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An Assessment of the Impact of Effective Internal Control Systems on the Financial Performance of Public Universities in Sierra Leone: A Case Study of Ernest Bai Koroma University of Science and Technology (EBKUST)

Dr. Abu Kai Kamara, PhD. MPhil. MSc. FCCA. BSc.
University of Sierra Leone- Department of Accounting and Finance- Fourah Bay College

Mohamed Dixon Kamara MPhil. MBA. BSc
University of Sierra Leone- Department of Accounting and Finance- Fourah Bay College

Dr. Dante Alie Bendu, PhD. MSc. MA. ACCA, FelCM. BSc
University of Sierra Leone- Department of Accounting and Finance- Fourah Bay College

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ABSTRACT: This study examines the impact of effective internal control systems on the financial and operational performance of public universities in Sierra Leone, with a particular focus on Ernest Bai Koroma University of Science and Technology (EBKUST). As public universities face increasing accountability, transparency, and resource management challenges, strong internal controls have become crucial for maintaining financial integrity and operational efficiency. This research aims to provide empirical evidence on how well-structured internal control frameworks contribute to improved financial management and overall institutional governance at EBKUST. The goal of this study is to evaluate the effectiveness of internal control systems at EBKUST and their role in enhancing financial performance. Specifically, the study seeks to (1) examine how robust internal control systems influence the university's financial performance and (2) identify the main beneficiaries of a properly implemented internal control system within the institution. To gain a detailed understanding of the impact of internal controls on financial performance at EBKUST, a mixed-method approach was used, combining a cross-sectional survey with interviews. The study population included 187 staff members from EBKUST, and a census method was applied for the quantitative part of the research. Data collected from the survey were analyzed using the Statistical Package for the Social Sciences (SPSS). The results were presented through various statistical tools, such as graphs, pie charts, and tables. Descriptive statistics provided a clear summary of the data. The findings indicated that since the establishment of EBKUST, the internal controls in place have been considered effective and satisfactory. This research also offers recommendations for improving internal control systems to promote greater efficiency and strengthen the financial health of public universities in Sierra Leone.

KEYWORDS: Statistical Package for the Social Sciences (SPSS), Ernest Bai Koroma University of Science and Technology (EBKUST).

INTRODUCTION

In recent years, several major businesses have collapsed due to misappropriation or mismanagement of financial resources through fraudulent practices. To address this issue, internal controls were implemented to enhance the effective and efficient management of financial resources. Frameworks such as the Sarbanes-Oxley Act (SOX) and the Committee of Sponsoring Organizations (COSO, 2004) have been established to ensure that organizations disclose their internal controls related to financial and accounting reporting. These measures were introduced in response to the accounting scandals that have come to light in recent years (Katua, 2014). According to Statement of Auditing Standards (SAS) No. 55, auditors to understand an entity's internal control system (ICS) and its adequacy for auditing purposes before developing an audit trail.

Internal control auditors and designers are helped by the assumptions that are inherent in these internal controls. These assumptions consist of the management responsibility concept, which supports the fact that establishing and maintaining an internal control scheme is a management responsibility (Muraleetharan, 2013). Also, the internal control system is supposed to give rational assurance that internal control goals are attained cost-effectively. Therefore, all internal control systems are not impeccable, and the cost incurred to achieve enhanced control is not supposed to surpass its benefits. Moreover, internal controls are supposed to meet the set goals no matter what data processing method is used. However, the control techniques used to attain these goals differ in different kinds of technology. Internal auditing is meant to evaluate how effective is the internal control system and establish if it is working as intended (Fadzil, Haron, & Jantan, 2008).

In the control structure, the first line of defense is prevention. Preventive controls include passive methods which are formulated to minimize regular occurrence of unwanted events. Preventive controls screen out deviant events by forcing compliance with desired or prescribed actions.

Preventing fraud and errors saves costs much better compared to identifying and solving issues after they emerge. This first stage can be used to block all the undesired financial events in public universities. Thus, the source documents from suppliers or debtors can prevent essential data from being corrupted. However, it is hard to predict and prevent all problems and some usually bypass the most comprehensive and effective preventive control networks (Ogundipe, Idowu, & Ogundipe, 2012).

The next level of defense is formed by detective controls. According to Monday, Inneh, & Ojo, (2014), this defense includes procedures, techniques, and strategies that are developed to recognize and disclose any unwanted event that escapes preventive controls. Detective controls are used in public universities to compare actual incidences to standards that are pre-established and identify errors that can be present in the system. The detective control produces a distress alarm to attract attention after it identifies a deviation from the standard. Accountants and auditors in public universities use these detective controls before they process transactions and post them to the books. They also help to recalculate the overall value of diverse situations by using the quantity and price to eliminate any errors in the totals (Nyongesa, 2014). Therefore, these control measures are applied to reveal some specific mistakes in the internal control system by equating actual occurrences to already set standards.

Corrective controls on the other hand include the actions that are undertaken to undo the impacts of errors detected in the system (Levy, Powel, & Yetton, 2011). In the university setup, detective controls pinpoint abnormalities and draw attention to them, whereas corrective controls mend the problem. However, there can be more than one practicable corrective measure for any detected error. Even in cases where we recalculate the value of the transaction, we should not assume that the value of price and quantity on the transaction are recorded correctly as they may be wrong. Connecting a corrective action to a detected error, as an instinctive reaction, may produce an inappropriate action, which can cause a significant mistake than the initial error (Nobes, 2014). Correcting errors should be viewed as a distinct control action that needs to be taken with a lot of caution. There are some measures and cautions that can be put in place right from the point of preparation of the budget estimates (Nobes, 2014).

Budgeting helps to prepare comprehensive financial statements for showing the financial results that are targeted and expected in the future and therefore helps in projections that guide internal controls. In public universities, budgetary controls are the processes used for determining varied authentic results with budgeted values of universities for the future time frame and setting standards and comparing them with the authentic performance for evaluating any variations. This helps in establishing any inconsistencies present and taking corrective measures at an appropriate timeframe. Budgetary control is a progressive procedure that aids in coordinating and planning. Budgetary control refers to the outcome while budget refers to the means. According to Mwaura (2013), budgetary control is a system that is used to control costs, including preparing budgets, identifying responsibilities and managing the departments, comparing actual performance with the budget, and working on the outcomes to attain the utmost profits (Monday, Inneh, & Ojo, 2014). If this is applied in internal control in a public university, it will help in enhancing performance.

1.2. Research Aim, Research, Objectives, and Research Questions

1.2.1. Research Aim

This study aims to evaluate the effectiveness of internal control systems in improving the financial performance of public universities in Sierra Leone, specifically focusing on Ernest Bai Koroma University of Science and Technology (EBKUST). The research intends to examine the current state of internal controls at EBKUST and their impact on resource management, financial accountability, and operational efficiency.

1.2.2. Research Objective

To describe how proper and effective internal control systems impact the financial performance of EBK University.

1.2.3. Research Questions

How do proper and effective internal control systems impact the financial performance of EBK University?

2. EMPIRICAL LITERATURE REVIEW

2.1.1. Introduction

This section reviewed the correlation between internal control systems as an independent variable and financial and performance as dependent variables by particularly focusing on the control environment, the entity's risk assessment process, the information and communication systems, control activities, and the monitoring of controls as the main components of internal control.

2.1.2. Empirical Review

The empirical literature review is an account of what has been published on a topic by accredited scholars and researchers. It brings out the knowledge and ideas that have been established on a topic, and what their strengths and weaknesses are. It uses secondary and does not report new or original experimental work.

Mwachiro (2013) examined the effectiveness of internal controls at the Kenya Revenue Authority (KRA) in improving revenue collection. The study focused on five key components: control environment, risk assessment, control activities, information and communication, and monitoring. Using a descriptive case study with a causal research design, data were analyzed through statistical and narrative methods, with correlation used to assess the relationship between internal controls and revenue collection. The findings indicated that all five components are essential for effective internal controls. Weak internal controls, particularly poor ethical values, were found to facilitate fraud, revenue loss, and embezzlement. The study concluded that while internal controls at KRA function, they face challenges and significantly impact revenue collection.

Magara (2013) Study investigated the impact of internal controls on the financial performance of deposit-taking Savings and Credit Cooperative Societies (SACCOs) in Kenya. The independent variables were the control environment, risk assessment, control activities, and monitoring mechanisms, while the dependent variable was financial performance. Using data from 122 SACCOs, obtained through primary sources and annual reports, a multiple regression model was applied to analyze the relationship. The findings revealed a strong positive correlation between internal controls and financial performance. Each internal control component contributed significantly to improved financial outcomes. The study concluded that strong internal controls are essential for SACCOs to perform well and avoid the risk of poor financial performance or collapse.

Ondieki (2013) examined the impact of internal audits on the financial performance of commercial banks. The study focused on the control environment, risk assessment, control activities, and monitoring mechanisms as independent variables, with financial performance as the dependent variable. The findings revealed that internal controls can include features designed to flag or prevent fraudulent transactions. While internal control audits verify the functionality of controls, they are not primarily designed to detect fraud or corruption. Instead, their objectives align with evaluating management's plans, methods, and procedures to achieve the organization's mission, goals, and objectives.

Muio (2012) studied the impact of internal control systems on the financial performance of private hospitals in Kenya, focusing on monitoring, control activities, risk assessment, information and communication, and control environment as key variables. The research, conducted among NHIF-accredited private hospitals in Nairobi, used a descriptive design and linear regression analysis to examine the relationships. The study found that all five components are essential for an effective internal control system. Among them, monitoring had the greatest influence on financial performance, followed by the control environment, information and communication, risk assessment, and control activities.

Olumbe (2012) investigated the relationship between internal control and corporate governance in commercial banks in Kenya, focusing on variables such as equity structure, internal and external supervision, board of directors, and board of supervisors. The study employed a descriptive research design, including all 43 commercial banks, and collected data using structured questionnaires and interviews. Linear regression analysis and performance comparisons from 2009–2011 were conducted. The findings revealed that most banks had implemented parameters for effective internal controls and corporate governance. The study concluded that there is a significant relationship between internal controls and corporate governance, with strong systems in place supporting good governance practices.

Ewa and Udoayang (2012) studied the impact of internal control design on a bank's ability to detect staff fraud and its relationship to staff lifestyle in Nigeria. The findings revealed that a well-designed internal control system significantly influences staff attitudes towards fraud, acting as a deterrent by implementing necessary checks that limit opportunities for fraudulent activities. In contrast, weak internal controls create gaps in the system, exposing it to fraud. The study emphasized the importance of strong internal control mechanisms to effectively prevent fraud.

Wainaina (2011) investigated the internal control function at the Kenya Polytechnic University College, focusing on variables such as control environment, risk assessment, control activities, information and communication, monitoring, and information technology. The study found that management relies on internal control techniques to implement decisions and regulate activities for which they are ultimately responsible. Effective internal control systems (ICSs) are essential for managing business resources and achieving corporate goals. The study also highlighted that ICSs play a crucial role in preventing and detecting fraud, as well as protecting both physical and intangible resources through proper authorization and documentation controls.

Ngungi (2011) conducted research to examine the design and implementation of internal control systems in both the private and public sectors, and to assess whether there were differences in their effectiveness and efficiency. The study focused on key components of internal control systems: control environment, risk assessment, control procedures, information and communication, and monitoring. Data was collected through questionnaires and focus group discussions, and analyzed using descriptive and inferential statistics. The findings revealed that the private sector has a stronger internal control system than the public sector across all components. However, both sectors showed no significant difference in monitoring and control activities, with the public sector having stronger preventive control elements.

Barra (2010) studied the effect of penalties and internal controls on employees' propensity to commit fraud. The findings revealed that control activities and segregation of duties increase the cost of committing fraud, making it less appealing for employees. For non-managerial employees, segregation of duties was found to be the most cost-effective fraud deterrent. However, for managerial employees, the imposition of maximum penalties was the most effective disincentive. The study concluded that the effectiveness of preventive control activities, such as segregation of duties, relies on the presence of detective controls.

Amudo and Inanga (2009) evaluated the internal control systems in the Regional Member Countries (RMCs) of the African Development Bank Group (AfDB), with a focus on Uganda. The study examined variables such as monitoring, control activities, risk assessment, information and communication, and control environment. The findings revealed that some key components of effective internal control systems were missing in the projects, making the current control structures ineffective. The study recommended improving the existing internal control systems in these projects to enhance their effectiveness.

Wee Goh (2009) studied the role of audit committees, boards of directors, and the remediation of material weaknesses in internal control. The study assessed the effectiveness of the audit committee based on its independence, financial expertise, size, and meeting frequency, and the effectiveness of the board based on its independence, size, meeting frequency, and CEO-chair duality. The findings revealed that: a) A higher proportion of audit committee members with financial expertise was positively linked to the timeliness of remediating material weaknesses. b) Larger audit committees were more likely to address material weaknesses promptly. c) A more independent board, less influenced by management, was more likely to pressure management to remediate material weaknesses effectively.

Olatunji (2009) studied the impact of internal control systems in the banking sector, categorizing controls into preventive, detective, and corrective types. Data were collected from fifty branches of Wema Bank Plc through interviews, structured questionnaires, and secondary sources such as journal publications and internet facilities. The data were analyzed using descriptive and inferential statistical methods, including chi-square tests. The findings revealed that the lack of an effective internal control system was a major cause of bank fraud in Nigeria. The study concluded that bank management should establish a robust internal control system to prevent fraud, ensure operational continuity, and maintain the bank's liquidity, solvency, and long-term viability.

Jones (2008) examined internal controls, accountability, and corporate governance in both medieval and modern Britain, focusing on variables such as control environment, risk assessment, information and communication, monitoring, and control activities. Using a modern referential framework, he analyzed internal controls in the twelfth-century royal exchequer and other medieval institutions. The study revealed that many internal controls used today were already present in medieval England. Key elements of medieval internal control included stewardship and personal accountability, which echo contemporary calls for enhanced personal accountability in modern organizations.

Mawanda (2008) researched the impact of internal control systems on financial performance in higher learning institutions in Uganda. The study focused on the control environment, internal audit, and control activities as key aspects of internal controls, while financial performance was measured through liquidity, accountability, and reporting. The research aimed to understand the causes of poor financial performance from an internal control perspective. The findings revealed a significant relationship between internal control systems and financial performance. The study recommended competence profiling for the internal audit department, ensuring it aligns with the university's expectations and staffing needs. It emphasized the critical role of internal auditing in establishing controls that positively influence financial performance.

Kamara (2023) studied the effectiveness of internal audits in the public sector, focusing on the National Revenue Authority (NRA). The research aimed to identify factors influencing the effectiveness of the Internal Audit Department and its impact on the NRA's performance. The findings indicated that the department is effective, staffed by competent individuals, and supported by management, despite limited resources. It plays a crucial role in enhancing risk management, internal control, and governance processes, providing independent assurance and aiding the audit committee, senior management, and external auditors. However, the study highlighted challenges limiting the department's effectiveness, including the need for automated audit tools due to the modernization of revenue collection methods, such as the ASYCUDA World and Integrated Tax Administration System. Other issues include information asymmetry, delays in receiving timely data, and slow responses from other departments to audit reports.

Crutchley et al. (2007) investigated factors contributing to a firm's involvement in accounting scandals. The study identified several characteristics that increase the likelihood of such scandals, including high firm growth, the use of earnings management techniques, small audit committees, and overly extended outside directors. In contrast, firms with lower growth rates and larger audit committees were less likely to be involved in scandals. The study also emphasized that strong internal controls and an ethical organizational culture are essential in preventing accounting scandals.

Beasley et al. (2000) examined differences in corporate governance mechanisms between organizations that committed financial reporting fraud and those that did not. Focusing on industries such as technology, healthcare, and financial services, the study used SEC allegations of fraudulent reporting from 1987 to 1997 to identify fraud-committing organizations. These were then compared with organizations that had not committed fraud, using data from the National Association of Corporations (NALD). The findings showed that firms involved in fraud had fewer independent board members, ineffective audit committees, fewer committee meetings, and less independence within the audit committees. Additionally, these firms had weaker internal audit functions.

2.2. Financial performance

Financial performance refers to the measures that assess how effectively organizations utilize their assets and resources to generate revenue from their primary operations (Nyakundi, Nyamita, & Tinega, 2014). Organizations can manage their financial resources, which includes generating and effectively using revenue, controlling costs, and ensuring financial sustainability. For public universities, financial performance involves managing funds received from government support, student fees, donations, and grants. This also encompasses budgeting, managing cash flows, and ensuring the timely payment of obligations, such as salaries and operational expenses. The financial performance of public universities can be evaluated using several benchmark indicators. These indicators include the ratio of borrowings to equity, reliance on student fees, diversity of revenue sources, liquidity, and overall operating results. While universities are non-profit organizations, their operating results are important indicators of financial performance. Significant deficits or a trend of consecutive deficits indicate the need for analysis and review.

Public universities in Sierra Leone, including EBKUST, have been experiencing significant challenges in managing their financial and operational resources. These issues often arise from weak internal control systems, leading to inefficiencies, financial mismanagement, and operational failures. Without effective internal controls, universities become more vulnerable to fraud, resource wastage, and poor decision-making, which can compromise their ability to deliver quality education and fulfill their mandates.

2.3. Assessment of Financial Performance

Assessing a company's financial health involves a variety of financial ratios and indicators that reflect different facets of the business, such as profitability, liquidity, solvency, efficiency, and market valuation. Here are some key financial ratios and what they indicate:

1) **Gross Profit Margin**: This ratio is calculated as **Gross Profit divided by Sales Revenue**. This financial ratio indicates the percentage of sales revenue remaining after the cost of goods sold is subtracted.

2) **Net Profit Margin**: Represented by: **Net Profit divided by Sales Revenue.** This ratio shows the percentage of sales revenue that remains after all expenses, including taxes and interest, are deducted.

3) **Return on Assets (ROA)**: Calculated as **Net Profit divided by Total Assets.** The ROA measures a company's ability to generate profit from its assets.

4) **Return on Equity (ROE)**: This ratio is calculated as **Net Profit divided by Owners' Equity.** This ratio assesses how effectively a company generates profits for its shareholders.

5) **Current Ratio**: The current ratio is calculated as **Current Assets divided by Current Liabilities**. This ratio evaluates a company's capacity to meet short-term obligations with its short-term assets. **Quick Ratio**: Also known as the acid-test ratio, it is expressed as **Current Assets minus Inventory divided by Current Liabilities**. This ratio measures a company's ability to cover short-term obligations with its most liquid assets.

6) **Debt-to-Equity Ratio**: This leverage ratio, **Total Debt divided by Owners' Equity**, indicates the proportion of company financing from creditors versus shareholders.

7) **Asset Turnover**: Represented by **Sales Revenue divided by Total Assets**, this ratio shows how efficiently a company uses its assets to generate sales.

8) **Price-to-Earnings (P/E) Ratio**: The P/E ratio is calculated as **Market Price per Share /Earnings per Share**. This ratio reflects the market's company valuation relative to its earnings.

These ratios provide insights into various aspects of a company's financial performance and are essential tools for investors, analysts, and managers.

2.4. Regional Perspective on the impact of effective internal controls on the financial performance of public universities

Public universities play a vital role in social and economic development by providing education, conducting research, and developing skills within their regions. However, like other public institutions, these universities face challenges related to governance, resource management, and financial accountability. A critical area influencing their financial performance is the effectiveness of internal controls. In today's hyper-competitive and challenging global environment, many African universities struggle to operate at optimal levels. As a result, financial performance is viewed as a natural process that leads to effective outcomes in universities and other organizations (Armstrong, 2014). Universities in Africa are actively working to implement internal control measures using various strategies to enhance their financial performance despite adverse competition. It is not surprising that internal controls have become essential for determining the success of these institutions (Kruise, 2012). The primary objective of an internal control system concerning financial performance is to improve universities' ability to achieve their goals effectively.

African university councils and chancellors are working to improve the financial and operational performance of their institutions. However, they are facing increasing challenges related to fraud and heightened risks within these organizations. As a result, developing and implementing effective internal control systems has become a top priority for leaders in many African countries. According to Garavan and Heraty (2016), many emerging universities in Africa have experienced significant resource losses due to theft and fraud committed by employees. These issues are largely attributed to inadequate internal control systems that fail to prevent or address such misconduct.

In 2010, Monash University in South Africa reported accounting scandals resulting in a loss of approximately $38 million due to misuse and misappropriation of funds. These scandals highlight the importance of evaluating and implementing systems of checks and balances to guide company executives during their decision-making processes. Executives have a moral and legal obligation to regularly provide accurate, trustworthy, and transparent financial reports for the corporation (Hayes, Dassen, Schilder, & Wallage, 2009).

In his 2014 analysis, Muhammed critically examined the internal control systems in Tanzania and Ethiopia. His study found that both countries have successfully implemented internal control systems in higher education institutions. The reforms in both nations focused selectively on addressing significant weaknesses within financial controls. The first-order task involved establishing effective controls, while the second-order task aimed at improving the efficiency of these controls. Both tasks were widely customized to meet specific needs. When comparing the internal control system initiatives of the two countries, it is evident that Ethiopia has adopted a hybrid approach. This approach involves evolving existing systems while concentrating on the legal framework. A robust internal control system is essential for the effective management of universities, as highlighted by Shanmugam, Haat, and Ali in 2012. Furthermore, it is crucial for any organization—whether profit-making or non-profit—to have an internal control system that includes measures to assess performance, ensuring proper oversight and governance.

Studies conducted in Nigeria have indicated that multiple internal control systems are often inadequate or overlooked, even when all frameworks for compliance with internal control systems (ICS) are implemented (Gbeg i & Adebisi, 2015; Alao & Amoo, 2014; Abiola & Oyewole, 2013; Hamilton & Gabriel, 2012; Akinyomi, 2010). Al-Atiqi and El-Azma (2007) note that financial accountability and monitoring in higher education institutions have drawn significant global attention. Salihu (2015) assessed the impact of internal control efficiency in higher learning institutions in Adamawa State, Nigeria, and found that the mechanisms of internal control were not properly enacted or enforced by the management boards. Key areas of concern included personnel controls, supervision, approval and authorization processes, and segregation of duties. As a result, there is a substantial risk of revenue loss.

A case study conducted by Ejoh and Ejom (2014) at the Cross River State College of Education in Nigeria found that most internal controls were effectively implemented. For instance, the finance department maintained a clear division of responsibilities, was regulated by top-level managers, and strictly adhered to budget regulations to prevent any under- or overspending.

An evaluation of internal control systems at technical universities in Ghana, conducted by Badoo, Hammond, and Oppong (2020), found that Accra Technical University had established procedures and policies to enhance the implementation of internal controls. However, the evaluation revealed that staff had limited awareness of the penalties and policies related to non-compliance. This lack of awareness was primarily due to the management's ineffective communication of internal control policies to staff, which occurred too late. Additionally, the study indicated that Accra Technical University demonstrated a high level of compliance with national regulatory policies and international standards in its fiscal management and financial reporting.

2.5. Summary

The literature reviewed indicates that several internal control mechanisms should be effectively implemented to improve the financial performance of public institutions. These mechanisms include the control environment, risk assessment, control activities, information and communication, monitoring, budgetary controls, and information technology. Additionally, a more independent board is less likely to be influenced by management and more apt to pressure management to address any material weaknesses. An effective internal audit department, staffed by competent members and supported by management—even with limited resources—can significantly enhance the organization's risk management, internal control, and governance processes. The internal audit department also provides independent and objective assurance, adds value, and assists the audit committee, senior management, and external auditors in fulfilling their respective roles.

Conversely, a weak internal control system may be a major cause of fraud. This often results from ineffective implementation of control mechanisms by the institution's management boards, particularly in areas such as personnel controls, supervision, approval and authorization, budgetary controls, and segregation of duties. As a result, there is a significant risk of revenue loss.

The evaluation of internal controls should be conducted with professional skepticism to ensure these controls are both effective and efficient. This research is important because it provides management with insights that can enhance the effectiveness and efficiency of internal controls, ultimately improving financial performance. Furthermore, this research can be replicated for studies on public universities as well.

3. METHODOLOGY

Research in the social and health sciences can be complex and multifaceted, requiring a holistic approach that incorporates diverse perspectives. Relying solely on either qualitative or quantitative methods may not fully reveal the intricacies of these research problems (Kamara, 2023). This is where mixed methods research becomes valuable, as it combines the unique strengths of both qualitative and quantitative approaches (Kamara, 2023). The mixed methods methodology has gained popularity due to its ability to integrate these two approaches effectively. In this particular study, data was collected using structured questionnaires and follow-up interviews. The follow-up interviews provided qualitative insights through in-depth conversations with selected participants. Additionally, data was obtained from various online resources, articles, the EBKUST website, online newspapers, and audited financial statements.

Mixed methods research employs both quantitative and qualitative data collection techniques, offering a more nuanced and comprehensive understanding of research inquiries. Teddlie and Yu's typology (2007) outlines five sampling strategies: Basic, Sequential, Concurrent, Multilevel, and Combined, which researchers can adapt to meet their specific objectives and data requirements. In this study, purposive sampling and a concurrent strategy were utilized.

The concurrent triangulation approach was utilized to analyze data and guide discussions and interpretations. This method simultaneously collects both quantitative and qualitative data, allowing for a comparison of the two datasets to identify similarities, differences, or a combination of both. Data integration occurs during the interpretation or discussion phase (Creswell, 2009; Greene, Caracelli, & Graham, 1989; Steckler et al., 1992). Purposive sampling was employed to select participants based on their experience with the central phenomenon. The study included 200 participants, all of whom completed questionnaires. Descriptive statistics, such as the mean, median, and mode, were used to determine the average or typical responses to the variables. Inferential statistics were applied to draw conclusions from the data. Quantitative findings were presented in tables and graphs, which helped summarize, describe, and explain the data in relation to the research questions. Additionally, data gathered from the survey were analyzed using the Statistical Package for the Social Sciences (SPSS) software. The results were displayed using various statistical tools, including graphs, pie charts, and tables, with descriptive statistics providing a clear overview of the data.

The mixed research methods approach has become increasingly popular due to its flexibility, ability to address complex issues, and comprehensive perspective. By combining qualitative and quantitative methodologies, researchers can obtain deeper insights and reach more reliable conclusions in the social and human sciences. A mixed-method research approach was selected for this study, covering the period from 2018 to 2023.

The primary sources of data for this study included both primary and secondary data. Primary data was collected through self-administered questionnaires and interviews, which gathered respondents' insights on the effects of the internal control system on financial performance at EBKUST University. In addition, secondary data was obtained from various documents and reports from the finance department at EBK University, as well as from professional and academic journals, published literature, textbooks, and previous dissertations accessed through the library and the internet.

3.2. Data Analysis and Presentation

Data analysis involves several steps, including data cleaning, coding, editing, and error checking. Quantitative data was analyzed using descriptive statistics (mean and standard deviation) as well as multiple regression analysis. The Statistical Package for Social Sciences (SPSS) was used for this analysis. Qualitative data was analyzed through content analysis, where responses from key informants were categorized into recurring issues or themes. The results were presented using charts and tables. Regression analysis was employed to demonstrate the statistical relationships among the variables.

$$Y= \beta o+ \beta 1x1 + \beta 2x2 + \beta 3x3 + \beta 4x4 + \beta 5x5 + \varepsilon$$

Where:

Y = Financial and Operational Performance

X1 = Control environment

X2 = Risk assessment

X3 = Control Activities

X4= Information and Communication

X5 = Monitoring

βo = Constant

ε = Error term

3.2.1. Application of Content Analysis in Similar Studies

For this research, content analysis was employed to analyze qualitative data, as it has been widely utilized in similar studies examining internal control systems and organizational performance. For example, in a study by Kaplan and Norton (1996), content analysis was used to evaluate the effectiveness of internal control systems in both private and public sector organizations. Their research focused on the impact of internal controls on performance management and strategic alignment. In another study, Okezie (2010) applied content analysis to investigate internal controls in Nigerian universities, identifying key factors that affect financial accountability and governance. Likewise, Owusu-Ansah and Jafaru (2017) utilized content analysis in their research on the internal control environment of Ghanaian universities and its effect on financial performance.

3.3. Research Design

A research design serves as a framework for conducting a study (Kothari, 2007). This research employed a mixed-methods design, which combines quantitative and qualitative data collection and analysis techniques. The mixed-methods approach was chosen for its ability to merge the broad scope of quantitative data with the in-depth insights provided by qualitative data, offering a more comprehensive understanding of the findings (Creswell & Clark, 2018). Palinkas et al. (2011) emphasized that this approach amplifies participants' voices, ensuring that the findings reflect their experiences.

The study also implemented a qualitative triangulation strategy to achieve a thorough understanding of the phenomena by synthesizing information from multiple sources (Amankwaa, 2016). However, this research is a case study that focuses specifically on the investigation of (EBKUST), which means that its findings cannot be automatically generalized beyond this institution. The ability to generalize is even limited in instrumental case studies where a single case is analyzed to represent a wider category. As a result, the recommendations made in this research are tailored specifically to EBKUST, the organization under study. For future research, it is recommended to include comparative studies involving at least three public and three private universities to ensure that the findings are generalizable and representative within Sierra Leone, and potentially applicable beyond Sierra Leone in other developing economies.

3.3.1. Interview Guide

The interview guide was composed of a series of questions aimed at facilitating discussions with participants during the interviews. The researcher used this guide in conjunction with interview schedules to conduct in-depth inquiries, gathering specific details and insights about the study variables. This approach enabled a more thorough investigation and improved understanding of the variables through the input of key informants. In addition, an unstructured interview guide was used as a tool for collecting comprehensive information from these key informants. This guide outlined important issues and themes, allowing the researcher to gather relevant data during the interview process (Neale & Boyce, 2006). The questions in the guide were designed to capture the perceptions of key informants regarding the relationship between the internal control system and financial performance at EBK University. The interview guide was preferred for its capability to yield in-depth data that could not be obtained through self-administered questionnaires alone (King et al., 2018).

The checklist was used to score responses received from participants and analyzed as indicated below:

0= No meaningful information is provided on the specific criterion.

1= Patchy information is provided.

2= the reporting provides good information on the criterion. However, one relevant area /indicator is not addressed.

3= the reporting includes full information on the criterion.'

Source: Adopted from Yilmaz (2013).

3.4. Ethical consideration

Ethics is a branch of philosophy that examines the conduct of individuals, establishing norms and standards for behavior in their relationships with one another. In this context, the researcher identified various ethical and legal issues related to research, including principles such as confidentiality, anonymity, informed consent, and the acknowledgment of contributions from others involved in the study. It is essential to respect the rights and dignity of research participants. To ensure this, all participants were informed about the study's objectives and asked to participate voluntarily. The study was designed to maintain confidentiality by avoiding the collection of names or telephone numbers on the research instrument. This approach aimed to enhance confidentiality and build participants' trust in the research process. Additionally, the researcher sought and obtained permission from the university registrar, deans, and heads of various departments, ensuring that participation was indeed voluntary. Those who agreed to participate received the research instrument in a private setting.

4. DATA ANALYSIS AND RESULTS

Data analysis was performed according to the research objectives. The quantitative and qualitative data collected were triangulated and tested against established theories to assess whether the internal controls in place at EBKUST are effective and could act as a catalyst for enhancing financial performance.

4.1. Key Findings of the Research Objective

The objective of this research was to answer the following question: How do proper and effective internal control systems impact the financial performance of EBKUST University? The study findings revealed that effective internal control systems significantly affected the university's financial performance. Key components, such as proper budgeting, timely auditing, and efficient resource management, were identified as crucial for ensuring that financial resources were allocated and spent appropriately. Participants in the study, including the finance director, the senior assistant finance officer, and internal auditors, acknowledged that the internal control mechanisms have addressed weaknesses highlighted in the Auditor General's Reports, including issues of mismanagement, fraud, and errors. As a result, these mechanisms have enhanced the institution's financial stability, enabling it to meet its financial obligations and support infrastructure projects aimed at providing quality educational services. Furthermore, the implementation of robust internal controls—such as segregation of duties, approval processes for expenditures, and regular financial reporting—has led to improved financial transparency and accountability.

The study aimed to assess how the internal control systems at EBKUST affect the financial and operational outcomes of the institution. The specific objectives included examining the impact of internal controls on financial performance and operational efficiency, as well as identifying the beneficiaries of these systems. Additionally, the chapter provides answers to the research questions formulated based on these objectives.

The coefficient of correlation was found to be 0.533, indicating a positive correlation between internal control systems and the financial and operational performance of the institutions. The coefficient of determination (R Square) shows that 39.6% of the financial and operational performance of EBKUST is influenced by internal control systems. The adjusted R^2, however, indicates that 40.8% of the financial and operational performance of the institution is influenced by internal control systems, leaving 59.2% attributable to other factors not captured in this study. The study revealed that 58% of respondents were male, primarily in the age group of 30-40 years, and most had attained tertiary education. Furthermore, 54.6% of the respondents were married. Among the population covered by the research, individuals with master's degree qualifications dominated the results, likely due to the requirement for lecturers at Sierra Leone universities to hold a master's degree. Additionally, most respondents had been with the university for over five years. In total, there were nine different responses, amounting to 187 responses, with some respondents providing more than one answer while others did not provide any information for the question. Of all responses received, 56.1% indicated that an internal control system was introduced or launched to maintain proper financial performance within the university, which is the primary goal of the system. Meanwhile, 18.1% stated that it was aimed at ensuring proper operational efficiency. The remaining responses, which ranged between 1% and 6%, provided partial but incomplete reasons for the existence of the internal control system, as shown in Table 4.1. This indicates that while respondents are aware of the existence of the internal control system and its launch, they do not necessarily understand the specific reasons for its implementation. The observed gap in detailed knowledge about the internal control system at EBK University is similar to what exists in other universities across Sierra Leone. Nevertheless, a 56.1% awareness rate is significant, suggesting that additional efforts, such as academic staff engagement, have helped bridge the knowledge gap.

4.1.2 Reasons why the Internal Control System was Launched at EBK University

Table 4.1 presents the reasons for implementing internal control systems at EBKUST to enhance financial management, prevent fraud, and ensure compliance with international accounting standards as well as Sierra Leone's rules and regulations. Furthermore, the management of EBKUST believes that establishing sound financial management through effective and efficient internal control mechanisms will build credibility and foster trust among stakeholders in the university's financial management. Table 4.1 outlines the reasons for launching the Internal Control System at EBK University.

Table 4.1: Reasons why the Internal Control System was launched at EBKUST

Variables	Frequencies	Percentage
To achieve the University’s mission and vision goals	4	2.1%
For assert mobilization	2	1.1%
To stabilize effective operations within the University	2	1.1.%
To prevent fraud within the University	2	1.1%
For safeguarding of Assets within the University	12	6.4%
To help maintain proper Regulatory Compliance	6	3.2%
To maintain proper Financial Performance	105	56.1%
To help reduce errors within the University System	10	5.3%
To enhance proper accountability in the University	10	5.3%
To maintain proper Operational Efficiency in the University	34	18.1%
Total	187	100%

Table 4.1 summarizes the reasons provided by respondents for the launch of the Internal Control System at EBK University. A total of nine (9) different responses were recorded, amounting to 187 responses overall. Some respondents provided multiple answers, while others did not answer the question at all. Of all the responses, 56.1% indicated that the Internal Control System was implemented to ensure proper financial performance within the University, which is the primary goal of the system. Additionally, 18.1% of respondents stated that the system was intended to maintain operational efficiency. Other reasons fell between 1% and 6% of the total responses, as detailed in Table 4.1. This indicates that while respondents may be aware of the existence of the Internal Control System and its launch, there is still some uncertainty regarding the specific reasons for its implementation. This reflects a slight knowledge gap about the Internal Control System at EBK University compared to other universities across Sierra Leone. However, the 56.1% awareness level is relatively high, suggesting that increased engagement with academic staff has contributed to bridging this knowledge gap.

The objective of this research was to answer the following research question: How do effective internal control systems impact the financial performance of EBK University? The study found that effective internal control systems significantly influenced the university's financial performance. Key components such as proper budgeting, timely auditing, and efficient resource management were identified as essential for ensuring that financial resources are allocated and spent appropriately. Participants in the study, including the finance director, senior assistant finance officer, and internal auditors, acknowledged that the internal control mechanisms had addressed and reduced weaknesses noted in the Auditor General’s Reports, as well as issues related to mismanagement, fraud, and errors. This has enhanced the institution’s financial stability, allowing it to meet its financial obligations and support infrastructural projects aimed at delivering quality educational services. Furthermore, the implementation of robust internal controls, including the segregation of duties, approval processes for expenditures, and regular financial reporting, has led to improved financial transparency and accountability.

The study showed that effective internal controls (ICs) — such as proper budgeting, adequate segregation of duties, auditing, and resource management — have positively influenced the university's financial stability. These controls address weaknesses, reduce the risk of mismanagement and fraud, and enhance financial accountability and transparency. As a result, the university is better equipped to meet its financial obligations and support infrastructural projects.

4.2. The effectiveness of systems of internal control

The respondents acknowledge that some aspects of the systems are functioning well. However, they also highlighted several reasons for the failures in other areas. One major issue is the limited number of staff in the departments responsible for enforcing controls, which leads to the available employees being overwhelmed with work. Furthermore, there is insufficient monitoring of the effectiveness of the internal control systems. Supervision is also lacking; for instance, a responsible officer merely signs requisitions without actively overseeing the entire payment process, which undermines the overall effectiveness of the controls.

4.3. Main measures of financial performance

The staff believes that the primary measures of financial performance include liquidity, which is the ability to meet day-to-day obligations, such as salaries and statutory requirements, as they arise. Additionally, they consider asset utilization to be another key indicator of financial performance. Furthermore, some participants emphasized the importance of maintaining a balanced budget, following a disciplined budgeting process, establishing clear priorities, and adhering to them strictly. They also advocate for ongoing budget reviews and the implementation of proper accountability guidelines that are both issued and monitored. The important measures include infrastructural development and employee motivation levels.

4.4. Fund availability

The respondents agreed that having sufficient funding is essential for the successful implementation of the university's activities. They also highlighted several other important measures, including effective asset utilization, making strategic investments to prevent idle funds from sitting in bank accounts and addressing the critical needs of the institution.

4.5. Accountability Procedures

The respondents expressed their views on the effectiveness of the accountability process and provided key examples to support their opinions. They believe the current accountability procedures are inadequate, citing that some staff members take the process for granted. Some senior academic staff noted they have never been required to account for the funds allocated to them, particularly after participating in university activities. They highlighted that the issue of accountability is exacerbated by the absence of a comprehensive financial manual that clearly outlines the accountability requirements. Furthermore, they pointed out the lack of supervision and follow-up on accountability-related matters. However, they did acknowledge that certain aspects of the accountability process are adequate, such as improvements in transparency within the system and the procurement process.

4.6. Reporting procedures

The respondents have mixed opinions about the institution's approach to reporting. Some believe that the reporting system is adequate and that it is gradually improving. However, others feel that there has been no improvement, noting that the administrative staff does not request reports from the academic staff.

5. SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1. Summary and Conclusion

The findings from this research indicate that the Internal Control System has significantly contributed to improving financial performance at EBK University, albeit to a moderate extent. The study demonstrated that the university possesses adequate and effective internal control systems, which include regular internal audits, proper segregation of duties in the finance and procurement departments, and physical controls to prevent overspending of allocated funds. Additionally, the university has established proper checks and balances, and it takes adequate corrective actions to address weaknesses identified in financial and audit reports. The control activities have been shown to positively impact the financial and operational performance of the institution. Furthermore, the results revealed that senior management, finance staff, procurement staff, IT staff, and some academic staff receive regular training on the following five components of internal controls: Control environment, Risk assessment, Control Activities, Information and Communication, and Monitoring. This training enhances their ability to promote transparency, accountability, and efficiency in delivering educational services. The study also found that various stakeholders, including students, academic staff, administrative staff, and government regulators, have benefited from the effective internal control systems in place at the university.

5.2. Recommendation to University Court, Senate and Finance and General-Purpose Committee

Given the substantial authority granted to the Senate and the Finance and General-Purpose Committee (F&GPC), it is recommended that the Senate include a member who is independent of the university's financial affairs and has a strong background in financial matters. This member would be responsible for interpreting the financial statements and records presented to the Senate. This individual should also serve on the F&GPC to guide on critical financial issues for both the F&GPC and the Senate.

5.3. Recommendation for Future Research

Further research is recommended to compare internal controls' effectiveness and impact on the financial and operational management of public universities in Sierra Leone. It is suggested that comparative studies be conducted to evaluate the effectiveness of internal controls and their influence on the financial and operational management of these institutions.

REFERENCES

1) Adebisi, J. F., & Gbegi, D. O. (2015). Fraud and the Nigerian public sector performance: The need for forensic accounting. International Journal of Business, Humanities and Technology, 5(5), 67-78.
2) Abiola, I., & Oyewole, A T. (2013). Internal control system on fraud detection: Nigeria Experience. Journal of Accounting and Finance, 13(5), 141-152.
3) Anderson U, Christ M, Johnstone K, Rittenberg L (2012) A PostSOX examination of factors associated with the size of internal audit functions. Accounting Horizons 26(2): 167–191. https://doi. org/10.2308/acch-50115
4) Akinyomi O.J.,Akinyomi, R.M. (2010). The Pioneer income tax relief as an investment incentive in Nigeria. International Journal of Development and Management Review, 6(1), 85-95.
5) Alao, A. A., & Amoo, A. A. (2014). Enhancing the performance of electricity distribution companies in Nigeria via internal control system. Research Journal of Finance and Accounting, 5(22), 197-214.
6) Al-Atiqi, IM and El-Azma, M. (2007), 'Funding and financial performance of private higher education institutions in Kuwait,' Paper presented at UNESCO forum on higher education, research, and knowledge on The impact of globalization on higher education and research.
7) Amankwaa, L. (2016). Creating protocols for trustworthiness in qualitative research. Journal of cultural diversity, 23(3).

8) Amudo, A., & Inanga, L. (2009). Evaluation of Internal Control Systems: A Case Study from Uganda. International Research Journal of Finance and Economics, 125-144
9) Armstrong, M. (2009). Armstorng's handbook of human resource practice (11th ed.). Kogan Page.
10) Barra, R.N. (2010), "The Impact of Internal Controls and Penalties on Fraud," Journal of Information Systems, vol. 24, no. 1, pp. 1-21.
11) Beasley, M.S., Carcello, J.V., Hermanson, D.R. and Lapides, P.D. (2000), "Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms", Accounting Horizons, Vol. 14 No. 4, pp. 441-454.
12) COSO. (2004), Internal Control- Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission. New York: Coopers and Lybrand.
13) Creswell, J. W. (2009). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches* (3rd). SAGE Publications Inc.
14) Creswell, J. W., & Plano Clark, V. L. (2018). Designing and Conducting Mixed Methods Research (3rd ed.). Sage Publications
15) Crutchley, C.E., Jensen, M.R.H. and Marshall, B.B. (2007), "Climate for scandal: corporate environments that contribute to accounting fraud", The Financial Review, Vol. 42 No. 1, pp. 53-73.
16) Ewa UE, Udoayang JO. The Impact Of Internal Control Design On Banks ' Ability To Investigate Staff Fraud and Life Style And Fraud Detection In Nigeria. International Journal of Research in Economics & Social Sciences 2013; 2(2): 32–43.
17) Fadzil, F. H., Haron, H., & Jantan, M. (2005). Internal auditing practices and internal control system. Managerial Auditing Journal, 20(8), 844 – 866.
18) Goh, B. W. (2009). Audit committees, boards of directors, and remediation of material weaknesses in internal control. Contemporary Accounting Research, 26, 549-579.
19) Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed Method Evaluation Designs. *Educational Evaluation and Policy Analysis, 11*(3), 255–274.
20) Hamilton DI, Gabriel JMO. Dimensions of fraud in Nigeria quoted firms. Am J Soc Manag Sci. 2012;3(3):112–20. https://doi.org/10.5251/ajsms.2012.3.3. 112.120.
21) Jones, M.J. (2008), "Internal control, accountability and corporate governance: medieval and modern Britain compared", Accounting, Auditing, Accountability Journal, Vol. 21, No. 7, pp. X-X O/S.
22) Kamara, A., K(2023). An Assessment of The Effectiveness of the Internal Audit on The Performance of The Public Sector: Case Study of The National Revenue Authority (NRA) (June 27, 2023). Available at SSRN: https://ssrn.com/abstract=4492906 or http://dx.doi.org/10.2139/ssrn.4492906
23) Levy, M., Powell, P. and Yetton, P. (2011), "Contingent dynamics of IS strategic alignment in small and medium-sized enterprises", Journal of Systems and Information Technology, Vol. 13 No. 2, pp. 106-124. https://doi.org/10.1108/13287261111135963
24) Katua (2014). The Role of SMEs in Employment creation and Economic growth in selected countries. International Journal of Education and Research, Vol, no 12.
25) King N, Brooks J, Tabari S (2018) Template analysis in business and management research. In: Ciesielska M, Jemielniak D (eds) Qualitative methodologies in organization studies, vol 2. Palgrave Macmillan, Cham, pp 179–206
26) Magara, C. N. (2013). Effect of internal controls on the financial performance of deposit-taking savings and credit cooperative societies in Kenya. A research project report submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree, School of Business, University of Nairobi. http:// repository.uonbi.ac.ke/handle/11295/60169.
27) Monday, J. U., Inneh, G. H., & Ojo, V. O. (2014). Internal controls and operating performance of small businesses in Lagos Metropolis. Paper presented at the Proceedings of the International Conference on Accounting, Finance and Management.
28) Maurihungirire Marilyn (2016). An analysis of the financial performance of State-Owned Enterprises: A case study of TransNamib Holdings Limited A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF THE UNIVERSITY OF NAMIBIA BY MARILYN Muraleetharan, P. (2013). "Control activities and performance of organisations." International Journal of Marketing, Financial Services and Management Research, 2(4), 10-16
29) Mwaura, P.M.(2013) "The effects of Financial Accountability on the Performance of Non-Governmental Organizations in Kenya," University of Nairobi Research Archive.. 2013.
30) Mawanda, S. P. (2008). Effects of internal control system on financial performance in Uganda's institution of higher learning. Dissertation for award of MBA in Uganda Martyrs University.
31) Muhammed, A (2014) "A Critical analysis of public financial management reform in Ethiopia and Tanzania" Journal of Developing Country Studies Vol.4 (9).
32) Muio, C., (2012). Impact of internal control systems on financial performance of Private hospitals in Nairobi: Unpublished MBA Project, University Of Nairobi
33) Mwachiro, D. B. (2013). Effect of internal controls on revenue collection: A case of Kenyan Revenue Authority. Nairobi: University of Nairobi.
34) Ogundipe, L. O., Ogundipe, S. E., & Ajao, S. K. (2012). Cash holding and irm characteristics: Evidence from Nigerian emerging market. Journal of Business Economics and Finance, 1(2), 45-58.
35) Neale, P., Thapa, S., & Boyce, C. (2006). Preparing a case study: A guide for designing and conducting a case study for evaluation input.Retrieved from http://www2.pathfinder.org/site/DocServer/m_e_tool_series_case_study.pdf
36) (Kothari, 2007).
37) Ngungi, T. M. (2013). Effect of Online Banking on Financial Performance of Commercial Banks in Kenya. Unpublished MBA Project. University of Nairobi.

38) Nobes, C., 1992, International Classification of Financial Reporting (Routledge, London)
39) Nyakundi, D.O., M.O. Nyamita, and T.M. Tinega. 2014. Effect of internal control systems on financial performance of small and medium scale business enterprises in Kisumu City, Kenya. International Journal of Social Sciences and Entrepreneurship 1 (11): 719–734.
40) Ondieki, N. M. (2013). Effect of internal audit on financial performance of commercial banks in Kenya (Master's Thesis). University of Nairobi
41) Olumbe, C.O. (2012), The relationship between internal controls and corporate Governance in commercial banks in Kenya, Unpublished thesis, University of Nairobi.
42) Othman, R., Ishak, I. F., Ariffin, N. K., Ismail, R., Razali A. A. (2014). Control Activities in the Payroll Process: A Case Study on the Malaysian Public Sector. Proceedings of ICF 2014.
43) Palinkas, L. A., Horwitz, S. M., Chamberlain, P., Hulrburt, M., & Landsverk, J. (2010). Mixed method designs in mental health services research. Psychiatric Services (in press Sarbanes Oxley Act (SOX) Act 2002
44) Shanmugam, J.K., Haat, M.H.C. and Ali, A. (2012), "An exploratory study of internal control and fraud prevention measures in SMEs", International Journal of Business Research and Management, Vol. 3 No. 2, pp. 90-99.
45) Steckler, A., McLeroy, K. R., Goodman, R. M., Bird, S. T., & McCormick, L. (1992). Toward integrating qualitative and quantitative methods: An introduction. Health *Education Quarterly, 19*(1), 1–8.
46) Teddlie, C. and Yu, F. (2007). Mixed Methods Sampling: A Typology with Examples. Journal of Mixed Methods Research, pp 77-100.
47) Wainaina, M. (2011). Gendered Challenges and opportunities in Module II programs in Kenyan Public Universities: Critical appraisal. International Journal of Humanities and Social Sciences, 1(20), 95–10
48) Renson Nyongesa1 Maniagi Musiega2 Evans Silver Kwendo Effect of Internal Audit Timeliness on Financial Performance of Deposit Taking Savings and Credit Cooperatives in Western Kenya . Vol. 5 (Iss. 4) 2024, pp. 1904-1915 African Journal of Empirical Research https://ajernet.net ISSN 2709-2607