



Effectiveness of internal control system in higher learning institution, in Nairobi, Kenya

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Abstract

The aim of this study is to assess the effectiveness of the internal control system in the Catholic University of Eastern Africa (CUEA). And, therefore, the specific objectives are to assess the effectiveness of elements of the internal control system in the CUEA, which are control environment, risk assessment, control activities, information and communication activities and monitoring activities. The study used a descriptive research design, and a sample of 53 administrative staffs was selected using a stratified sampling technique. Data collected via questionnaire were analysed by employing a descriptive statistics that contains frequency, percentage, mean and standard deviation. The validity and reliability of the instruments were assured using the piloting and Cronbach Alpha technique. The study found that solely control the environment of the institution was effective to a great extent, but, the four elements of its internal control system were effective to a moderate extent. Therefore, the researcher concluded that the institution had an internal control system to a moderate extent proved by a mean of 3.4. This suggests that in spite of the institution designed its control environment to a great extent its policies and procedures weren't enforced and monitored to a very great or great extent. Thus, the study recommended that the institution needs more effective implementation and monitoring of its policies and procedures and creating proper risk assessment to improve its internal control system.

Keywords: Effective, financial, internal control system, managements.

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1. Introduction

Internal control is a broad term with large coverage. It covers the control of the entire management system so as to carry on the business of the enterprise in an orderly and cost-effective method. COSO (2013) outlined internal control as a method, performed by an entity's board of administrators, management and other personnel, meant to produce reasonable assurance concerning the accomplishment of the objectives relating to operations, reporting and compliance. Kumuthinidevi (2016) stated that an effective internal control is the basis for safe and sound organisation activities; it also minimises the possibility of significant errors and irregularities and assists in timely detection of any fraud and errors. An appropriately designed and constantly implemented system of operational and financial internal control helps institution administrators and management to safeguard the enterprise resources, produces reliable financial reports and complies with laws and regulations (Kumuthinidevi, 2016). Thus, an effective internal control can considerably increase the probability that financial information is reliable so that managers and also board will rely upon accurate information, assets and records of the organisation don't seem to be purloined, misused or accidentally destroyed; the organisation policies and government regulations are met, and the overall organisation objective is achieved.

Kaplan (as cited in Kipyego & Naibei, 2017) similarly describes internal control, as a process created by an entity's board of administrators, management and other personnel, aimed to produce reasonable assurance concerning the accomplishment of a firm's objectives which are effectiveness and efficiency of operations, reliability of financial and management reporting, compliance with applicable laws and regulations and shield the organisation's reputation. According to Whittington and Pany (2004), internal controls of any organisation have five components, namely, control environment, risk assessment, control activities, information and communication activity and monitoring activities. Therefore, an organisation achieves an effective internal control system through properly implementing and monitoring all components of its internal control system. A study conducted in Vietnam Thai Nguyen province by Thao (2018) on the effectiveness of the internal control system in the private joint-stock commercial banks. The study reported that control environment, risk assessment, information and communication system, control activities and self-assessment of the bank were effective to a neutral level. Furthermore, the study found that the private joint-stock commercial bank had an internal control system with a fairly level of effectiveness.

A study carried out by Kumuthinidevi (2016) on the effectiveness of the internal control system in the private banks of Trincomalee in Sir Lanka. It was reported that the private banks of Trincomalee had control environment, risk assessment, information and communication, control activities and self-assessment to a moderate extent effective. Finally, the study concluded that the private bank had an internal control system to a moderate extent effective. Frimpong et al. (2012) conducted a study in Kumasi Ghana on the appraisal of internal control systems: a case study of Akafo Adamfo marketing company limited. The study found that Akafo Adamfo's control environment, risk assessment, control activities, information and communication and monitoring activities were shown very effective. The study further concluded that there were very effective internal control structures in Akafo Adamfo.

1.1. Problem statement

In the previous decade, internal control failures were the main cause for the majority explosive accounting scandals of the enterprises. The Enron is the best example within the US. Before Enron collapsed in 2001, the corporate declared earnings of \$200 million and according to the stock market was valued billions of dollars. Conversely, the stock price of Enron was driven up by deceitful accounting practices and earnings management (Zhang, 2007). End of the similar year, it declared that it had exaggerated its earnings over the last four years and owed approximately \$6 billion to its lenders, several investors lost their money; workers lost their jobs and even employee's pensions

vanished after the collapse as a result of the company's pension scheme had invested in its own shares (Zhang, 2007).

Magara (2016) additionally states that the national carrier Republic of Kenya Airways reported in 2016 to have lost in more than Ksh 60 billion in under-priced ticketing scam, and additional Ksh 2.2 billion because of incorrect billing and permitting excess baggage will not following due procedure. Similarly, according to Achuka, (2016), in 2016, the Catholic University of Eastern Africa (CUEA) also in deep financial crises after it emerged that poor management decisions and leakage of funds amounting to a minimum of KSh 400 million. A research has not conducted recently on assessing the effectiveness of the internal control system in higher learning private institution in Kenya. Therefore, it was based on this gap and the above-declared problems of the internal control system the researcher conducted a research on assessing the effectiveness of the internal control system in higher learning institution in Nairobi Kenya.

1.2. Objectives of the study

The general objective of the study was:

1. To assess the effectiveness of the internal control system in the CUEA.

The specific objectives of the study were:

2. To assess the effectiveness of control environment in the CUEA.
3. To assess the effectiveness of risk assessment and control activities in the CUEA.
4. To assess the effectiveness of information and communication and monitoring activities in the CUEA.

2. Literature review

2.1. Theoretical frameworks

Internal controls are policies and procedures put in place to guarantee the reasonable achievement of the organisation objectives. A reliable internal control system helps managers to rely on more accurate information in making all necessary decisions in the organisation.

2.1.1. Reliability theory

Reliability theory merely describes as the probability of a system completing its expected operation throughout an interval of time (Gavrilov & Gavrilova, as cited in Abdullahi, & Muturi, 2016). Reliability theory is a body of ideas, mathematical models and techniques aimed to forecast, estimate, understand and enhance the lifetime distribution of systems and their components (Barlow et al., as cited in Gavrilov & Gavrilova, 2001). The reliability of the system (or component) refers to its ability to operate appropriately according to a stated standard (Crowder et al., as cited in Gavrilov & Gavrilova, 2001).

According to the reliability theory, an internal control system contains elements that are interrelated to each other and therefore reliability of those elements is outlined as the likelihood of the components being found in the success state (Gavrilov and Gavrilova, as cited in Abdullahi, & Muturi, 2016). The theory additionally argues that weak internal control systems lead to more substantive work and thence greater cost (Kinney, 2000). Messier and Austen (as cited in Abdullahi & Muturi, 2016) stated that one of the benefits of reliability theory is its tight relationship to the auditor's needs concerning understanding the inner control system and control risk assessment. The theory stipulates that internal control systems are primarily established for assessment and control of risks.

2.1.2. The agency theory

Agency theory was developed in 1976 by Jensen and Meckling. This theory described agency relationship as a contract between principal (s) and agent in which the agent is agreed to perform some services on behalf of the principal (s). The theory posits that agents have additional information than principals and which this information imbalance adversely affects the principals' ability to monitor whether or not their interests are being properly served by agents. The theory describes firms as essential structures to keep up contracts, and via firms, it is possible to exercise control that reduces dishonest behaviour of agents (Jensen and Meckling, as cited in Abdullahi & Muturi, 2016). Jussi and Petri (as cited in Muhunyo, 2018) stated that the agent–principal relationship is strengthened more by the principal employing an expert and systems (auditors and internal control systems) to monitor the agent.

2.2. Components of internal control system

COSO (1992) provided criteria against which the effectiveness of internal controls can be assessed. Internal control can be refereed effective if the entity's operation objectives are being attained; trustworthy financial statements are being prepared, and if the entity complied with all necessary laws and regulations. Consequently, the effective operating of elements of internal control provides a reasonable guarantee regarding the attainment of one or more of the listed objectives (COSO, 1992). As stated in the internal control framework of COSO (2013), an effective internal control should in priority encompass the five elements of the control. Therefore, the effectiveness of internal control would be assessed through the five elements of the internal control system, which are described in the following sections.

2.2.1. Control environment

The control environment is the foundation for all other components of internal control that provides discipline and structure, which sets the tone of an organisation by influencing the control consciousness of its people (Ratcliffe and Landes, 2009). Similarly, Messier, Glover and Prawitt (2006) submitted that the control environment sets the tone of an organisation and it influences the control consciousness of employees. According to COSO (2013), the control environment is the set of standards, processes and structures that provide the basis for carrying out an internal control system across the organisation. Whittington and Pany (2004) states several aspects of the control environment which comprises integrity and ethical values, competence of employees and management, management's philosophy and operating style, audit committee of the board of directors, the organisational structure and human resource policies and practices. It is the responsibility of management to establish appropriate control environment of the organisation.

2.2.2. Risk assessment

Risk assessment is the process of identifying and analysing relevant risks that would affect the organisation in achievement its objectives; the assessment includes both financial and non-financial risk. According to COSO (2013), a precondition to risk assessment is the establishment of objectives linked at different levels of the entity. Management specifies objectives with categories relating to operations, reporting and compliance with sufficient clarity to be able to identify and analyse risks to those objectives. The risk assessment forms the basis for determining how risks will be managed. A risk is defined as the possibility that an event will occur and adversely affect the achievement of organisational objectives. Risk assessment requires management to consider the impact of possible changes in the internal and external environment and to potentially take action to manage the impact (COSO, 2013).

2.2.3. Control activity

An internal control system contains certain control activities, including policies and procedures with regard to approval, authorisation, verification, reconciliation, review of operational activities,

safeguarding of assets and segregation of duties (Visser & Erasmus, 2008). Once the possible risks of an organisation are determined, the control activities are established to address these risks that may hinder the achievement of the organisation's objectives. Ratcliffe and Landes (2009) described control activities as the policies and procedures used in various organisations to ensure management directives are carried out and necessary actions are taken to address risks to the achievement of various objectives. Control activities take place throughout the organisations at all levels and in all tasks (Ratcliffe and Landes, 2009).

COSO (2013) also describes control activities as actions (generally described in policies, procedures and standards) that help management mitigate risks in order to ensure the achievement of objectives. Control activities are performed at all levels of the entity, at various stages within business processes, and over the technology environment (COSO 2013). Mendoza (2012) lists out in his research that the control activities of internal control systems can be divided into nine activities, namely, authorisation, segregation of duties, information processing, physical controls, sufficient documents, authentication, reconciliation, appraisal of operational performance and oversight.

2.2.4. Information and communication activities

Information is essential for an organisation to carry out internal control duties in favour of the accomplishment of its objectives (COSO, 2013). Communication arises both internally and externally and supports the organisation with the information required to carry out daily internal control activities and it allows employees to comprehend internal control responsibilities and their significance to the accomplishment of the organisation objectives (COSO, 2013).

The significance of having the accurate information communicated to managers at the exact time has become a key to effective business operations and internal control as organisations have become more complicated in their structure and global operations and become more reliant on technology (COSO, 2013). According to Lamoye (2005), for the control system to be effective and efficient, there ought to be relevant and reliable information which should be recorded and communicated to management and other personnel within the organisation.

2.2.5. Monitoring activities

The function of monitoring activities is to ensure the organisation internal controls are properly designed and implemented, and any deficiencies of the internal controls are reports on time to the senior management in order to have the organisation effective and efficient internal control system in its daily operation. According to Whittington and Pany (2004), monitoring activities is a process to assess the quality of internal control performance. Monitoring makes it possible for management to decide whether any adjustment is necessary, and it can be achieved by implementing consistent supervisory and management activities, such as assessing the reasonableness of management reports as well as constant monitoring of other reports (Whittington & Pany, 2004).

Monitoring activities is on-going evaluations, separate evaluations or some combination of the two, which is used to ascertain whether each of the five components of internal control including controls to affect the principles within each component is present and functioning (COSO, 2013). The purpose of monitoring is to determine whether internal control is adequately designed, properly executed and effective (COSO, 2013). Internal control is sufficiently designed and properly implemented if all five elements of internal control (control environment, risk assessment, control activities, information and communication, and monitoring) are present and performing as designed (Ofori, 2011).

3. Methods and materials

3.1. Research design and participants

A descriptive research design was used to describe the respondent's profiles and to assess the opinion of these respondents on the effectiveness of the internal control system in the CUEA. The

target population of this study was all administrative staffs of CUEA in the year of 2018–2019, which were 202 staffs. Out of these target population, a sample of 53 was selected using a stratified random sampling technique. The stratified sampling was used because the target population was classified into such category which has different characteristics among each category and similar characteristics within each category.

3.2. Data collection instrument

The study used primary data and close-ended questioners were designed in the form of five-point Likert Standard Scales to measure the institution's internal control system effectiveness. The collected data comprised section (A) the demographic characteristics of the respondents and section (B) effectiveness of components of internal control system which are control environment with (10) items, risk assessment with (7) items, control activities with (12) items, information and communication activities with (7) items, monitoring activities with (8) items and finally a questioner regarding the overall effectiveness of internal control system also designed.

3.3. The validity and reliability of the instrument

Before the questionnaires sent to the respondents, it was examined by an expert in the field of accounting, accordingly, the questionnaires were improved based on the comments of the expert. In addition, it also sent to the administrative staffs of Strathmore University (20% of the sample) for the purpose of pre-testing (piloting), in the process any deficiencies of the questionnaires were amended. The reliability of the instrument also measured using Cronbach alpha which is the most typical measure of internal consistency or reliability of a set of scale. It was found that the Cronbach alpha of control environment, risk assessment, control activities, information and communication activities and monitoring activities is 0.98, 0.98, 0.99, 0.98 and 0.99, respectively, which suggests that the instrument of this study has very high reliability.

3.4. Data analysis and evaluation methods

The data were organised, screened and checked for completeness. Then, it was coded and entered into the computer, and cross-checked with the original data for accuracy. The data were analysed using computer software (SPSS Ver. 22). The descriptive statistical techniques comprising frequency, percentage, mean and standard deviation were used to analyse and evaluate the collected data. And also one of the ordinal measures called 'Five Point Likert Scale' was used to assess the collected data. A Likert Scale is a type of rating scale employed to evaluate attitudes or opinions. With this scale, respondents were asked to rate the object using the following five points: very great extent = 5, great extent = 4, moderate extent = 3, little extent = 2, no extent = 1.

By using this scale, it will be easy to find out the effectiveness of the internal control system in the CUEA. Based on the standards indicated in the questionnaire, a mean value for each element of internal control is computed. Therefore, the mean value is determined and interpreted using the following criteria: X_i = mean value;

1. $4.5 \leq X_i \leq 5$ = very great extent effective.
2. $3.5 \leq X_i \leq 4.4$ = great extent effective.
3. $2.5 \leq X_i \leq 3.4$ = moderate extent effective.
4. $1.5 \leq X_i \leq 2.4$ = little extent effective.
5. $1 \leq X_i \leq 1.4$ = no extent effective.

3.5. Ethical consideration

The ethical approval to conduct this study was obtained from the CUEA. And consent for responding to the distributed questioners was obtained from all respondents before the data collected.

4. Results and discussions

4.1. Control environment

Table 1 represents the rates of respondents on the effectiveness of the control environment in the CUEA. It was measured using the aspects of control environments. The study found that the mean and standard deviation of the information gathered regarding the effectiveness of the control environment are 3.5 and 0.96, respectively.

Table 1. The effectiveness of control environment in the CUEA

Rates	F	%
Very great extent	8	14.9
Great extent	21	38.8
Moderate extent	15	29.3
Little extent	7	12.6
No extent	2	4.4
Total	53	100

Note 1 Rating: very great extent = 5, great extent = 4, moderate extent = 3, little extent = 2, no extent = 1, F = Frequency, % = percentage.

Table 1 shows a large number (38.8%) of respondents rated that the institution had control environment to a great extent effective, while 29.3% and 14.9% of the respondents rated the effectiveness of the institution's control environment to a very great and moderate extent, respectively. As the finding indicates, the institution had control environment to a great extent evidenced by the mean of 3.5. However, it still needs such improvement in designing its control environment. The result also implies that the institution control environment supported the effectiveness of its internal control system to a great extent, which suggests that the institution had a good tone at the top that uses as a base for other components of internal control. However, it's necessary to clarify that having a good implementation of all aspects of control environment doesn't mean the institution has a good internal control system, because the effectiveness of the internal control system of an institution depends on the effectiveness of all components of the internal control system.

Overall the study determined that the management of the institution was committed to design the institution control environment to great extent, which includes determining each individual member of the institution authority, responsibility, appropriate lines of reporting, establishing code of business ethics, setting the standards of the institution, ensuring availability of adequate and competent staffs, etc. The result corresponds to the finding of Ofori (2011) who concluded that the Ghana post company had a satisfactory control environment. However, this finding contrasts with the finding of Thao (2018) who stated that the private joint-stock commercial banks in Thainguyen province, Vietnam, had a control environment to a moderate extent. Similarly, Kumuthinidevi (2016) found that the private banks of Trincomalee in Sir Lanka had a control environment to a moderate extent.

4.2. Risk assessment

Table 2 shows the information regarding the effectiveness of risk assessment in the CUEA, which was gathered from the respondents by taking into consideration the aspects of risk assessment. The mean and standard deviation of the information are 3.0 and 0.98, respectively.

Table 2. The effectiveness of risk assessment in the CUEA

Rates	F	%
Very great extent	4	7.8
Great extent	15	27.7
Moderate extent	18	34.9
Little extent	13	23.9
No extent	3	5.7
Total	53	100

Note 2 Rating: very great extent = 5, great extent = 4, moderate extent = 3, little extent = 2, no extent = 1, F = Frequency, % = percentage.

Table 2 demonstrates 27.7% and 34.9% of the respondents valued that the institution risk assessment was effective to a great and moderate extent, respectively, whereas 23.9% of the respondents rated that the effectiveness of risk assessment in the institution to a little extent. Therefore, the result of the study confirms that the institution's risk assessment was effective to a moderate extent as it supported by the mean of 3.0. The findings also indicate that the management only enforced the aspects of the institution's risk assessment to a moderate extent, including regular risk assessment and analyses related to financial issues (e.g., fraud, loss or embezzlement of assets and collusions), analysing risk of internal and external environment before making any change or decisions and analysing risks related to lose of the institution's reputation. Accordingly, the institution had an internal control system to a moderate extent in terms of risk assessment. This might be one of the reasons why the institution faced a financial crisis at least ksh 400 million in 2016 and still struggling to settle its debts because it is highly probable an institution to be vulnerable to such risks if it doesn't implement a decent enough risk assessment.

The finding of the study corresponds to the finding of Thao (2018) who stated that the private joint-stock commercial banks in Thainguyen province, Vietnam, had a risk assessment to a moderate extent. Similarly, Kumuthinidevi (2016) determined that the non-public banks of Trincomalee in Sir Lanka had a risk assessment to a moderate extent. However, this result contrasts with the finding of Ofori (2011) who concluded that the Ghana post company had a satisfactory risk assessment.

4.3. Control activities

Table 3 represents the effectiveness of control activities in the CUEA, which were evaluated using the aspects of control activities. The mean and standard deviation of those rates gathered from the respondents on the effectiveness of control activities are 3.3 and 1.1, respectively.

Table 3. The effectiveness of control activities in the CUEA

Rates	F	%
Very great extent	7	12.8
Great extent	16	30.2
Moderate extent	18	33.4
Little extent	9	17.5
No extent	3	6.1
Total	53	100

Note 3 Rating: very great extent = 5, great extent = 4, moderate extent = 3, little extent = 2, no extent = 1, F = Frequency, % = percentage.

As shown in Table 3 most (30.2% and 33.4%) of respondents agreed that the institution had control activities to a great and moderate extent effective, respectively, and a small number (12.8% and 17.5%) of respondents rated that the institution control activities were effective to a very great and little extent, respectively. Hence, the study determined that the control activities of the institution were effective to a moderate extent as it supported by the mean of 3.3. This result indicates that the institution had no adequate policies and procedures that can ensure its operations to be more efficient and effective. It also suggests that the institution's internal control system was effective to a moderate extent in terms of control activities variable.

Overall the findings imply that the management of the institution implemented all policies and procedures to a moderate extent, which are policies and procedures regarding approval, authorisation, verification, reconciliation, review of operational activities, safeguarding of assets, segregation of duties and job rotation. Based on this finding, it can be concluded that although the management of the institution designed a control environment to a great extent, the institution did not implement its policies and procedures effectively to a very great or great extent but it only implemented it to a moderate extent. As described in the literature 'control activities are actions (policies, procedures and standards) implement in the institution to mitigate any possible risks'; but if those actions are not practiced adequately, the institution could face such loses due to inadequate control activities. Therefore, based on the result, control activities could be one of the main causes of the institution's financial crises in 2016 as well as closing of some of its branches following those crises and for its current inefficiencies. This finding corresponds to the finding of Thao (2018) who stated that the private joint-stock commercial banks in Thainguyen province, Vietnam, had control activities to a moderate extent. Similarly, Kumuthinidevi (2016) concluded that the private banks of Trincomalee in Sir Lanka had control activities to a moderate extent. However, this result contrasts with the finding of Ofori (2011) who concluded that the Ghana post company had satisfactory control activities.

4.4. Information and communication activities

Table 4 discloses the information regarding the effectiveness of information and communication activities in the CUEA, which was measured using the aspects of information and communication activities. The mean and standard deviation of the information are 3.2 and 0.9, respectively.

Table 4. The effectiveness of information and communication activities in the CUEA

Rates	F	%
Very great extent	5	9.8
Great extent	15	28.3
Moderate extent	22	41.9
Little extent	9	16.6
No extent	2	3.4
Total	53	100

Note 4: Rating, very great extent = 5, great extent = 4, moderate extent = 3, little extent = 2, no extent = 1, F = Frequency, % = percentage.

Table 4 shows most (41.9%) of the respondents valued that the information and communication activities in the CUEA were effective to a moderate extent and 28.3% of the respondents rated that the institution information and communication activities were effective to a great extent, whereas a small number of respondents (16.6%) agreed that the institution had information and communication activities to a little extent effective. Based on the result, the institution information and communication activities were effective to a moderate extent with the mean of 3.2, which suggests that the institution's internal control system was effective to a moderate extent regarding the variable of information and communication activities.

It also implies that the institution accounting process, flow of information across all levels of the institution, improvement of communication tools, report of any weakness of the institution, availability of information regarding any change of technology and potential risks, etc. had not practiced more sufficiently instead it only exercised moderately. Therefore, it can be inferred that the institution is still facing such challenges in the effectiveness and efficiency of its operations, especially in the management decision-making process. Because, as stated in the background section, one of the main causes of the institution's financial crises in 2016 was due to poor management decisions and it is typical that management decisions are highly dependent on the information and communication system.

The finding of this variable corresponds to the finding of Thao (2018), who confirmed that the private joint-stock commercial banks in Thainguyen province, Vietnam, had information and communication activities to a moderate extent. Similarly, Kumuthinidevi (2016) indicated that the private banks of Trincomalee in Sir Lanka had information and communication activities to a moderate extent. However, this result contrasts with the finding of Ofori (2011) who concluded that the Ghana post company had satisfactory information and communication activities.

4.5. Monitoring activities

Table 5 shows the effectiveness of monitoring activities in the CUEA, which was measured by the aspects of monitoring activities. The mean and standard deviation of the information in Table 5 are 3.1 and 0.9, respectively.

Table 5. The effectiveness of monitoring activities in the CUEA

Rates	F	%
Very great extent	3	5.4
Great extent	16	30.5
Moderate extent	20	39
Little extent	11	20.4
No extent	3	4.8
Total	53	100

Note 5 Rating: very great extent = 5, great extent = 4, moderate extent = 3, little extent = 2, no extent = 1, F = Frequency, % = percentage.

Table 5 shows the majority (39%) of the respondents evaluated that the monitoring activities in the CUEA was effective to a moderate extent. Similarly, 30.5% of the respondents rated that the monitoring activities of the institution was effective to a great extent. However, 20.4% of the respondents valued that the effectiveness of the institution's monitoring activities to a little extent. Therefore, this result confirms that the institution had monitoring activities to a moderate extent effective evidenced by the mean of 3.1. It also implies that monitoring activities supports the effectiveness of the institution's internal control system moderately.

Therefore, the study concluded that the institution implemented its monitoring activities to a moderate extent effective, including independent process of checking and evaluating of internal controls system and properly reviewing the audit report by the management. It is also important to note that one of the functions of monitoring activities is to detect any fraudulent activities and other weaknesses of the institution; so this result could be a warning sign to the institution regarding any potential financial and non-financial losses. Because if there is no adequate enough of on-going evaluation or supervision in its operation, from its experience in 2016, it is highly probable that the institution could expose to such loses. The finding corresponds to the finding of Thao (2018), who stated that the private joint-stock commercial banks in Thainguyen province, Vietnam, had monitoring activities to a moderate extent. Similarly, Kumuthinidevi (2016) indicated that the private banks of Trincomalee in Sir Lanka had monitoring activities to a moderate extent. However, this result contrasts

with the finding of Ofori (2011) who concluded that the Ghana post company had satisfactory monitoring activities.

4.6. Internal control system

Table 6 shows the information gathered from the respondents through directly questioning regarding the level of effectiveness of the internal control system in the CUEA. The mean and standard deviation of the information are 3.4 and 0.86, respectively.

Table 6. The effectiveness of internal control system in the CUEA

Rates	F	%
Very great extent	4	7.5
Great extent	21	39.6
Moderate extent	23	43.4
Little extent	3	5.7
No extent	2	3.8
Total	53	100

Note 6 Rating: very great extent = 5, great extent = 4, moderate extent = 3, little extent = 2 no extent = 1, F = frequency, % = percentage.

As the result indicates in Table 6, majority (43.4% and 39.6%) of the respondents rated that the internal control system of the CUEA were effective to a moderate and great extent, respectively; while small number (7.5%, 5.7% and 3.8%) of respondents agreed that the institution had internal control system to a very great, little and no extent, respectively. Therefore, based on the result CUEA's internal control system was effective to a moderate extent as it supported by the mean of 3.4.

Since the general purpose of the study was to assess the effectiveness of internal control system in the CUEA, the researcher also evaluated the effectiveness of internal control system by analysing the effectiveness of all independent variables (control environment, risk assessment, control activities, information and communication activities and monitoring activities), as one variable. Similarly, it was found that the internal control system was effective to a moderate extent with the mean of 3.2; this indicates a high reliability of the study findings.

The result reveals that the overall internal control system of the institution was not more effective to reasonably ensure the achievement of its objectives (effectiveness and efficiency of the operations, reliability of financial and management reporting, compliance with applicable laws and regulations and protecting the institution's reputation). Hence, it's important to note that an organisation can only achieve effective internal control system by taking into consideration and implementing properly all the components of internal control; for instance, good internal control cannot be achieved by only having good control environment instead it can be achieved by concerning all the components of internal control system together.

Therefore, it is, in this case, that the CUEA had an internal control system to a moderate extent. Because the institution designs its discipline structure, process, human resource policies, etc. to a great extent; however, they weren't properly implemented and monitored, which results in the effectiveness of the institution's internal control system to a moderate extent instead of great or very great extent. The result corresponds to the study conducted by Thao (2018) on the effectiveness of internal control system in the private joint-stock commercial banks in Thai Nguyen province, Vietnam; the study found that the bank had an internal control system to a moderate extent. Similarly, the study carried out by Kumuthinidevi (2016) on the effectiveness of the internal control system in the private banks of Trincomalee in Sir Lanka found that the bank had an internal control system to a moderate extent effective.

5. Conclusion

The study found that the CUEA had a risk assessment, control activities, information and communication activities and monitoring activities to a moderate extent and it also had a control environment to a great extent. Overall the researcher concluded that the CUEA's internal control system was not very great or great effective instead it was a moderate extent effective.

6. Recommendations

To enhance the institution's internal control system effectiveness, management must enforce job rotation and vacation policies in order to improve transparency and bring benefits to the institution. This helps to deter fraud when potential perpetrators know that someone else will do their job for a period of time, and expose any fraud or weakness of the staff. The management should also make sure that the segregation of duty and authority of each employee is properly implemented. In addition, the management should enhance the institution's risk assessment policies to detect and prevent any possible risk before causing the institution such losses as stated in the background that the CUEA had faced a loss of at least Ksh 400 million in 2016 due to weak internal control system.

It also recommended that the institution should ensure the implementation of all its policies and procedures including specifying each employee's responsibility and authority, segregation of staff duties, etc. And the institution should enhance the strength of its internal auditor team including their qualification and independence, to ensure that the internal auditors are properly and regularly monitoring the effectiveness of the internal control system. Furthermore, the management should evaluate independently the performance of each employee of the institution on an on-going basis to reward or penalise accordingly. This helps to identify the employees who cause the institution to such losses and those who help the institution in achieving its objectives.

In the case of monitoring the board of directors and management, the shareholders should appoint an independent board of directors as much as possible, and the board of directors also should properly monitor the activities of the senior management through providing them incentives, such as performance incentive contract. Finally, the researcher recommended that a research to be done on the challenges of the internal control system in higher learning institutions and it also recommended a research to be done on factors that affect the board of directors to implement an effective internal control system in a higher learning institution.

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References

- Abdullahi, M. H. & Muturi, W. (2016). Effect of internal control systems on financial performance of higher. *International Journal of Economics, Commerce and Management*, 12, 762–80.
- Achuka, V. (2016). *Nairobi news*. Retrieved From Retrieved from <https://Nairobinews.Nation.Co.Ke/News/Catholic-University-Financial-Crisis-Loss-Sh400-Million>
- Committee of Sponsoring Organisations of the Treadway Commission (COSO). (1992). *Internal control-integrated framework* (4 vols). COSO, New York, NY. Control-Integrated Framework, Retrieved From https://www.academia.edu/12912529/Internal_Control_Integrated_Framework_Committee_of_Sponsoring_Organizations_of_the_Treadway_Commission
- Committee of Sponsoring Organisations of the Treadway Commission (COSO). (2013). *Internal control – integrated framework (2013 Framework)* (pp 1–8). Retrieved from <https://www.Coso.Org/Documents/COSO-CROWE-COSO-Internal-Control-Integrated-Framework.Pdf>

Tenbele, N. T. (2019). Effectiveness of internal control system in higher learning institution, in Nairobi, Kenya. *Global Journal of Business, Economics and Management: Current Issues*, 9(3), 143-155. <https://doi.org/10.18844/gjbem.v9i3.4399>

- Frimpong, E. A., Boadi, I. D., Blay, E., Frimpong, R., Akligo, B. E., & Angmor, B. K. (2012). *The appraisal of internal control systems: a case study of akuafo adamfo marketing company limited* (Master's Thesis), pp 1–63. Retrived from <http://webcache.googleusercontent.com/search?q=cache:ctPw-aKifW4J:ir.csuc.edu.gh:8080/xmlui/bitstream/handle/123456789/78/APPRaisal.pdf>
- Gudpa and Arora. (2003). Internal control reports and financial reporting problems. *Accounting Horizons*, 10(25), 67–75.
- Gavrilov, L., A. & Gavrilova, N., S. (2001). *The reliability of aging and longevity*, Center on Aging, NORC/University of Chicago, pp 527–545. Retrieved from <http://healthsters.com/JTB-01.pdf>
- Kinney, W. R. (2000). Research opportunities in internal control, quality and quality assurance. *A Journal of Practice and Theory*, 19(4), 83–90.
- Kipyego, L. & Naibei, I. K. (2017). Accounting internal control systems and firm performance : evidence from commercial banks In Kericho County, Kenya. *International Journal of Economics, Commerce and Management*, 5(11), 697–712.
- Kumuthinidevi, S. (2016). A study on effectiveness of the internal control system in the private banks of trincomalee. *International Journal of Scientific And Research Publications*, 6(6), 600–612.
- Lamoye. (2005). Internal controls and cost. *NF Perspective J*, 4.
- Magara, C, N. (2016). *The East African*. Retrieved From <https://www.theeastafrican.co.ke/oped/comment/local-firms-are-failing-due-to-poor-internal-control-systems-/434750-3415544-Yw8qsk/Index.html>
- Mendoza, R. R. (2012). *Internal control system: vital tool for cooperative governance*. Makati City, Philippines: Hotel Intercontinental Manila.
- Messier, W. F., Glover, S. M. & Prawitt, D. F. (2006). *Auditing and assurance services: a systematic approach*. New York, NY: Mcgraw-Hill.
- Muhunyo, B. M. (2018). Effect of internal control systems on financial performance of public institutions of higher learning in Nairobi City County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(2), 273–287.
- Ofori, W, (2011). *Effectiveness of internal control system: a perception or reality* (Master's Thesis). Retrieved From [Http://Dspace.Knust.Edu.Gh/Bitstream/123456789/4435/1/WILLIAM%20OFORI%20FINAL%20THESIS%202011.Pdf](http://Dspace.Knust.Edu.Gh/Bitstream/123456789/4435/1/WILLIAM%20OFORI%20FINAL%20THESIS%202011.Pdf)
- Ratcliffe, T. A. & Landes, C. E. (2009). *Understanding internal control and internal control services*. New York, NY: American Institute of Certified Public Accountants, Inc.
- Thao, N. P. (2018). *Joint-Stock commercial banks In Thai Nguyen Province , Vietnam, (April)*. The 5th IBSM International Conference on Business, Management and Accounting, pp 766–780.
- Visser, C. B. & Erasmus, P. W. (2008). *The management of public finance: a practical guide*. Cape Town: Oxford University Press.
- Whittington, O. R. & Pany, K. (2004). *Principles of auditing: and other Ass services*. New York, NY: Mcgraw – Hill.
- Zhang, I. X. (2007). Economic consequences of the Sarbanes–Oxley act of 2002. *Journal of Accounting and Economics*, 44(1–2), 74–115.