and rationalization Albrecht, Hill, and Albrecht (2012) compared this theory to a fire, using the simple explanation that three elements are necessary for a fire to occur that is oxygen, fuel, and heat. Like fire, fraud is unlikely to exist in the absence of the three elements mentioned in the fraud triangle theory, and the severity of fraud depends on the strength of each element. In other words, for an individual to make any unethical decisions, perceived pressure, an opportunity, and a way to rationalize the behaviors must exist.

The elements of perceived pressure, perceived opportunity, and rationalization are all interrelated, and the strength of each element impacts the others. Interestingly, Howe and Malgwi (2012) indicated that a bridge between perceived pressure and perceived opportunity is created when the individual is able to rationalize the fraudulent behavior.

### **The Fraud Diamond Theory**

The fraud diamond theory, an expanded version of the fraud triangle theory, was first presented by Wolfe and Hermanson in the CPA Journal in December 2014. The fraud diamond theory includes an additional element: Wolfe and Hermanson (2014) argued that, although perceived pressure or incentive might coexist with an opportunity to commit fraud and a rationalization for doing so, fraud is unlikely to take place unless the fourth element, capacity, is also present. In other words, the potential perpetrator must have the skills and ability to actually commit fraud. Wolfe and Hermanson (2014) identified four observable traits related to individuals' capacity to commit fraud; Authoritative position or function within the organization, Capacity to understand and exploit the accounting and internal control systems' weaknesses to the greatest advantage, Confidence that fraudulent behaviors will not be detected (or that one can easily escape punishment if the behavior is detected), and Capability to effectively deal with stress in order to manage the fraud over a long period of time.

With the additional element presented in the fraud diamond theory affecting individuals' decision to commit fraud, the organization and auditors need to better understand employees' individual traits and abilities in order to assess the risk of fraudulent behaviors. In addition, better systems of checks and balances should be implemented and monitored to proactively minimize risks and losses as a result of fraudulent activities in the workplace.

## **The Fraud Scale Theory**

The fraud scale theory was developed by Albrecht, Howe, and Romney (2014) as an alternative to the fraud triangle model. The fraud scale is very similar to the fraud triangle; however, the fraud scale uses an element called “personal integrity” instead of rationalization. This personal integrity element is associated with each individual’s personal code of ethical behavior. Albrecht et al. (2014) also argued that, unlike rationalization in the fraud triangle theory, personal integrity can be observed in both an individual’s decisions and the decision making process, which can help in assessing integrity and determining the likelihood that an individual will commit fraud. This argument is consistent with other research. Experts agree that fraud and other unethical behaviors often occur due to an individual’s lack of personal integrity or other moral reasoning (Dorminey et al., 2010; Rae & Subramaniam, 2008), as moral and ethical norms play essential roles in an individual’s decisions and judgment.

Ethics relates to determining the rightness or wrongness of a behavior in terms of organizational, legal, or societal guidelines. It is important to note that individuals with low levels of ethical development have been found to be more likely to commit fraud than those with higher levels; those with higher levels of ethical development were still found to be capable of committing fraud, but not under the same conditions as those with lower ethical development (Appelbaum et al., 2012).

## **RESEARCH METHODOLOGY**

### **Research Design**

The study adopted descriptive research design. This descriptive research design reports things the way they are, such things as behavior, attitudes, values and characteristics. This research design was also suitable because it was concerned with describing the characteristics of particular individual or group of individuals.

### **Target Population**

The target population of the study was 120 employees from KK, G4S, Wells Fargo, BM, Lavington, Radar, Securex, and Falcon Security firms in Kenya. The study targeted the assets & finance managers, record keeping & stores personnel and accounting and transport officers.

### **Sampling Design**

Stratified random sampling was used because the population under study has different departments in the selected security firms. A random sample was drawn to represent every stratum. A sample size of 40 per cent was then selected randomly from each stratum to constitute the sample for the study.

## **Data Collection Instruments**

Questionnaires were administered to all the respondents and they were self-administered. The questionnaires contained mainly closed-ended items structured in a likert scale. Hand delivery was used to give the respondents the questionnaires. Each respondent in the same group received the same set of questions phrased in exactly the same way.

## **Data Analysis and Reporting**

Data collected through questionnaires was edited and coded for analysis. It was analyzed quantitatively and qualitatively. Quantitative data was analyzed through the use of descriptive statistics, charts, tables and percentages for data representation. Qualitative data was analyzed through content analysis. Data was analyzed using descriptive statistics and inferential statistics such as correlation analysis and regression analysis with the help of Statistical Package for Social Science (S.P.S.S) versions 17 and was presented in form of tables and figures. In addition, the researcher conducted a correlation and multiple regression analysis so as to determine internal control measures in relation to various forms of fraud in the selected security firms. The multiple regression equation is:

$$F = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

F = Fraud

$\beta_0$  = constant

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  = Regression coefficients

X1 = Asset custody control; X2 = System monitoring; X3 = Authorization of transactions

X4 = Finance duties segregation; e = Error term

## **RESEARCH FINDINGS**

### **Findings on status of Fraud**

The study found out that fraud in the Kenyan security firms was shown to be low. Most of the indicators included; misappropriation of assets in the form of cash and asset theft, fraudulent disbursements, theft of fixed assets and non-cash assets, personal use of inventory or other non-cash assets, bribery and corruption. However, the study found that there existed anti-fraud programs and controls that are effective in reducing instances of fraud. It was therefore established that fraud was indicated by; Misappropriation of assets in the form of cash theft, Fraudulent disbursements, Theft of inventory or other non-cash assets, Personal use of inventory or other non-cash assets and Bribery and corruption, and anti-fraud programs and controls that are effective in reducing instances of fraud. The findings are in agreement to the study by John (2009) which found that asset custody and records controls helps avoid theft and misappropriation, a fraud action.

### **Findings on Effects of Assets Custody Control on Fraud**

It was found that most of the indicators of assets custody control were frequent as regards to the fraud. Such factors included; maintenance of asset register where records of all the assets are registered; conducting frequent inventory take/survey; and using computerized systems to monitor the movement of assets. Other factors such as; recording assets in affixed property tags, and using electronic based devices such as CCTV surveillance in company premises were found to be very high as concerns fraud management. Overall, assets custody control was found to be frequent in regards to fraud. This was in line with Daft et al. (2011) who noted that as your business grows and becomes more complex, it is more likely that errors, duplication or omissions can occur.

### **Findings on Effects of System Monitoring and Fraud**

The study found out that the status of system monitoring was frequent; segregation of duties involving custody, authorization and control of source documents and records was also frequent; and operationalization of internal audit department was high. The documentations were found to be usually having pre-printed and pre-numbered and there was frequent assessment of the effectiveness of internal control structure and procedures for financial reporting. It was further found that security companies usually conducted random audits to reconcile financial transactions. Cole et al. (2012) had earlier established that changing conditions, management needs to determine whether the internal control system continues to be relevant and able to address new risks.

### **Findings on Effects of Finance Duties Segregation on Fraud Management**

The study found out that status of all indicators of finance duties segregation was high (frequent) and they highly affected fraud. The study found that finance duties segregation showed that in general frequently affected fraud. The study found that there were frequent rotation of duties within finance staff, the finance staff had some understanding of internal control design and operation, and the policy of allocation of duties within finance division were always clear. competency levels and requisite skills were frequently considered as the key consideration to allocation of duties. The study found that competency levels and requisite skills were key consideration to allocation of duties. In advancement to findings in the study by Daft et al, (2007) and that by Cole et al. (2012) identified some indicators of System monitoring found useful in enhancing fraud management in the modern world, these included; segregation of duties involving custody, authorization and control of source documents and records, operationalization of internal audit department was neutral, documentations being pre-printed and pre-numbered, frequent assessment of the effectiveness of internal control structure and procedures for financial reporting, and conducting random audits to reconcile financial transactions. This was true for the case of Daft et al, (2007) and that by Cole et al. (2012) as they established earlier.



### **Findings on Impacts of Authorization of Processes on Fraud Management**

It was found that the security companies had frequent system of assigning authority and responsibility and the companies' management frequently considered competent levels for specific jobs. The study found out that there was frequent adequacy in documentation, record management and independent checks on performances the management usually communicates importance of internal control. Overall, the study found that authorization of processes frequently impacted on fraud. As regards Segregation of duties Coleman, (2009) One of the key concepts in placing internal controls over a company's assets is segregation of duties. Segregation of duties serves two key purposes: It ensures that there is oversight and review to catch errors and it helps to prevent fraud or theft because it requires two people to collude in order to hide a transaction. The study found that authorization of processes impacted on fraud, which supports Goldman (2008), who established that there must appointed individual who can initiate or execute transactions for the business, Indicates the transaction meets accounting and compliance requirements within functional purpose of area and is aware of budget availability.

### **REGRESSION ANALYSIS**

Multiple regression was carried out on the independent variables (assets custody control, system monitoring, finance duties segregation and authorization of processes) against the dependent variable (Fraud) to estimate the model. The study first obtained the model summary shown in table 1

**Table 1: Model Summary for fraud**

				Change Statistics				
R	Adjusted	Std. Error of the	R Square	F			Sig.	F
R Square	R Square	Estimate	Change	Change	df1	df2	Change	
.752 <sup>a</sup>	.565	.57314	.565	11.357	4		.000	

a. Predictors: (Constant), Finance duties segregation, Authorization of Transactions, System Monitoring, Assets custody control

Table 1 shows the coefficient of determination was 0.515, an indication that 51.50% of variation in fraud in security firms in Kenyan is explained by assets custody control, system monitoring, finance duties segregation and authorization of processes. Therefore, all the variable; assets custody control, system monitoring, finance duties segregation and authorization of processes are strong determinants of fraud in Kenyan security firms. In conclusion, the inferential statistics showed that the dependent variable, fraud in Kenyan security firms was explained by assets custody control, system monitoring, finance duties segregation and authorization of processes.

The study then produced Analysis of Variance (ANOVA) and these results are captured in Table 2.

**Table 2: ANOVA for Fraud**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	14.922	4	3.731	11.357	.000b
Residual	11.497	35	.328		
Total	26.419	39			

a. Dependent Variable: Fraud

b. Predictors: (Constant), Finance duties segregation, Authorization of Transactions, System Monitoring, Assets custody control

Results in Table 2, indicates that p-value = .000. Since p-value < .05 (F= 11.357, P-value =.000), so, at the 5% significance level (i.e  $\alpha = 0.05$ , level of significance), there exists enough evidence to conclude that at least one of the predictors; assets custody control, system monitoring, finance duties segregation and authorization of processes, is useful in predicting the fraud management. Therefore the model is useful in explaining fraud.

The IVs and DV were then regressed to estimate the study model. The study obtained result shown in Table 3.

**Table 3: Results of Regression of Revenue Collection Performance**

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	-1.413	.691		-2.044	.049
Assets custody control	.342	.152	.286	2.256	.030
System Monitoring	.316	.131	.286	2.411	.021
Authorization of Transactions	.542	.177	.361	3.051	.004
Finance duties segregation	.269	.200	.174	1.342	.019

a. Dependent Variable: Fraud

From these results, the estimated equation is  $F = -1.413 + .342X_1 + .316X_2 + .542X_3 + .269X_4$ . The table shows that assets custody control, system monitoring, finance duties segregation and authorization of processes had positive coefficients, which indicates that they were directly proportional to fraud. This means that an increase in any of; assets custody control, system monitoring, finance duties segregation and/or authorization of processes leads to improvement of fraud management and vice versa.

## CONCLUSIONS

The study concludes that assets custody control highly affects fraud in Kenyan security firms. The indicators of assets custody control in fraud management are; maintenance of asset register where records of all the assets are registered; conducting frequent inventory take/survey; and using computerized systems to monitor the movement of assets; recording assets in affixed property tags, and using electronic based devices such as CCTV surveillance in company

premises. The study concludes that system monitoring highly affects fraud and is enhanced by; segregation of duties involving custody, authorization and control of source documents and records, operationalization of internal audit department was neutral, documentations being pre-printed and pre-numbered, frequent assessment of the effectiveness of internal control structure and procedures for financial reporting and conducting random audits to reconcile financial transactions. The study revealed finance duties segregation highly affects fraud. The core functions to achieve effective fraud management system were found to be; frequent rotation of duties within finance staff, the finance staff fully understanding of internal control design and operation, and the policy of allocation of duties within finance division being very always clear, and competency levels and requisite skills being the key consideration to allocation of duties. The study concludes that authorization of processes impacts highly on fraud. This characterized by security companies having system of assigning authority and responsibility, and the companies' management always considering competent levels for specific jobs, having adequacy in documentation, record management and independent checks on performances and the management usually communicating importance of internal control. The study concludes that fraud in Kenyan security firms is explained by assets custody control, system monitoring, finance duties segregation and authorization of processes and 51.50% of variation in fraud in security firms in Kenyan is explained by assets custody control, system monitoring, finance duties segregation and authorization of processes.

## **RECOMMENDATIONS**

The following recommendations are made in the light of the findings and conclusions of this research so as to aid the management of security companies to enhance their internal controls and improve performance of their organizations through prevention of fraud.

Due to the rapid and significant changes in technology, shorter product life cycles, escalating global competition which have increasingly led to dynamic business environments which erode the value of a firm's existing competencies, this study recommends that management of security companies in Kenya embrace the culture of building up of new internal control measures to enable their firms adopt new ways of fraud reduction that better fit to shifting environmental conditions by embracing system based internal controls that uses the latest technology. The study first recommends that Kenyan security firms should enhance their assets custody control to improve the fraud reduction. This would be achieved through ensuring; maintenance of asset register where records of all the assets are registered; conducting frequent inventory take/survey; using computerized systems to monitor the movement of assets; recording assets in affixed property tags, and using electronic based devices such as CCTV surveillance in company premises.

Secondly the study recommends that management of Security companies in Kenya should strengthen and ensure efficiency of their system monitoring to avert any foreseen and unforeseen loophole and hence effective fraud reduction. The companies should implement policies to

ensure ; segregation of duties involving custody, authorization and control of source documents and records, operationalization of internal audit department was neutral, documentations being pre-printed and pre-numbered, frequent assessment of the effectiveness of internal control structure and procedures for financial reporting. They should review their policies and strategies to ensure conducting random audits to reconcile financial transactions.

Thirdly, the study recommends that the Security companies in Kenya should implement finance duties segregation through; frequent rotation of duties within finance staff, the finance staff being made to fully have clear understanding of internal control design and operation, creating clear policy of allocation of duties within finance division, and making competency levels and requisite skills being the key consideration to allocation of duties. This study further recommends that management of Security companies in Kenya adopt electronic resource planning such as forensic accounting and auditing through the implementation of systems and processes that enhance effective coordination of a variety of tasks, resources and the synchronization of different activities to manage fraud for their Security Firms.

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