

Effects of Internal Control Systems on Financial Performance of Saccos in Nyeri Central Sub-County, Kenya

Mary Mbaka*, Dr. David Kiragu (PhD), Dr. Riro Kamau (PhD)

Department of Accounting & Finance, Dedan Kimathi University of Technology, Kenya, P.O Box 657- 10100, Nyeri, Kenya

***Corresponding author**

Mary Mbaka

Article History

Received: 11.03.2018

Accepted: 20.03.2018

Published: 30.03.2018

DOI:

10.21276/sjbms.2018.3.3.14



Abstract: Kenyan SACCO segment makes up a considerable percentage of the country's savings and this has spurred economy and social development. It has been established that internal environment has a great bearing on the performance of SACCOs. This study investigated the relationship between internal control systems and performance in SACCOs in Nyeri Central Sub-County and was guided Restitution and Internal Control Theory, Agency theory and Control theory. Internal controls were looked at from the perspective of Control Environment, control activities, Risk Assessment and Monitoring all focused on the performance which measured profitability and investment returns. The target population was 26 operating SACCOs in Nyeri Central Sub-County and the respondents was 78 employees working in this SACCOs who were categorized into the loan managers, internal auditors and financial analysts. The research was conducted using both quantitative and qualitative approaches; adopting cross-sectional survey research design. The relevant data was collected using questionnaires, out of 78 employees 68 responded representing 87.2% response rate. Collected data was analyzed using statistical package for social sciences (SPSS) to generate descriptive statistics. Effects of internal controls on the financial performance of SACCOs in Nyeri central sub-county were measured using multiple regression analysis. The results indicated that internal control environment, risk assessment control and activity control had a positive and statistically significant effect on financial performance of SACCOs. Monitoring had a positive but statistically insignificant effect on financial performance of SACCOs. SACCOs should come up with policy that ensures regular and systematic review of the internal control systems and ensure that issues raised are addressed appropriately.

Keywords: Auditing, Control activities, Control environment, Monitoring, Risk assessment.

INTRODUCTION

SACCOs in Kenya are currently a leading source of co-operatives credit for socio-economic development. They must strive to enhance performance in the ever competitive finance market and internal control is an institutional strategy for business sustainability. The top management of the SACCOs has overall responsibility of designing and implementing effective internal control [1]. Management is accountable to the board of directors, which provided governance, guidance and oversight). Management may be in a position to override controls and ignore or stifle communications from subordinates, enabling a dishonest management which intentionally misrepresents results to cover its tracks. A strong, active board, particularly when coupled with effective upward communications channels and capable financial, legal and internal audit functions, is often best able to identify and correct such a problem [2].

Internal control system are all the policies and procedures adopted by the management of an entity to assist in achieving management's objectives of ensuring as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records and the timely preparation of reliable financial information[3]. Under the COSO Internal Control-Integrated Framework, a widely-used framework in the United States, internal control was broadly defined as a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations, reliability of reports, and Compliance with laws and regulations (Amudo & Inanga [4]. COSO includes: control environment, risk assessment, control activities, information and communication and monitoring activities.

Internal control is a key constituent of the Foreign Corrupt Practices Act [5] and the Sarbanes-Oxley Act of 2002[37], which required improvements in internal control in United States public corporations [6]. Internal controls within business establishments were also called business controls. Under the COSO Internal Control-Integrated Framework, a widely-used framework in the United States, internal control was broadly defined as a process, affected by an entity's board of directors, management, and other personnel, designed to provide logical assurance regarding the accomplishment of objectives in the following categories: Usefulness and efficiency of operations, Dependability of reports, and Compliance with laws and regulations. According to the COSO Framework, everyone in an organization had responsibility for internal control to some extent. Virtually all employees produced information used in the internal control system or take other actions needed to effect control. Also, all personnel should be responsible for communicating upward problems in operations, noncompliance with the code of conduct, or other policy violations or illegal actions. Each major entity in corporate governance has a particular role to play [3].

According to Morris [7], performance is referred to the ability to operate efficiently, profitability, Survive grow and react to the environmental opportunities and threats. Performances measures in SACCOs includes include; ROI, Profitability, Goal Attainment, ROE. Various researchers in Kenya have explored the dynamics of SACCOs in light of sustainability, poverty alleviation; resource mobilization for investment and socio-economic growth and development among the poor. Previous studies including Mugambo [2] observe that there governance problems in cooperative societies. However, with introduction of the societies Act 2008, they have been required to ensure qualified professionals are employed and the right members of the governing committees are elected [1].

Internal control has to be evaluated in order to provide management with some assurance regarding its effectiveness. An effective control environment is where competent people understand their responsibilities, the limits to their authority, and are knowledgeable, mindful, and committed to doing what is right and doing it the right ways. Various researchers in Kenya have explored the dynamics of SACCOs in light of sustainability, poverty alleviation; resources mobilization for investment and socio-economic growth and development among the poor. However, little research has been undertaken on the effects of internal control systems on financial performance of SACCOs. Economic theory points that sustainable financial performance is a product of strong internal control systems. SACCOs are financial institutions which offers similar products like banks and most of them

were formed long time ago but their performance is not something to be proud of compared to commercial banks and other financial institutions [8].

The aim of this research was to fill this gap by examining the effects of internal control systems on financial performance SACCOs in Nyeri Central Sub-county since they perform below expectations and was guided by the following objectives; To investigate the role of internal control environment on Financial Performance of SACCOs in Nyeri central sub-county, To ascertain whether risk assessment influences Financial Performance of SACCOs in Nyeri central sub-county, To investigate if control activities affects Financial Performance of SACCOs in Nyeri central sub-county and To establish whether monitoring of SACCOs activities influences their Financial Performance.

LITERATURE REVIEW

Theoretical Literature Review

The Agency Theory

Theory describes firms as required structures to uphold contracts, and through firms, It's possible to implement control which minimizes opportunistic behavior of agent's .The most cited reference to the theory comes from Michael Jensen and William Meckling [9] which says that in order to harmonize the interests of the agent and the principal, a comprehensive contract is written to address the interest of both the agent and the principal and further explain that the relationship is further strengthened by the principal employing an expert to monitor the agent. Weaknesses in internal controls are related with increased levels of salary management [10]. Morris [7] in support believed that management should create an environment of control to manage earnings. Internal control systems have been incorporated into policies, rules and regulations of organizations to achieve their established objectives. This theory is important in the current study as it would shed light on how the principal and agency interact for the benefit of the organization. It also helped in the evaluation of the organization on internal controls.

The Control Theory

The better the running of a system operations, the less the cost and greater the benefit associated with. According to Bierstaker [11], the basics of control theory that we should wish to separate authorization, custody and accounting. What this means is that for business or system to stand one individual should authorize the purchase and the selling of products, while another should take custody of the sale and a third should account for the number of products sold. The reason this approach results in control over a business is that none of these individuals could cause loss to the

business without being either prevented from doing so or being detected after causing the loss. The core notion of this separation of duties is that collusion is essential for an undetected loss to arise.

Empirical Literature Review

According to Stoner [12], performance refers to the ability to operate efficiently, profitability, Survive grow and react to the environmental opportunities and threats. Whittington and Kurt [13] found out that objective performance measures include indicators such as profit growth, revenue growth, return on capital employed. Financial consultants Stern Stewart and Co. created Market Value Added (MVA), a measure of the excess value a company has provided to its shareholders over the total amount of their investments [7]. This ranking is based on some traditional aspects of financial performance including: total returns, sales growth, profit growth, net margin, and return on equity. The empirical evidences on the internal control systems and its effect on financial performance are discussed per each variable of the study. Literature reviews are designed to provide an overview of sources while researching a particular topic and to demonstrate to readers how the research fits into the larger field of study [14].

Dwivedi [15] argues that other financial measures should include value of long-term investment, financial soundness, and use of corporate assets. John and Morris [7] discussed accounting based performance using three indicators: return on assets (ROA), return on equity (ROE), and return on sales (ROS). Each measure is calculated by dividing net income by total assets, total common equity, and total net sales, respectively. The study assessed Sacco's financial performance using the following indicators as used by the various scholars discussed in previous studies; profitability and net Assets.

Control Environment and financial performance

The control environment, as established by the organization's administration, sets the tone of an institution and influences the control consciousness of its people [13]. Management attitude should be committed to ethical business practices and to following the established control procedures. 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; and the way management assigns authority and responsibility, and organizes and develops its people. A study by Khamis [16] found out that there is a significant positive relationship between internal control system (control environment) and financial performance of financial institution. In his research Mawanda [17] established that there is a positive relationship between control environment and financial

performance of institutions of higher learning in Uganda as portrayed by his case study of Uganda Martyrs University. Case studies on internal controls in Belgium illustrate the importance of the control environment when studying internal auditing practices. Sarens and De Beelde [18] found that certain control environment characteristics like tone-at-the-top, level of risk and control awareness, extent to which responsibilities related to risk management and internal controls are clearly defined and communicated are significantly related to the role of the internal audit function and fraud detection within an organization.

Risk assessment and financial performance

Enterprise Risk Management (ERM) was developed by COSO in 2004 to address risk management issues related to an organization. The frame contains all component of internal control frame work, but adds also the components of objective setting, event identification and risk response [19]. COSO [3] emphasizes the importance of objective setting in the entity and relates it to risk assessment as a precondition. Risk assessment involved determination of goals and objectives. The central theme of internal control was; to identify risks to the achievement of an organization's objectives and to do what is necessary to manage those risks. Thus, setting goals and objectives was a precondition to internal controls [6]. At the highest levels, goals and objectives should be presented in a strategic plan that includes a mission statement and broadly defined strategic initiatives. Cebenoyan and Strahan [20] in their study found that banks which have advanced in risk management had greater credit availability. The greater credit availability leads to the opportunity to increase the productive assets and bank's profit. Schroeck [21] and Nocco and Stulz [22] stress the importance of good risks management practices to maximize firm's value. Nocco and Stulz [22] suggests that effective enterprise risk management (ERM) have a long-run competitive advantage to the firm (or banks) compared to those that manage and monitor risks individually. Schroeck [21] proposes that ensuring best practices through prudent risk management result in increased earnings. The survival and success of a financial organization depends critically on the efficiency of managing these risks [23]. More importantly, good risk management is highly relevant in providing better returns to the shareholders [24, 25]. In addition, prudent risk management by financial institutions is the hallmark to avoid financial distress that could lead to a full blown financial crisis.

Control Activities and financial performance

Whittington and Pany [13] asserts that control activities are another component of internal controls. These scholars note that control activities are policies and procedures that help ensure that management directives are carried out. Control activities are the policies and procedures that help ensure management

directives are carried out. They help ensure that necessary actions are taken to address risks to achievement of the entity's objectives. Control activities occur throughout the organization, at all levels, and in all functions. They include a range of activities as diverse as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties. Control activities usually involve two elements: a policy establishing what should be done and procedures to affect the policy. All policies must be implemented thoughtfully, conscientiously and consistently [26]. Using the analytical approach and focusing on control activities and monitoring, Barra [27] investigated the effect of penalties and other internal controls activities on employee propensity to be fraudulent. Data was collected from both managerial and non-managerial employees. The results showed that the presence of the control activities, separation of duties, increases the cost of committing fraud. Thus, the benefit from committing fraud has to outweigh the cost in an environment of segregated duties for an employee to commit fraud. Further, it was established that segregation of duties is a "least-cost" fraud deterrent for non-managerial employees, but for managerial employees, maximum penalties are the "least-cost" fraud disincentives. The results suggest the effectiveness of preventive control activities such as segregation of duties is dependent on detective controls.

Monitoring and financial performance

Monitoring is the assessment of internal control performance over time; it is accomplished by ongoing monitoring activities and by separate evaluations of internal control such as self-assessments, peer reviews, and internal audits [28]. The purpose of monitoring is to determine whether internal control is adequately designed, properly executed, and effective. Romar and Moberg [29] conducted a case study that showed the following could have contributed to WorldCom scandal in 2002: unrealistic growth targets when expectations were low, management philosophy was aggressive; inadequate assessment of internal and external factors, and objectives before setting aggressive targets; poor segregation of duties; access to data entry and manipulation was not properly segregated and there was a lack of stringent monitoring of the internal control system and therefore quality of the controls around the posting of journal entries to the general ledger was not identified as weak. Emasu [30] notes that "The effectiveness of internal audit function partly depends on; legal and regulatory framework,

placement of the function and its independence existence of audit committees, resources allocated to the function and professionalism of internal audit staff". It is however a bitter reality that internal audit departments are rarely adequately facilitated. Regarding the size and facilitation of the internal audit function, Gerrit and Mohammad [31] found evidence in support of the monitoring role of the internal audit function. They specifically found evidence that management ownership is positively related to the relative size of the Internal Audit Function, which is inconsistent with traditional agency theory arguments that predict a negative relationship, but more in line with recent studies on earnings management. This finding suggests that increased management ownership may influence the board of directors to support larger internal audit functions to allow them to closely monitor manager's performance. Effectiveness of internal audit procedures is a measure of the ability of the program to produce a desired effect or a result that can be qualitatively measured [32]. Rezaee and Zabihollah [33] argue that there should be effective monitoring procedures to ensure reliability of financial statements, operational reports, safeguarding corporate assets and effective organizational controls.

METHODOLOGY

Descriptive research design was selected since it deals with clearly defined objectives and it is easier to collect data from a relatively large number of cases making it more representative. The method is also suitable for analyzing both qualitative and quantitative data to address the problem. The design also has enough provision for protection of bias and maximized reliability [34]. The researcher engaged the target population in finding out the effects of ICS on financial performance of SACCOs in Nyeri Central sub- County.

Sampling procedures and Sample size

The study used a multi-stage sampling process in the selection of the sample. The sample size was 78 employees working in the SACCOs in Nyeri central sub-county, the staffs working in SACCOs were categorized into three categories, that is, the Loan Manager, Internal Auditor and the Financial Analyst. They were the appropriate respondents for this study because Internal Auditor had information about internal control system used in their respective SACCOs, Financial Analyst had information about the financial performance and Loan Officer gave information about risk assessment, management and policies put in place by SACCOs.

Table-1: Sample Size

| Category of SACCO | No of SACCOs | LM | IA | FA | Total number of Staff |
|-------------------|--------------|----|----|----|-----------------------|
| Transport SACCO | 12 | 1 | 1 | 1 | 36 |
| Rural SACCO | 4 | 1 | 1 | 1 | 12 |
| Urban SACCO | 10 | 1 | 1 | 1 | 30 |
| Total | 26 | 3 | 3 | 3 | 78 |

DATA COLLECTION

The structured questionnaire was utilized containing close-ended questions. The questionnaires were self-administered to the respondents. There were 78 questionnaires which were self-administered to the respondents due to the sensitive information needed for the study, this was done within a period of one month through drop and pick technique. Self-administered questionnaire were deemed to be more effective than mail questionnaire because this gave assurance to respondents that their privacy was protected in that the data they provided was to be handled and protected in such a way that they were not be associated with them personally [35].

To test the validity and reliability of the questionnaires, a pilot study was carried out. The test re-test technique was used to estimate the reliability of the instruments by administering the pilot test in the SACCOs in Mathira sub-county. To ensure validity, the researcher made sure that questions that were used relate to and cover all the variables of the study. It is the degree to which results obtained from the analysis of the data actually represent the variables of the study. The research instrument was validated in terms of content and face validity. The content related technique measures the degree to which the questions items reflects the specific areas covered while face validity is the extent to which a test is viewed as covering what it purports to measure The research instrument was validated in terms of content and face validity by consulting research professionals like managers, supervisors and corporate consultants.

DATA ANALYSIS AND PRESENTATION

Zikmund, Babin, Carr and Griffin [36] define data analysis as the application of reasoning to comprehend the data that have been gathered with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation. Before processing the responses, the completed questionnaires were edited for completeness and consistency. Data was analyzed using Statistical package for social science (SPSS) to generate descriptive statistics, that is; minimum, maximum, mean and standard deviation and inferential statistics, that is, the model R², ANOVA statistics and Regression coefficients The researcher used the following multiple regression equation:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

Where

Y= Financial Performance

β_0 = Intercept or Constant

X₁= Control Environment

X₂= Risk Assessment

X₃= Control Activities

X₄= Monitoring

$\beta_1, \beta_2, \beta_3, \beta_4$ = Are the regression coefficients or change induced in Y by each X

e= Error term

RESULTS AND DISCUSSION

Control environment

Descriptive analysis in Table 2 below showed that SACCOs had well elaborate organization structure and whose management act with great degree of integrity in execution of their roles was rated highest with a mean score of 4.6912, followed by ethical values being upheld in all management decisions with a mean score of 4.3676. The finding of the study revealed that SACCOs have well elaborate organization structure and whose management act with great degree of integrity in execution of their roles by upholding ethical values in all management decisions.

Table-2: Descriptive Analysis of Internal Control environment

| | N | Mean | Std. Error | Std. Deviation |
|--|----|--------|------------|----------------|
| There is a well elaborate Organization Structure in the Sacco | 68 | 4.6912 | .08448 | .69663 |
| Top Management is committed to the operation of the internal controls | 68 | 4.1471 | .15993 | 1.31880 |
| Specific lines of authority and responsibility have been established to ensure compliance with the policies and procedures | 68 | 4.0441 | .17584 | 1.45000 |
| Management provides feedback to the junior officers about the operation of the system | 68 | 4.0441 | .17584 | 1.45000 |
| Management act with great degree of integrity in execution of their roles. | 68 | 4.6912 | .08448 | .69663 |
| Ethical values are upheld in all management decisions | 68 | 4.3676 | .13563 | 1.11843 |
| Valid N (listwise) | 68 | | | |

Risk Assessment

Results in table 3 below show that the aspect that SACCO management carried out a comprehensive and systematic identification of its risks was rated highest with a mean score of 4.69, followed by the management evaluate the risks and take precaution measures with a mean score of 4.37 while SACCOs risk management policy is made known to all staff.

This finding of this study showed that SACCOs with management that carries out a comprehensive and systematic identification of its risks, evaluate the risks and take precaution measures and make its risk management policy known to all staff greatly enhances financial performance.

Table-3: Descriptive Analysis of Risk assessment

| | N | Mean | Std. Error | Std. Deviation |
|---|----|--------|------------|----------------|
| The management carries out a comprehensive and systematic identification of its risks | 68 | 4.6912 | .08448 | .69663 |
| The management evaluate the risks and take precaution measures | 68 | 4.3676 | .13563 | 1.11843 |
| Internal audit staff, or other internal control staff conduct regular audit and give recommendation on appropriate controls | 68 | 4.0588 | .17389 | 1.43394 |
| SACCOs risk management policy is made known to all staff | 68 | 4.0441 | .17584 | 1.45000 |
| SACCO has an internal audit department which is sufficiently staffed | 68 | 4.0441 | .17584 | 1.45000 |
| Valid N (listwise) | 68 | | | |

Control Activities

Results obtained show that the aspect of SACCO that produce appropriate and sufficient reports for the proper management and measure of performance was rated highest with a mean score of 4.69, followed by SACCO has policies and procedures that must be adhered to with a mean score of 4.62, Duties and roles of staff are clearly outlined / clear separation of duties

had a mean score of 4.50, appropriate supervision by senior staff on the work of their juniors had a mean score of 4.37 while The results show production of appropriate and sufficient reports for the proper management and measure of performance, clear separation of duties, and having policies and procedures in place that must be adhered had significant influence on Sacco financial performance.

Table-4: Descriptive Analysis of Control Activities

| | N | Mean | Std. Error | Std. Deviation |
|--|----|--------|------------|----------------|
| SACCO has policies and procedures that must be adhered to | 68 | 4.6176 | .11093 | .91471 |
| Duties and roles of staff are clearly outlined / clear separation of duties | 68 | 4.5000 | .11944 | .98496 |
| Staff are made aware of the ICS put in place | 68 | 4.3088 | .13458 | 1.10976 |
| Are SACCOs accounting systems properly manage and report transactions in accordance with the proper accounting standards | 68 | 4.0441 | .17584 | 1.45000 |
| Appropriate and sufficient reports are produced for the proper management and measure of performance | 68 | 4.6912 | .08448 | .69663 |
| There is appropriate supervision by senior staff on the work of their juniors | 68 | 4.3676 | .13563 | 1.11843 |
| Valid N (listwise) | 68 | | | |

Monitoring

Descriptive analysis results showed that the SACCO with the top management frequently reviews the independence of external auditors was rated highest with a mean score of 4.62, followed by the auditing procedures complying with ISA standards with a mean score of 4.50. The management evaluates and addresses the issues raised in the external audit reports had a mean score of 4.31, monitoring system in the Sacco to

determine compliance with internal controls had a mean score of 4.06 while Sacco takes appropriate follow-up action in instances of noncompliance and Internal auditors periodically assess the adequacy of the organization's internal control systems had a mean score of 4.04. The results showed that the top management that frequently reviews, evaluates and addresses the issues raised internal and external auditors was rated highest.

Table-5: Descriptive Analysis of Monitoring

| | N | Mean | Std. Error | Std. Deviation |
|---|----|--------|------------|----------------|
| There is a monitoring system in the Sacco to determine compliance with internal controls | 68 | 4.0588 | .17389 | 1.43394 |
| The Sacco takes appropriate follow-up action in instances of noncompliance | 68 | 4.0441 | .17584 | 1.45000 |
| Internal auditors periodically assess the adequacy of the organization's internal control systems | 68 | 4.0441 | .17584 | 1.45000 |
| The Top management frequently reviews the independence of external auditors | 68 | 4.6176 | .11093 | .91471 |
| The auditing procedures comply with ISA standards | 68 | 4.5000 | .11944 | .98496 |
| The management evaluates and addresses the issues raised in the external audit reports. | 68 | 4.3088 | .13458 | 1.10976 |
| Valid N (listwise) | 68 | | | |

INTERNAL CONTROL SYSTEMS ON FINANCIAL PERFORMANCE

Table-6: Coefficients of Internal Controls

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-----------------------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | -.663 | 1.215 | | -.546 | .587 |
| Control environment | .394 | .107 | .410 | 3.675 | .000 |
| Risk assessment and control | .445 | .096 | .474 | 4.620 | .000 |
| Control Activities | .351 | .141 | .274 | 2.489 | .015 |
| Monitoring | .021 | .188 | .012 | .112 | .911 |

a. Dependent Variable: Financial performance

Table 6 shows that the beta coefficients of the resulting model indicate that control environment, risk assessment and control, control activities and monitoring had positive effect on financial performance in SACCOS with slopes of $\beta_1=0.394$, $\beta_2=0.445$, $\beta_3=0.351$ and $\beta_4=0.021$ respectively. The study results show that there was positive and statistically significant relationship between control environment at p value 0.000, risk at P value $0.000 < 0.05$ and control activity was found to have positive and statistically significant relationship on level of performance at P value $0.015 < 0.05$. Monitoring had positive but insignificant effect on financial performance in SACCOS at p value 0.911 which is greater than 0.05.

CONCLUSION

Given the findings of the study control environment, risk assessment and control activities are important drivers of financial performance in SACCOS. It implies that internal control aspects of the environment, risks and activities undertaken are significant aspects of an effective internal control system for Sacco's in Nyeri Sub-County. Sacco management should therefore lay emphasis on monitoring of the process in order to enhance financial position and in particular, reports from internal and external auditors should reviewed and issues raised there in be addressed.

RECOMMENDATIONS OF THE STUDY

Based on the findings, this study recommends the following:

- SACCOS should develop internal control system and policies to ensure that ICS is adhered to.
- SACCOS should also formulate policy to ensure that risk assessment and control is done at different levels and corrective and/or preventive measures are taken in order to mitigate the effect.
- SACCOS should come up with code of ethics that governs how employees should act ethically.

ACKNOWLEDGEMENT

I wish to express my sincere appreciation to all who empowered me both directly and indirectly towards accomplishing this study. My special gratitude goes to my academic supervisors Dr. Kiragu D.N and Dr. Riro G.K who offered their time and skillfully guided me towards successful and timely completion of this work.

I also thank all lecturers, staff members and classmates at Dedan Kimathi University of Technology for their support throughout my study time. I also appreciate the institutions that provided its data, which I was able to incorporate and compile towards completion of my research. I owe special appreciation to my family (Eric Munene and my two sons Hastings

and Starlings) for their financial, moral and ethical advice throughout my studies. Finally, to God be all the glory, I would not indeed make it without His special grace.

REFERENCES

1. Ngaira, L. U. C. Y. (2011). The impact of SACCO regulatory authority guidelines on SACCO operations in Kenya: The case of Nairobi deposit taking SACCOs. *Unpublished MBA project. University of Nairobi.*
2. Mugambo, M. A. D. (2011). *Challenges Facing Entrepreneurship Development through Public Investment, A Case of Millennium Development Projects in Rwanda, Published MBA Thesis 6, Maastrident School of Management, (MSM).*
3. COSO.(2013). Internal Control-Integrated Framework.
4. Khrawish, H. A. (2011). Determinants of commercial banks performance: evidence from Jordan. *International Research Journal of Finance and Economics, 81*, 148-159.
5. Calderón, R., Álvarez-Arce, J. L., & Mayoral, S. (2009). Corporation as a crucial ally against corruption. *Journal of Business Ethics, 87*(1), 319-332.
6. Public Company Accounting Oversight Board (PCAOB). (2004). An Audit of Internal Control over Financial Reporting Performed in Conjunction with an Audit of Financial Statements. Auditing Standard No. 2.
7. Morris, J. J. (2011). The impact of enterprise resource planning (ERP) systems on the effectiveness of internal controls over financial reporting. *Journal of Information Systems, 25*(1), 129-157.
8. Obiero, D. (2002). The banking sector regulatory framework in Kenya. *Its Adequacy In Reducing Bank Failures.*
9. Jensen, M., & Meckling, W. (1976) *Theory of the firm: Managerial behavior, agency costs, and ownership structure*
10. Chan, R. C., Shum, D., Touloupoulou, T., & Chen, E. Y. (2008). Assessment of Executive Functions: review of Instruments and Identification of Critical issues. *Archives of clinical neuropsychology, 23*(2), 201-216.
11. Bierstaker, J.L. and Thibodeau, J.C. (2006).The effect of format and experience on internal Control evaluation. *Managerial Auditing Journal*.Vol. 21. No. 9 pp. 877-891
12. Mugenda, O. M. & Mugenda, A. G. (2003) *Research Methods, Quantitative and Qualitative Approaches.* Nairobi: Nairobi Acts Press.
13. Whittington, R. and Pany, K. (2001). *Principles of Auditing and Other Assurance Services.* Irwin/McGraw- Hill.
14. Creswell, J.W.(2004). *Research design Qualitative, quantitative, and mixed method sapproaches.* (2nd ed.). California: Sage Publications Inc.
15. Dwivedi, D.N. (2002), *Managerial Economics*,(6th ed.). New Delhi: Vikas Publishing House.
16. Ali, K. H. (2013). *Contribution of internal control system to the Financial performance of financial institution A case of people's bank of Zanzibar ltd* (Doctoral dissertation, Mzumbe University).
17. Oyo, B., Williams, D., & Barendsen, E. (2008). A system dynamics tool for higher education funding and quality policy analysis. In *Proceedings of the 24th International Conference of the System Dynamics Society.*
18. Sarens, G., & De Beelde, I. (2006).The relationship between internal audit and senior *Journal of Auditing. 10*(3), 219-241.
19. Rittenberg, L. E., & B. J. Schwieger, (2005). *Auditing Concepts for a Changing Environme* (2nd ed.). Fort Worth, TX: The Dryden Press
20. Cebenoyan, S. A., & Strahan, A. P. (2004). Risk management, capital structure and lending at banks. *Journal of Banking and Finance, 28*, 19-43.
21. Schroeck, G. 2002. *Risk Management and Value Creation in Financial Institutions.* NY: John John Wiley and Sons, Inc.
22. Nocco, B. W., & Stulz, R. M. (2006). Enterprise risk management: Theory and practice. *Journal of applied corporate finance, 18*(4), 8-20.
23. Khan, T., & Ahmed, H. (2001). *Risk management: an analysis of issues in Islamic financial industry.* Islamic Development Bank, Islamic Research and Training Institute.
24. Akkizidis, I., & Khandelwal, S. (2007). *Financial risk management for Islamic banking and finance.* Springer.
25. Al-Tamimi, H. & Al-Mazrooei M. 2007, Banks'' risk management: a comparison study of UAE national and foreign banks, *The Journal of Risk Finance, 8*(4), 394-409.
26. Anduuru, N.V. (2005). *The accounting system and its related internal control system.* Nairobi: Essential Management Consultancy Services Ltd.
27. Okwiri.O.A (2010) Total Quality Management.
28. Ofori W,(2011)*Effectiveness of internal control . A perception or Reality*
29. Moberg, D., & Romar, E. (2003). WorldCom. Santa Clara University. *Markkula Center for Applied Ethics, Santa Clara University.*
30. Emasu, S. (2007). Public financial management – Concepts and Practices, *ACCA international Public Sector Bulletin, 7*, 6-10
31. Muhammad, J. (2015). Effects of Internal Audit Function and Internal Control Systems on Financial Performance in an Institution of Higher Education in Pakistan A Case Study of National Agriculture Education Accreditation Council (Naeac).
32. Harvey, C., Linda, M., Leinicke, W., Max, R., & Joyce, A. O. (2004). Sarbanes-Oxley: what it

- means to the marketplace. *Journal of Accountancy*, 197(2), 43.
33. Rezaee, I., & Zabihollah. B. (2002). Financial statement fraud, prevention and detection. *Journal of fraud prevention*, 22, 23-41.
 34. Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
 35. Cooper, D. R., & Schindler, P.S. (2011). *Business Research Methods*. New York: McGraw Hill.
 36. Pandey I. M. (2010) *Financial Management* 10th Ed. Vikas Publishing House PVT LTD
 37. Sarbanes, P., and M. Oxley. (2002). Sarbanes-Oxley Act of 2002. Washington, DC: U.S. Congress.