

## Internal Control System as Means of Fraud Control in Deposit Taking Financial Institutions in Imenti North Sub-County

Samuel Ngigi Nyakarimi <sup>1\*</sup> Mary Karwirwa <sup>2</sup>

1.School of Business and Economics, Meru University, YMCA institute and Kenya Institute of Management, Meru Kenya

2.School of Business and Economics, Meru University, Equity Bank Limited and Kenya Institute of Management, Meru Kenya

### ABSTRACT

The purpose of the study was to establish the relationship between internal control systems (ICS) and fraud control in deposit taking financial institutions. ICS was analyzed based on its component which include; Control Environment, Risk Assessment, Control Activities, Information and Communication and Monitoring. The Researcher set out to establish how ICS could be used to control fraud in financial institutions. The researcher set study objectives and hypotheses that assisted in establishing the relationship sort.

The research was conducted using both quantitative and qualitative approaches using Stratified random sampling, ANOVA and Descriptive Research Designs. Data was collected using Questionnaires from the operations managers and supervisors, from various deposit taking financial institutions in Imenti North Sub-county. A sample of 92 respondents from a population of 120 was used for this study. Data was analyzed using the Statistical Package for Social Scientists (SPSS) where conclusions were drawn from tables and figures derived from the Package.

The study found that the financial institutions analyzed recruit through vetting on competences and integrity, the organization structure reflects chain of command, there are proper follow-up of delegated responsibilities and the employees are promoted and compensated fairly. On risk assessment the study revealed that the institutions have proper mechanisms of mitigating risks, financial documents are properly kept, and there are processes of identifying and estimating risks. Though there was agreement that there are no cases of missing documents to authenticate transaction the analysis reflected a low mean than in other parameters. In analyzing control activities it was found that transactions are undertaken by authorized personnel, reconciliations are done regularly, proper accounting principles are applied and there is proper segregation of duties. Further the study showed that there is job rotation and verifications are done to reduce chances of forgery. The study revealed that the institutions have developed means of passing information, the employees are informed of their roles, besides engaging external parties to verify financial statements they also act upon the findings quickly. In monitoring organizations have evaluation mechanisms, they also have plans on activities and ensures that the laid down rules are followed. Research study found that there are continuous checks to ensure controls are working well. The study established a significant relationship between ICS and fraud control.

The researcher recommends that the management of these institutions should establish proper mechanisms of promoting qualified and deserving employees, also the institutions should ensure fair remunerations based on qualification, responsibilities and output of employees. The study recommends that the financial institutions establish and manages knowledge or information management system within the institution, so as to enable all parties within the institution to freely access and utilize necessary official information that will enable the employees to embrace and appreciate their roles in enhancing vigilance against fraudsters.

### 1.1 Background of the Study

The Commission of Sponsoring Organization (COSO) defined the internal control " as a process, effected by the entity's board of directors, management and other personnel designed to provide reasonable assurance regarding achievement of objectives in effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations" (COSO,2010). This definition points to the fact that internal controls create a basis of amount of work to be carried out by the professionals charged with the function, as they are expected to ensure the safeguard of the organization's funds, ensure that there is efficient and effective management of assets and that financial statements are accurate at all time. Though internal controls system cannot eliminate all errors and irregularities, it is expected that they can alert management to potential problems, which can be controlled before they escalate to big problems (Campbell and Harther, 2010).

ICS can be effective if its components are present and are functioning effectively for operations, financial reporting and compliance. The highest management level (board of directors) in the organization and its audit committee have responsibilities of making sure that the ICS within the organization is sufficient to ensure efficient and smooth operations in the organization. These responsibilities include determining the extent to which internal controls are evaluated and the parties involved, in many successive evaluations of ICS,

the internal and external auditors are involved to ensure independence in advising the management. The ICS need to be evaluated regularly so as to provide management with some confidence regarding its effectiveness. (Tunji, 2013)

Financial problems experienced in recent time have demonstrated that in some organizations mostly in financial institutions, risk-management and internal control practices were ineffective or imperfect. According to the reports on the interview carried on the management leaders of businesses in various organizations it was realized that majority of them did not understand the risks they were exposed to (Ali, 2013). International Federation of Accountants (IFAC) indicated that previously many organizations focused on financial reporting controls until many more financial crises arose. These crises showed that many, of the risks that affected organizations were from other areas other than financial reporting including operations and external circumstances. Therefore, risk management and related ICS need to include a wider perspective, considering that organizations are affected by internal and external variables, some variables from the external environment are beyond the control of the organization. Therefore effective risk management and internal control should be an important part of responsibility of management at every level of an organization and across all operations to reduce risks (IFAC, 2012).

Tunji (2013), in his research on effectiveness of ICS as antidote for distress in banking industry in Nigeria noted that collapse of internal controls system in any organization will lead to the failure or suffering of the organization. Karagiorgos, Drogalas and Dimou (2013) in their research indicated that the bank failures have mostly been attributed to fraud. In the United States (US) alone, bank failures rose to 200 percent in 1980s partly due to fraud and mismanagement. In the year 2014, 14 banks have failed in the US which is a reduction as compared to the same period in 2013 where 16 banks failed (Tumin, 2014). Baring and Yamaichi Securities of Japan failure increased focus on the financial sector's attention on mismanagement and internal controls (Anita, 2000). Calomiris (2008), in his research found that bank failures and widespread losses over the past 20years have increased the importance of effective risk management and internal control within the formal financial industry worldwide.

Basle committee analyzed the situations leading to bank failures and it observed that the failures and losses in banks could have been avoided had the banks maintained strong ICS (Anita, 2000). Karagiorgos et al (2013) observed that strong ICS are relevant to the banks due to their vulnerability to fraud. Similarly banking industry in Nigeria has suffered a lot due to mismanagement resulting from either lack of adherence to laid down principles and policies (internal control systems) that have been established by the management of financial institutions and regulatory authorities or lack of internal controls system all together. Whatever the situation, every financial and non-financial organization, need to install efficient, effective and proper functioning internal controls system in order to protect its assets from possible misuse, vandalisation and mis-application by the employees, theft and errors made by inefficient and inexperienced personnel, (Ifeanyi, Adejanju and Olagunju, 2011)

Global consulting company Deloitte, East Africa, in its crime survey indicated that East African banks lost USD 48.3m to fraud in one and a half years that ended in June 2012 due insider collaboration with fraudsters. Most of these frauds were perpetuated using the electronic systems that were introduced in banks to increase clearance of paper cheques (the Guardian Reporter, 2012). To address the electronic fraud menace, the Central Banks of East Africa announced plans to harmonize the East African banking systems. The harmonization is expected to create integrated regional financial institutions to enable them to develop proper integrated mechanisms for fighting vices like fraud and improving credit management system among other service and efficiency improving functions. However the harmonization alone cannot fully address the fraud problem in banks (Mwaura and Thiong'o, 2013). The ICS allows the financial institutions to foresee potential problems which may causes financial losses through fraud, thereby prevent or reduce future losses (Hayali, Dinc, Sarili, Secil and Aysel, 2013).

Banking Fraud Investigations Department (BFID), has indicated that Kenya's banking system has become vulnerable to fraud according to reports generated by the department on fraud, the financial institutions have become a soft spot for staff to steal. In the report by BFID, banking fraud in Kenya had increased by more than three times in the third quarter of 2010, to Sh1.7 billion (BFID, 2011). Mukanda (2013) in his report also concurred with BFID report and he observed that Kenya's banking industry has become a very easy target for fraudsters who have been stealing a lot of money from banks on monthly basis. In the month of December 2013 alone, nearly Sh500 million was reported stolen from 33 financial institutions in the country. This has been attributed to the facts that banks sometimes prefer internal disciplinary mechanism in cases involving employees' theft, which does little to address the fraud problem (BFID, 2011).

Fraudsters generally identifies the loopholes in the control procedures (weak internal controls) and then they compare the rewards of fraud perpetration against the risk or penalties if they are apprehended (Khanna and Arora, 2009). Many employees in bank or financial institutions have taken advantage of weak internal controls to commit fraud. Weak internal controls have contributed to large losses for some banks and failures of

others arising from fraudulent activities (Hartman, 2014).

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

From background discussions it was revealed that many financial institutions in Kenya have put in place ICS (control environment, risk assessment, information and communication and monitoring) to improve efficiency and reduce cases of fraud. However despite the efforts, Kenya is one of the countries that has been worst hit by fraud with a new survey ranking it seventh in the world among those with highest levels of economic crime (Gibendi, 2014). The background study has shown that weak ethical practices, management policies and integrity issues (control environment), lack of proper evaluation mechanisms of procedures and policies (monitoring), poor risk assessment and lack proper ways of receiving, disseminating and acting on information (information and communication) has led to increased fraud in financial institutions in the country. Akelelo (2012) on her study on fraud in the banking industry in Kenya including those in Meru County found that fraud is still rife in the country. However in her study she did not focus on how ICS can be used to control fraud in deposit taking financial institution. Thus this study explored ways ICS (control environment, risk assessment, information and communication and monitoring) can be used as means to control fraud in deposit taking financial institutions area of study being Imenti North Sub-County.

### **1.3 Purpose of the Study**

The purpose of this study was to establish the relationship between internal control system and fraud control in deposit taking financial institutions.

### **1.4 Research Objectives**

The study focused on internal control system as measure of fraud control. It was guided by the following specific objectives;

- a) To determine how control environment can be used to control fraud in financial institutions.
- b) To examine how risk assessment control fraud in financial institutions.
- c) To find out how information and communication can be used to control fraud in financial institutions.
- d) To establish how monitoring can be used to control fraud in financial institutions

### **1.5 Study Hypotheses**

The study tested the following hypotheses

- H<sub>01</sub>: there is no significant relationship between control environment and fraud control in financial institutions.
- H<sub>02</sub>: there no significant relationship between risk assessment and fraud control in financial institutions.
- H<sub>03</sub>: there is no relationship between information and communication and fraud control in financial institutions.
- H<sub>04</sub>: there no significant relationship between monitoring and fraud control in financial institutions

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

The study focused on a number of branches of different deposit taking financial institutions in Imenti north Sub-County which will include branches in Meru town and Makutano areas, this is mainly due to the fact most of the financial institutions are located in these areas.

## **Literature Review**

This chapter constructed the theoretical framework with its main focus being the internal control and control of fraud. The chapter also highlighted the main components of the internal controls in the context of the research to be carried out.

### **2.1 Theoretical Framework**

#### **2.1.1 Fraud Triangle Theory by Donald Cressey (1973)**

The fraud triangle originated from Donald Cressey's hypothesis: *"Trusted persons become trust violators when they conceive of themselves as having a financial problem which is non-shareable, are aware this problem can be secretly resolved by violation of the position of financial trust, and are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property"* (Akelelo, 2012).

This theory was first coined by Cressey in 1973. Fraud triangle theory identifies that lead culprits to commit fraud. Fraud triangle describes three major factors that are present in any fraud situation: (a) perceived pressure, (b) opportunity, and (c) rationalization. Fraud cannot happen in absence of the aforesaid elements and the seriousness of the fraud will depend on the strength of the above elements (Ruankaew, 2013). The elements

are explained below under each heading.

### **Perceived pressure for committing fraud in financial institutions**

Pressure in case of fraud can be likened to the motivation that is what in one's life that drives one to commit fraud. Pressure sometimes involves personal situations that create a demand for more money; such situations might include vices like drug use or gambling or merely life events like a spouse losing a job. At other times, pressure arises from problems on the job; unrealistic performance targets may provide the motive to perpetrate fraud. Motivators can also be non-financial. There may be high pressure for good results at work or a need to cover up someone's poor performance. Addictions such as gambling and drugs may also motivate someone to commit fraud (Ruankaew, 2013).

### **Opportunity for committing fraud**

Of the three elements of the Fraud Triangle, opportunity is often hard to spot, but fairly easy to control through organizational or procedural changes. The Opportunity to commit fraud is possible when employees have access to assets and information that allows them to both commit and conceal fraud. Employees are given access to records and valuables in the ordinary course of their jobs. Unfortunately, that access allows people to commit fraud. Over the years, managers have become responsible for a wider range of employees and functions. This has led to more access for them, as well as more control over functional areas of companies. Access must be limited to only those systems, information, and assets that are truly necessary for an employee to complete his or her job (Lebanese Association of Certified Public Accountants (LACPA), 2009)

Opportunity is created by weak internal controls, poor management oversight, and/or through use of one's position and authority. Failure to establish adequate procedures to detect fraudulent activity also increases the opportunities fraud for to occur, (Ruankaew, 2013). Committing fraud through use of one's position and authority in many occasions happens when internal controls are weak or do not exist, or where there is poor management oversight. Chances of committing fraud increases due to layoffs and staffing shortages when they weaken or eliminate internal controls. (Auditor of Public Accounts (APA), 2011)

### **Rationalization of committing fraud in financial institutions**

There are two aspects to rationalization: (1) the fraudster must conclude that the benefits to be realized from a fraudulent activity outweighs the possibility for detection. (2) The fraudster needs to justify the fraud. Justification can be related to job dissatisfaction or perceived entitlement, or a current intent to make the victim whole sometime in the future, or saving one's family, possessions or status. Rationalization is discernable by observation of the fraudster's comments or attitudes (LACPA, 2013).

Rationalization involves a person reconciling his/her behavior with the commonly accepted notions of decency and trust. For those who are generally dishonest, it is probably easier to rationalize a fraud. For those with higher moral standards, it is probably not so easy. Fraudsters have to convince themselves that to defraud is alright with "excuses" for their behavior.

Common rationalizations include making up for being underpaid or replacing a bonus that was deserved but not received. A thief may convince himself that he is just "borrowing" money from the company and will pay it back one day. Some embezzlers tell themselves that the company doesn't need the money or won't miss the assets. Others believe that the company "deserves" to have money stolen because of bad acts against employees.

## **2.2 Review of Related Literature**

The literature in was obtained from journals, project thesis, dissertations and publications by professional bodies.

### **2.2.1 Internal Control System**

Internal control systems operate at different levels of effectiveness. Determination of whether a particular internal control system is working properly, assessment of the five components - Control Environment, Risk Assessment, Information and Communication, and Monitoring should ensure that they are present and functioning well. Effective controls provide reasonable assurance regarding the accomplishment of established objectives (COSO, 2013)

#### **2.2.1.1 Control Environment in Financial Institutions**

The control environment is a set of standards, processes, and structures that provide the basis for carrying out internal control across the organization(s). The top management of the organization establish the guideline at the top regarding the importance of internal control including expected standards of conduct. Management supports expectations at the various levels of the organization. The control environment comprises the integrity and ethical values of the organization; the parameters enabling the top management to carry out its governance oversight responsibilities; the organizational structure and assignment of authority and responsibility; the process for attracting, developing, and retaining competent individuals; and the rigor around performance measures, incentives, and rewards to drive accountability for performance.

The resulting control environment has a pervasive impact on the overall system of internal control



(COSO, 2013). Price Water House Coopers (PWC) (2012) indicated that, the control environment includes the governance and management functions and the attitudes, awareness, and actions of those charged with governance and management concerning the entity's internal control and its importance in the entity. The control environment, as established by the organization's administration, sets the tone of an institution and influences the control consciousness of its people. Leaders of each department, area or activity establish a local control environment. This is the foundation for all other components of internal control, providing discipline and structure.

Control environment factors include: Integrity and ethical values, the commitment to competence, leadership philosophy and operating style, the way management assigns authority and responsibility, and organizes and develops its people (Ward & Smith, 2002). The control environment has a pervasive influence on the way business activities are structured and carried out, the way objectives are established, the way risks are assessed and fraud detected and addressed. The control environment is influenced by the entity's history and culture. It influences the control consciousness of its people. Effectively controlled companies have top management with a positive attitude towards the control environment and they are able to establish appropriate policies and procedures to curb and reduce or control fraud (Wallage, 2005)

#### **2.2.1.2 Risk Assessment in financial institutions**

Every entity faces a variety of risks from external and internal sources. Risk is defined as the possibility that an event will occur and adversely affect the achievement of objectives. Thus, risk assessment forms the basis for determining how risks will be managed (COSO, 2013). An entity's risk assessment process is a process for identifying risks (relating to its objectives, activities and which are relevant to financial reporting), estimating the significance of the risks, assessing the likelihood of their occurrence, and deciding upon actions to manage them. If the entity's risk assessment process is appropriate to the circumstances.

The process of identifying and analyzing risk is an ongoing process and is a vital component of an effective internal control system (Ward & Smith, 2002). Attention must be focused on risks at all levels and appropriate actions must be taken to manage the risks if they are detected. Risks can relate to internal and external factors. After risks have been identified they must be evaluated. Managing change requires a constant assessment of risk and the impact on internal controls. Economic, industry and regulatory environments change and entities' activities evolve. Mechanisms are needed to identify and react to changing conditions (Schneider and Becker, no date).

#### **2.2.1.3 Information and Communication in deposit taking financial institutions**

Information is necessary for the organization to carry out internal control responsibilities to support the achievement of its objectives. The management generates or obtains and uses relevant and quality information from both internal and external sources to support the functioning of other components of internal control. Communication is the continuous, interactive process of providing, sharing, and obtaining necessary information. Internal communication is the means by which information is spread throughout the organization (COSO, 2013).

Badara and Saidin (2013) in their study on impact of effective ICS on internal audit effectiveness, indicated that relevant information must be identified, recorded and communicated in a form and time frame that enables people to carry out their responsibilities. Effective communication must ensure that the information flow down, up and across and the entire organization on time and form needed for operations to take place. All employees should receive clear and relevant message from top management that control responsibilities which should be taken seriously. Employees also should understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information to the top management. Evaluation of the quality of the contents of information can be done through determination of how appropriate, timely, current and accessible they are.

The auditor as an independent examiner is expected to communicate his results on his examination of the internal controls system to the management for corrective actions (Tunji, 2013). Information and communication can reduce the risk of fraud in two ways. First, the possibility of hiding fraud is reduced by means of the integrity and the accuracy of information. In other words, a person who commits a fraud can't have the opportunity of hiding it for a long time. Secondly, an open and effective communication culture in an organization, aids in detecting the possibility of fraud in advance (Hayali et al, 2013)

#### **2.2.1.4 Monitoring in Financial Institutions**

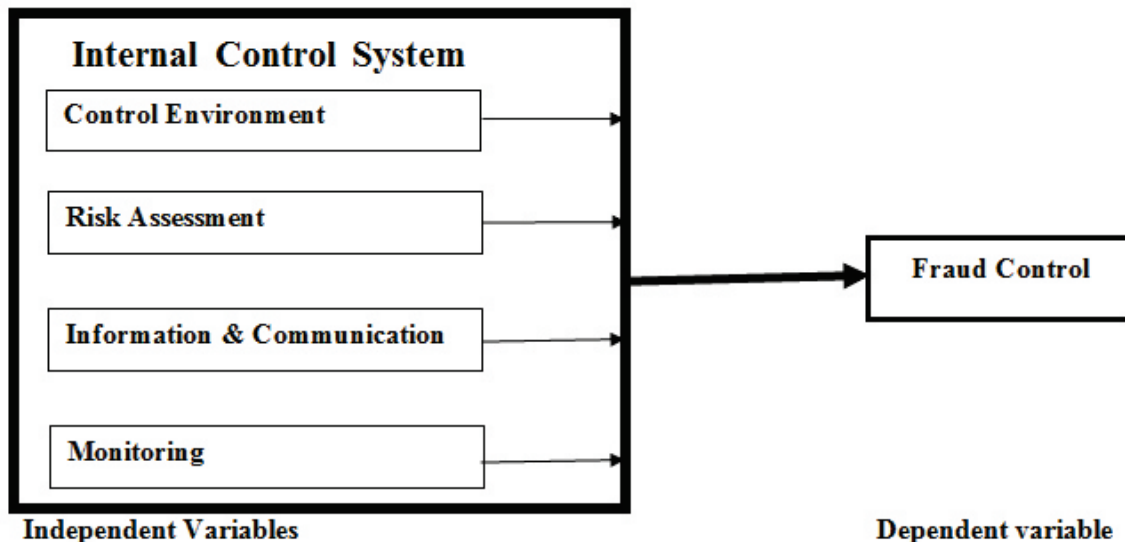
Community Association Institute (CAI) (no date) defined monitoring as "the process of evaluating and assessing the systems of internal control to ensure that the procedures are consistently applied over an extended period of time." COSO (2013) stated that continuous evaluations, separate evaluations, or some combination of the two are used to find out whether each of the five components of internal control, including controls to effect the principles within each component, is present and functioning. Continuous evaluations, put up in business processes at different levels of the entity, provide timely information. Separate evaluations, conducted periodically, will vary in extent and frequency depending on assessment of risks, effectiveness of continuous

evaluations, and other management considerations.

Price Water House Coopers (PWC) (2012) indicated that changes in the organization or its external environment, controls implemented earlier may no longer adequately address risk in the present period. Changes may also make it impossible to carry out existing controls adequately. There may be various many reasons for these changes which may include new products and markets, restructuring, personnel fluctuations, new information systems or changes in the regulatory environment. The management therefore should receive regular management report to assist in monitoring of activities on frequent basis.

The staff on the other hand must evaluate various systems of internal control and enhance them where needed. Any discovered deficiencies should be addressed immediately and added to the overall systems of internal control (Abiola and Oyewole, 2013). By monitoring, internal control activities are continuously kept under surveillance and their performance are assessed. This what the whole organization should engage in, indicating that fraudulent actions are revealed and dealt with within the shortest time possible (Hayali et al, 2013)

### 2.3 Conceptual Framework



## Research Methodology

### 3.1 Research Design

The researcher used descriptive research design. Mugenda and Mugenda (2003) indicates that descriptive design is indices that describe a certain sample giving clear information of element without interfering with it. This design will be used to establish the relation that exist between the ICS and fraud control in financial institutions. It will also help the researcher to describe the characteristics of variables in the organizations earmarked, gather information, analyze, summarize and interpret it for the purpose of clarification in a short time. The descriptive design minimizes bias, saves time and money.

### 3.2 Target Population

The target population of this study will be operation managers and supervisors of financial institutions in Imenti North Sub-county. The target population will be 30 operation managers and 90 operation supervisors.

### 3.3 Sampling Frame

The sampling frame included operation managers and supervisors from different financial institutions. The sampling frame was selected as it had a balanced representation of all deposit taking financial institutions in Imenti North Sub-County as per appendix IV. Table 3.1 represents the sampling frame.

The sample size was obtained through the use following formula developed by Yamane Taro and used by Israel Glenn.

$$n = \frac{N}{1+N(e)^2} \quad \text{Where;}$$

$n$  = required sample size.  
 $e$  = level of significance taken to be 0.05  
 $N$  = the population size.  
 $1$  = constant (Israel, 2011)

$$\text{Thus, } n = \frac{120}{1 + 120(0.05)^2} = 92$$

**Table 3.1: Sampling Frame**

	Banks	Micro Finance Institutions	SACCOs	Total
Operations Managers	14	3	6	23
Supervisors	39	12	18	69
Total	53	15	24	92

### 3.4 Data Collection Instruments

The study adopted the questionnaire as a tool of collecting primary data (the data collected afresh for the first time thus happen to be original in character). Questionnaire is standard list of questions relating to a particular investigation or research. The questionnaires were used as they were easy to administer and to save time. The questionnaire were designed in a way that the respondents were required to tick the appropriate answer according to their assessment based on Likert scale. The researcher prepared a list of questions based on the research objectives in order to solicit information from the target population, the questions were closed ended and required answers that were definitive to avoid confusion.

### 3.5 Instrument Validity and Reliability

Kothari (2004) stated that validity refers to the extent to which a test measures what it is actually intended to measure. In other words validity is the extent to which differences found with the measuring instrument reflect true differences among those being tested. On reliability, Mugenda and Mugenda (2003) stated that Reliability is the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials.

#### 3.5.1 Reliability

The researcher carried out a pre-test of the questionnaire by issuing a set of questionnaires to establish whether the research questions that were put forward were answered correctly by the respondents. The researcher collected the answered questionnaire and carried out a post-test to evaluate the responses and rectify the questionnaire where possible or where the respondents could not fully understand. The researcher tested the reliability of instrument by use of reliability values (Alpha values) recommended by Cronbach who recommended analysis of each alpha value for each variable under study which should not be less than 0.6 (Mohsen and Reg, 2011). The alpha values were derived by the use of Statistical Package for Social Sciences (SPSS) and are shown in table 3.2 below.

**Table 3.2: Reliability table**

Constructs	Cronbach Alpha Values
Control Environment	0.783
Risk Assessment	0.734
Information and Communication	0.790
Monitoring	0.871

Table 3.2 reveals that all the variables have Alpha Values above 0.6 mark recommended by Mohsen and Reg. Therefore all the variables in the instrument are deemed reliable.

#### 3.5.2 Validity

The validity of the data collection instrument was done with the help of an Expert (the Researcher's Supervisor) to review the questionnaire. The Researcher forwarded the structured Questionnaire to the Supervisor who is an expert in the area covered by the research. The supervisor offered constructive criticism that helped in redesigning and correction of the questionnaire to facilitate data collection.

### 3.6 Data Collection Procedure

The researcher first sort permission from the management of organizations to carry out research in their organizations, this was done through letters of request. The permission was granted and the researcher attached an introduction letter to the questionnaires before they were distributed to the respondents. The questionnaires were then administered through the operations managers of different financial institutions. The questionnaires were collected after a maximum duration of one day.

## Data Analysis, Presentation and Interpretations

### 4.1 Analysis, Results and Discussions

The study wanted to establish the relationships between the ICS and fraud control. The following are results derived from the analysis of data collected from the respondents. The results are analyzed based on the hypotheses as presented below:

#### 4.2 Hypothesis testing

This section indicates the test results on the relationship between components of ICS i.e control environment, risk assessment, information and communication, monitoring and fraud control.

#### 4.2.1 Hypothesis one

H<sub>01</sub>: there is no significant relationship between control environment and fraud control in financial institutions.

H<sub>11</sub> there is significant relationship between control environment and fraud control in financial institutions.

**Table 4.10: ANOVA test on Control Environment and Fraud control**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	42.341	4	10.585	20.935	.000
Within Groups	39.945	79	.506		
Total	82.286	83			

The observed ANOVA test value above (20.935) is greater than Critical value  $F_{(4,79)} = 2.49$  at 95 percent confidence level and falls in the rejection region, therefore we reject the null hypothesis that there is no significant relationship between control environment and fraud control in financial institutions is rejected. Therefore we accept alternative hypothesis and conclude that there is significant relationship between control environment and fraud control in financial institutions. These observation shows that the control environment put in place by the financial institutions controls fraud. The study results are in agreement with findings of Mawanda (2008) which indicated that there is positive relationship between control environment and financial and asset safeguard.

#### 4.2.2 Hypothesis two

H<sub>02</sub>: there is no significant relationship between risk assessment and fraud control in financial institutions.

H<sub>12</sub>: there is significant relationship between risk assessment and fraud control in financial institutions.

**Table 4.11: ANOVA test on Risk Assessment and Fraud control**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	47.640	4	11.910	70.993	.000
Within Groups	13.253	79	.168		
Total	60.893	83			

The observed value of ANOVA test (70.993) represented in table 4.12 above is bigger than Critical value from the ANOVA test table at 95 percent confidence level ( $F_{(4,79)} = 2.49$ ), hence the null hypothesis that there is no significant relationship between risk assessment and fraud control in financial institutions is rejected. Therefore we accept alternative hypothesis and conclude that there is significant relationship between risk assessment and fraud control in financial institutions. This shows that the risk assessment applied in these financial institutions work in controlling fraud. This is in tandem with the findings of Tunji (2013) who concluded that proper risk assessments can be used to reduce financial distress in banking industry brought about by errors and fraud.

#### 4.2.3 Hypothesis three

H<sub>03</sub>: there is no significant relationship between information and communication and fraud control in financial institutions.

H<sub>13</sub>: there is significant relationship between information and communication and fraud control in financial institutions.

**Table 4.12: ANOVA test on Information and Communication and Fraud control**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	56.105	3	18.702	96.809	.000
Within Groups	15.455	80	.193		
Total	71.560	83			

The observed ANOVA test value above (96.809) is greater than Critical value  $F_{(3,80)} = 2.72$  at 95 percent confidence level, hence the null hypothesis that there is no significant relationship between information and communication and fraud control in financial institutions is rejected. Therefore we accept alternative hypothesis and conclude that there is significant relationship between information and communication and fraud control in financial institutions. These results shows that information and communication plays an important role in fraud control. Tunji (2013) agrees that timely, current and accessible information and communication can be effectively used to avert any form of financial misapplication or misuse.

#### 4.2.4 Hypothesis four

H<sub>04</sub>: there is no significant relationship between monitoring and fraud control in financial institutions

H<sub>14</sub>: there is significant relationship between monitoring and fraud control in financial institutions

**Table 4.13: ANOVA test on Monitoring and Fraud control**



	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41.643	4	10.411	25.769	.000
Within Groups	31.917	79	.404		
Total	73.560	83			

The test statistics computed above (25.769) is bigger than Critical value ( $F_{(4, 79)} = 2.49$ ) at 95 percent confidence level and therefore falls in rejection region. The null hypothesis that there is no significant relationship between monitoring and fraud control in financial institutions is therefore rejected and alternative hypothesis is accepted. This means that there is significant relationship between monitoring and fraud control in financial institutions. These findings indicate that the monitoring practiced by the financial institutions are able to control fraud. The findings are backed by the IFAC (2012) which indicates that monitoring is a vital component of ICS and if applied properly it is able detect any form of error or malpractices early enough before they cause major harm to the organization.

### 5.1 Summary of Findings

The overriding purpose of this study was to establish the relationship between internal control system and fraud control in deposit taking financial institutions. To accomplish this purpose the researcher developed research objectives and hypotheses based of the various components of the ICS. He also developed conceptual and operationalization frameworks. These helped in developing questionnaires to gather information. The researcher was able to gather the information through the questionnaires and the following is the summary of the findings  
 Out the total 92 respondents only 84 filled and returned the questionnaires. Based on the experience of the respondents the study revealed that the majority of the respondents had experience of 5 to 10 years (69%) while the minority had experience of below 5 years (6%). The other respondents had job experience of 10 to 15 years (14.3%) and above 20 years (9.5%), however though there were no respondents with job experience of between 15 and 20 years. On the presence of internal controls 92.9% affirmed that there are internal controls of their organizations, but the rest indicated that there are no internal controls. This response may be due to the fact that the respondents may not have been aware of the presence of internal controls. Seventy four point four percent of all the respondents indicated that the internal controls are very effective, 15.5% indicated that internal controls are moderate and 7.1% did not respond to that query. The question on the ability of internal controls to address the problem of fraud, 7.1% did not respond to the question, 29.8% strongly agreed that internal controls are able to address the problem of fraud, 59.5% agreed to the assertion, 2.4% were indifferent while the rest strongly disagreed.

In the study the researcher also needed to determine how control environment can be used to control fraud. The results under different sub-headings indicated that majority of the respondents were in agreement that the control environment can be used to control fraud, with an average of 4 in Likert scale of 1 to 5 the respondents showed agreement on the fact. In determining how risk assessment control fraud, determining how, information and communication and monitoring can be used to control fraud in financial institutions the study registered an average of 4 or more than four in Likert scale, which indicated that the respondents were in agreement that the components of ICS can be effectively used to control fraud in the financial institutions.

The study examined and established a significant relationship between ICS and fraud control. This relationship was examined through the components of ICS and fraud control. The components of ICS (control environment, risk assessment, information and communication and monitoring) were linked to fraud control and their relationships were tested using ANOVA test. Details of the results from ANOVA test test showed that all components of ICS have significant relationship with fraud control. The test statistics for various components of ICS were as follows; control environment ( $F = 20.935$ ,  $P = 0.0001$ ), risk assessment ( $F = 70.993$ ,  $P = 0.0001$ ), information and communication ( $F = 96.809$ ,  $P = 0.0001$ ) and monitoring ( $F = 25.769$ ,  $P = 0.0001$ ). The ANOVA test values obtained above fell in the rejection regions when compared with critical values at respective degrees of freedom. Likewise the p-values were less than the test value of 0.05.

### 5.2 Conclusion

Based on the findings of the study, it is concluded that the ICS established by various financial institutions are able to control fraud as supported by the study findings on control environment, risk assessment, information and communication and monitoring. However, there are challenges in mechanisms of promotion and compensation of employees and also in cases of missing supporting documents in transaction processing as indicated by mean and standard deviation of those two aspects. The means of those two issues were the lowest and fell below 4 in Likert scale. The standard deviations of the two issues were big which indicated large deviations in responses of the respondents.

The final conclusion of this study is that there is a significant relationship between internal control system (control environment, risk assessment, information and communication and monitoring) and fraud

control in financial institution in Imenti North Sub-county.

### 5.3 Recommendations

Since it was evident from the findings of the study, that there was lower content with the promotion and compensation of the employees by the management, then the management of these institutions should establish proper mechanisms of promoting qualified and deserving employees, also the institutions should ensure fair remunerations based on qualification, responsibilities and output of employees. The study also revealed that there are cases of missing documents required for transaction processing. This is one way of fraud perpetration, therefore the management should ensure that proper rules, guidelines and policies are developed and ensure their full implementation to reduce chances of fraud commission.

The study also recommends that the financial institutions establish and manages knowledge/information management system within the institution, so as to enable all parties within the institution to freely access and utilize necessary official information that will enable the employees to embrace and appreciate their roles in enhancing vigilance against fraudsters.

Finally, the study recommends that there should be a deliberate attempt by the management to forge a cordial working relationship with other employees in order to ensure any information gathered by the employees can be passed effortlessly to the management for action. This relationship may help the employees to appreciate their jobs, thus improving their input and reduce cases of errors.

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#### **Authors' bio data**

Samuel Ngigi Nyakarimi has a Bachelor of Commerce (First Class Honors) degree in Accounting from Meru University, Kenya, a Master of Business Administration (MBA) degree in Accounting from Meru University of Science & Technology, Kenya and he is a Certified Public Accountant. He lectures finance, accounting and management courses in YMCA institute, Kenya Institute of Management and Mount Kenya University. Samuel is an Associate Member Kenya Institute of Management (AKIM). He is also engaged as a Lecturer of Business statistics and Mathematics, Business Law, Quantitative Analysis and Economics. His research interests are on Economics, Finance and Accounting.

Mary Karwirwa has a Bachelor of Commerce (First Class Honors) degree in Accounting from Meru University, Kenya, a Master of Business Administration (MBA) degree in Accounting from Meru University of Science & Technology, Kenya and she is a Certified Public Accountant. She works in Equity bank, Kenya as Relations Officer. She also lectures at Kenya Institute of Management. She is an Associate Member Kenya Institute of Management (AKIM). He is also engaged as a Lecturer of Financial Management and Financial Accounting

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