

The Impact of Internal Control Systems on the Financial Performance of Listed Commercial Banks in Machakos Town, Kenya

Ngeta Jacqueline¹, Evusa Zablon^{2*} & Wahome Ndirangu³

^{1,2}*School of Business, South Eastern Kenya University*

³*School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture and Technology*

**Corresponding author*

Abstract: Recent past has seen commercial banks placed under receivership for poor performance which signals to poor internal controls which went undetected by the regulator. Because of this reason, this study aimed to evaluate the impact of internal control systems on financial performance of listed commercial operating in Machakos, Kenya. The study used both causal and correlation research designs. Census method was used to select the select the commercial banks since they are few. The study population comprised of all staff working all listed commercial operating in Machakos Town. Purposive sampling was used to select a sample of 39 respondents, three from each of the 13 listed banks operation within Machakos Town. The study used primary data obtained thorough a self-administered questionnaire. Data was analyzed by use of correlation and descriptive statistics with aid of SPSS version 26. The findings were presented in form of tables and percentages. Reliability of the instrument was evaluated using Cronbach's alpha. All the variables had Cronbach's alpha above 0.7 and thus were accepted as indicating that the instrument was reliable. The study findings showed that the predictor variables explained 54% of the variability in financial performance of commercial banks. The study found that risk assessment and monitoring had the highest positive and statistically significant impact on financial performance of commercial banks operating within Machakos Town. The study recommends that commercial banks should embrace internal control systems in order to enhance financial performance. Commercial banks should review their practices and policies in line with the internal control systems that significantly impact on the performance.

Keywords: Internal, Control, Systems, Financial, Performance, Commercial, Banks, Kenya

I. INTRODUCTION

Commercial banks play a fundamental role in a country's financial system and the economy. As a key component of the financial system, banks facilitate efficient allocation of funds from savers to borrowers. Their specialized financial services reduce both information asymmetry and the cost of obtaining information on availability of savings and borrowing opportunities. These financial services help to make the overall economy more efficient. Businesses and households mainly depend on banks for payment of services. The pivotal role of banks in the economy draws governments and central banks to focus on financial systems soundness and

stability. Kenya's strategic economic blue print, vision 2030 confirms the confidence the government of Kenya has in the ability of its banking system to drive the county from its current ranking as a lower-middle income country to middle income economy. As part and integral part of the financial system, commercial banks have their part to play in order to deliver the envisioned target.

According to the Committee of Sponsoring Organization-COSO (2013) internal control is a key system which sets the tone of an entity. The strength of internal controls influences the corporate consciousness of the people within that organization, instills managerial discipline and commitment to stewardship, directs operations, mounds the corporate culture, influences ethical, influences change behavior and is the foundation for all other components of financial performance. The regulatory role played by the Central Bank of Kenya coupled sound management practices through strong internal control systems are deemed necessary pre-requisites for optimal functionality and performance of the banks in Kenya.

The banking sector has shown significant growth over time in terms of growth in the number of deposits account, deepening of the financial market and increased loan to asset levels (CBK, 2020, Finances Survey, 2020). Similarly, branch network has also expanded as well as infusion of digital financial products that have immensely contributed to growth in Kenya's banking system. (CBK, 2021). Kenya has a vibrant banking sector that is relatively stable and well regulated. The adoption of information technology has further contributed to deepening in the financial system and a plethora of new digital financial products that have received overwhelming adoption by the banking clientele. These products have particularly revolutionaries the payment system, and have shown significant impact in the loan market. These developments have the potential to increase vulnerability of the banking system hence the need to recheck banking soundness and readiness. Internal control systems therefore play a key role in aligning the banking system to changes in its immediate operating environment.

In the contemporary globalized market, financial risks and crisis have been prevalent. Literature finds that Kenya's

commercial bank have also experienced cases of banking failures (CBK, 2016). Between 1993 and 1995, a total of 17 financial institutions (CBK 1996) that were linked to the Goldenberg scandal collapsed. In 1998, six banks - Bullion Bank, Fortune Finance, Trust Bank, City Finance Bank, Reliance Bank and Prudential Bank collapsed (CBK, 1998). Between the years 2007 - 2015, another four institutions collapsed: Kenya Finance Corporation, Trade Bank, Euro Bank, and Charter House bank (CBK, 2016). The latest casualties are Dubai Bank, Imperial Bank and Chase Bank (2015-2016). Governance problems and insider trading adversely affected stability and the going concern of Chase bank. Interestingly the bank lured both individuals and Corporates with huge, easy, and unsecured loans before just before its collapse in 2016. Dubai bank suffered both capital deficiencies and illiquidity problems (CBK, 2016). Unsafe and unsound business practices pushed Imperial bank into liquidation in 2016. (CBK 2016). The current restructuring of the banking sector through mergers and acquisitions points to a sitting financial fragility in the market. This history puts to question the sufficiency of banking internal control systems and their impact of banks performance. This paper will investigate the relationship between internal control systems and bank performance in Kenya

American Institute of Certified Accountants (AICPA, 1949) defines the concept of internal control as the steps, harmonized procedures and actions an organization applies to ensure safety of its assets, accuracy of accounting data, reliability of accounting information, compliance to management policies and promotion of efficiency in operations. Auditing standards No 5 defines Internal Control over financial reporting as “the whole system of control, financial or otherwise, established by management to carry on the business in an orderly and efficient manner, ensuring adherence to management policies, safeguard assets and as far as possible the completeness and accuracy of records”. International Standards on Auditing (ISA) 315 defines internal control as the management policies as well as procedures applied by management to help in realizing managerial goals of ensuring as far as possible, order and efficiency in business operations is promoted alongside compliance with organizational policies, safeguarding of assets, prevention and detecting of fraud and error, accuracy and completeness of accounting records that facilitate preparation of accurate, reliable and timely financial reports. It is implicit that internal control system therefore includes all tools and arrangements created by the management and implemented within an organization to ensure assets are safeguarded, and for completeness, accuracy, timeliness and reliability of accounting information.

Corporate failures of the 1970s and 80s prompted the formation of a Committee of Sponsoring Organization (COSO) in 1987 by the major accounting and auditing professional organizations and tasked to study cases of fraudulent financial reporting that marred business practices in

the that period. The COSO developed a framework for internal control in 1992 which has been adopted as the world’s standard for firms to control business operations and financial systems. The Basel Committee on banking fronts a thirteen-point framework for evaluation of Internal Control Systems which it summarizes and aligns with COSOs five-point principal framework for internal control which includes Management oversight and the control environment, Risk recognition and assessment, Information Communication and Monitoring activities and Correcting deficiencies. Basel committee further accentuates that sound Internal Controls are integral to prudent banking operations and promotes stability in the financial system. Further, the committee alludes those strong internal controls are a pre-requisite for banks adherence to Basel II provisions of management soundness, sensitivity to market risk, and capital and liquidity adequacy among others. Furthermore, effective internal controls enable banks to identify tools that improve on efficiency, minimize exposure to risks and possible losses from inadequately safeguarded company assets and reduce costs. The interrelationship banking supervision requirements and strong ICS points to the central role the latter plays towards banking performance. Figure 1-1 illustrates the five principles of internal control as developed by COSO.

While it is recognized that good internal control systems provide managers with reasonable assurance that the basic objectives of management will be achieved (Postan, 2010; Mawanda, (2000), weak internal control systems have been labelled as the perfect fertile ground for perpetration of fraud and scandals (Agyapong, 2017). There is a growing concern on the presence, implementation and strength of internal control systems in the wake of failures of financial institutions over the world. Recant history, bank failures witnessed at Enron in USA and WorldCom whose failures were strongly linked to side-stepping internal controls couples with corporate malpractices. Kenya has not been an exception from banking turmoil. Between 1993 and 1995, a total of 17 financial institutions (CBK 1996). In 1998, six banks collapsed (CBK, 1998) and between the years 2007 - 2015, another four institutions collapsed (CBK, 2016). The latest three casualties to fail are Dubai Bank, Imperial Bank and Chase Bank (2015-2016). Huge losses have also been reported including in former Barclays bank (now ABSA bank) in various branches within Nairobi city to the tune of 22M Nairobi between 20/4/2019 and 21/4/2019 yet the banks have in place operating Internal Controls.

While there is sizeable empirical focus in internal controls for banks and other industries, their findings fail to point to a generalizable position for the different firms and industries and for the different components of internal control. Ewa and Udoayang (2012) finds that strong ICS are a deterrent to employee associated banking fraud in Nigeria. Agyapong, (2017) finds that continuous lapse exhibited in internal control systems in the public sector in Ghana creates suitable environment for misallocating public resources. Kipkemboi

et al., (2016) and Kiplangat (2016) finds that control environment is significant in predicting changes in financial management in private hospitals and county governments, Etonl et al., (2022) find a significant effect of monitoring controls on financial accountability of local governments in Uganda. His findings corroborated by Kariuki and Reddy (2017) who found low monitoring and evaluation in municipalities, which was associated with inadequate resources. Nyumoo et al., (2020) finds that only communication and risk assessment have a significant impact on the financial performance of SACCOs in Meru County. Githaiya (2017) investigating on issues that contributed bank failures in Kenya found that control environment and monitoring were the key factors that led to the collapse of three Banks in Kenya from 2015-2016. This is corroborated by Mwendu et al., (2021) who find that only control activities and monitoring significantly influences financial performance of listed banks in Kenya. In conflict to the findings noted herein, Alawattegama (2018) found that internal controls have insignificant influence on the financial performance of banking and finance companies in Colombo. The foregoing divergent findings of the impact of internal controls on firm performance intimates that the impact of internal control may be contingent to firm or industry in time. Further, studies on internal control in the baking industry have focused on the head office and not at local branch levels. This study aimed at filling the gap on the impact of internal in understanding the branch level causality between internal control and bank performance in Kenya.

1.3 Research Objectives

The purpose of this study was to determine the effect of internal control systems on financial performance of commercial banks operating in Machakos Town, Kenya. The study was guided by five specific objectives which were to:

- i) Establish the effect of control environment on financial performance of commercial banks operating in Machakos Town, Kenya.
- ii) Establish the effect of risk assessment on financial performance of branches of commercial banks operating in Machakos Town, Kenya.
- iii) Assess the effect of information and communication System on financial performance of branches of commercial banks operating in Machakos Town, Kenya.
- iv) Establish the effect of control activities on financial performance of branches of commercial banks operating in Machakos Town, Kenya.
- v) Establish the effect of monitoring on financial branches of commercial banks operating in Machakos Town, Kenya.

II. LITERATURE REVIEW

2.1 Theoretical Review

The study focused on three theories: Stakeholder theory, agency theory and contingency theory. Edward Freeman's (1983) stakeholder theory opines the board of directors and the management of a firm need to understand and protect the interest of all stakeholders of the firm that stretch beyond the owners to include capital providers, current and potential investors, customers, employees and the government among others. The relevance of the theory to the study relates to two aspects of internal control viz control environment and control activities. It is the mandate of the board of directors and management to create appropriate control environment that entails establishing clear organizational structure, reporting lines, authority, and responsibilities, corporate culture, professional, ethical and moral codes of conduct. The theory provides the lens through which the role of the board and management should be seen with reference to internal control and its impact of profitability where both the dependent and independent variables lent themselves to the manipulation and control that only rests with the top management of a corporate.

Jensen and Meckling (1976) agency theory posits that the separation of owners from the daily management of their business organizations and delegation of those responsibilities to non-owner professional agents creates conflict of interest between the principal owners and the agent managers. According to Jensen and Meckling (1976) proposes that based on the assumption that both the principal and the agent are rational, then the agency conflict is neutralized through compressive contracts that are designed to cover the interests of both parties. The management can further extend these contract agreements concept to the employees such that the contract terms bind employee commitment to implementation of policy and procedures enough to supersede the need for monitoring costs.

Woodward's (1958) Contingency Theory posits that there is no best way to manage. Chenhall (2003) expounds the term "contingency" to mean that a particular position only holds true under particular parameters. Donaldson, (2001) opines that contingency explains the circumstance that one variable impacts on another variable depending on the contextual state of a third variables. Generally, it is recognized there is no universal organizational structure, and that that an optimal organizational structure is contingent upon diverse factors such as the nature of organizational work, organizational technology and market conditions. In line with this argument, Drazin and Van de Ven (1985) argues that firm performance is dependent on certain situations, distinct to the firm and not necessarily generalizable. He suggests that firm performance can also be explained through contingency theory.

2.2 Empirical Literature review

A study on Chinese listed companies by Hu et al., (2021) finds that the implementation of C-SOX internal control reforms increased companies' accrual-based earnings quality, prevented voluntary expenditures swings and decreased the manipulation of earnings through actual activities through enhanced reporting. Githaiya (2017) reports that the collapse three of commercial banks in Kenya was largely contributed by conflict of interest in top management leading to weak corporate governance. The study found a strong link of the board's oversight and bank failure. On banking crisis in Kenya, Githaiya (2017) finds that a key contribution was lack of risk assessment in granting loans. He finds that lending requirements were compromised, loans were approved quickly and the management ignored credit risk and that it was neither a priority to the board nor the managers. Momanyi and Njiru (2016) financial risk management practices comprising of; risk identification, risk monitoring, risk assessment and risk mitigation, had a positive correlation to the performance of SACCOs in Nakuru, Kenya. In a similar fashion, Bett and Memba (2017), Rosman et al. (2016), Kirogo, Ngahu, and Wagoki (2014) and Nyakundi et al. (2014) found a significant positive relationship between risk assessment and financial performance. However, Ghani and Rosli Mahmood (2015) and Alawattagama (2018) found an insignificant relationship between risk assessment and financial performance of banks and micro finance institutions respectively. Thus, need for more empirical studies to reconcile these mixed findings from previous studies on risk assessment and financial performance.

From a study in Nigeria, Ironkwe and Otti (2016) find that the preparation and dissemination of accounting information that had the quality of relevance to users showed significant influence on the bank's profitability. Further, Ali, Omar, and Bakar (2016) found that with reference to accounting information, information quality, systems quality and service quality significantly influences firm's performance. This was confirmed by Bett and Memba (2017) and Nyakundi et al. (2014). On the contrary, Alawattagama (2018) established that information & communication indicate an insignificant positive impact on firm performance of forty-five banking and finance companies listed on the Colombo Stock Exchange.

III. RESEARCH METHODS

This study adopted both correlation and causal designs. The researcher adopted correlation design as the interest was to establish the nature and magnitude of effect and relationship existing between independent and dependent variables. Causal design was adopted because the design was appropriate in determining the effect of independent variables on dependent variables. Correlation achieved through analysis of the 5 Likert scale data. The target population included Branch Managers, Head of Corporate and regulatory affairs, chief finance officers, chief business officers, chief information officers, risk managers, credit managers, and Human

Resources Managers. The researcher used purposive sampling to select the sample of 39 employees working in listed commercial banks operating in Machakos Town. The sampling frame included Branch manager, assistant manager, Credit manager and chief finance officers in the 13 listed banks in Machakos Town. The study targeted managerial staff as appropriate respondents because they are well versed with organizational structures of internal control and financial performance of the banks. A sample size of 39 was arrived at by selecting 3 respondents from each bank. The study used the primary sources of information. Primary data is one which is collected directly from the sources and firsthand experience. The main tool for data collection will be a closed ended questionnaire administered by the drop and pick method. The research employed quantitative techniques for analyzing data. Regression and Correlation analyses will be incorporated to analyze the variables and their relationship with each other. Descriptive statistics obtained from data analysis were presented using frequency tables, while inferential data findings will be presented using correlation and regression tables. The statistical tool of analysis was SPSS software. Internal control systems and financial performance relationship was modeled using the following multiple linear regression models:

$$ROE = \alpha + \beta_1CE + \beta_2RA + \beta_3IC + \beta_4CA + \beta_5M + \varepsilon$$

Where: Y = Dependent variable (Financial Performance, ROE)

α = the constant term

β = Regression Coefficients of independent variables

CE= control environment

RA= risk assessment

CA= control activities

ICS = information and communication system

M = monitoring

ε = Error Term

IV. FINDINGS AND DISCUSSION

Reliability of an instrument refers to its ability to produce consistent and stable measurements. The reliability is expressed as a coefficient between 0 and 1. The higher the coefficient, the more reliable the instrument is. Reliability of this instrument was evaluated using Cronbach's alpha. Table 1 shows that all the variables had Cronbach's alpha above 0.7 and thus were accepted. Specifically; control activities with 7 items had the highest reliability ($\alpha = 0.795$) followed by risk assessment ($\alpha = 0.778$) with 7 items, information and communication ($\alpha = 0.774$) with 7 items, control environment ($\alpha = 0.756$) with 7 items and monitoring ($\alpha = 0.756$) with 9 items respectively. The study consequently revealed that the instrument was reliable and further analysis could be carried out.

Table 1 Reliability Test

Variables	No of items	Cronbach's alpha
Control environment	7	.756
Risk assessment	7	.778
Control activities	7	.795
Information and communication	7	.774
Monitoring	9	.756
Overall	37	.772

Validity test is done to show the degree to which questionnaire measures what it is expected to measure (Kothari, 2004). A pilot test was conducted using 10 respondents. This exercise was useful in interpreting whether respondents understood the questions the same way the study intended. Based on their output the questionnaire was reviewed before further data collection. The research data was then collected using the modified questionnaires.

4.1 Descriptive Analysis results

4.1.1 Control Environment

The respondents were asked to rate statements on internal control systems. The findings revealed that to a great extent; boards independent oversight on the banks internal control significantly influences bank performance (mean = 4.7714, std dev = .42804), management has established clear organizational structure reporting lines, authority and responsibilities (mean = 4.6857, std dev = .47101), management is commitment to attracting developing and maintaining competent labor (mean = 4.6571, std dev = .48159), management proficient in creating a strong and suitable control environment (mean = 4.6571, std dev = .48159), management communicates the importance of internal controls to the personnel (mean = 4.5882, std dev = .49955), board and management promote high ethical and banking integrity standards (mean = 4.5714, std dev = .55761) and management is devoted executing internal audit recommendations on internal control systems (mean = 4.5429, std dev = .56061).

Table 2: Descriptive Statistics for Control Environment

	Mean	Std. Deviation
	Statistic	Statistic
The management proficient in creating a strong and suitable control environment	4.6571	.48159
The boards independent oversight on the banks internal control significantly influences bank performance	4.7714	.42604
The board and management promote high ethical and banking integrity standards	4.5714	.55761
Management has established clear organizational structure reporting lines, authority and responsibilities	4.6857	.47101
The management communicates the importance of internal controls to the personnel	4.5882	.49955
The management is devoted executing internal audit recommendations on ICs	4.5429	.56061

Management is commitment to attracting developing and maintaining competent labor	4.6571	.48159
---	--------	--------

4.1.2 Risk Assessment

Under risk assessment, the analysis indicated that to a great extent; risk assessment policy on digital lending significantly mitigates banking loses and therefore influences bank performance (mean = 4.6571, std dev = .48159), banks policy on credit scoring sufficiently identifies and controls for liquidity and credit risk and this improves profitability (mean = 4.6571, std dev = .53922), management has installed efficient tools that promptly capture and recourse material risk and this act significantly impacts on bank performance (mean = 4.6143, std dev = .55904), bank has efficient system to mitigate the occurrence of risks that are material to performance of the bank and stability (mean = 4.5143, std dev = .56211), all materiality levels set by the bank are reasonably relevant and influence bank performance (mean = 4.4571, std dev = .56061), adherence to KYC policy in risk assessment influences (mean = 4.3714, std dev = .54695) and risk assessment on traditional bank loans is efficient and improves bank performance (mean = 4.3429, std dev = .68354).

The results are in line with the finding of Hu et al., (2021) who found that the implementation of COSO – internal control reforms increased companies’ accrual-based earnings quality, prevented voluntary expenditures swings and decreased the manipulation of earnings through actual activities through enhanced reporting. The findings further supported Githaiya (2017) who reported that the collapse three of commercial banks in Kenya was largely contributed by conflict of interest in top management leading to weak corporate governance. The study found a strong link of the board’s oversight and bank failure.

Table 3: Descriptive Statistics for Risk Assessment

	Mean	Std. Deviation
	Statistic	Statistic
Adherence to KYC policy in risk assessment influences	4.3714	.54695
All materiality levels set by the bank are reasonably relevant and influence bank performance	4.4571	.56061
Management has installed efficient tools that promptly capture and recourse material risk and this act significantly impacts on bank performance	4.6143	.55904
Banks policy on credit scoring sufficiently identifies and controls for liquidity and credit risk and this improves profitability	4.6571	.53922
The bank has efficient system to mitigate the occurrence of risks that are material to performance of the bank and stability	4.5143	.56211
Risk assessment on traditional bank loans is efficient and improves bank performance	4.3429	.68354
Risk assessment policy on digital lending significantly mitigates banking loses and therefore influences bank performance	4.6571	.48159

4.1.3: Control Activities

Under risk taking propensity, the analysis indicated that to a great extent; segregation of duties authorization and approval of transaction by relevant officers influences bank performance (mean = 4.6857, std dev = .47101), confirmation of arithmetic accuracy is a common practice (mean = 4.6471, std dev = .48507), follow ups on non-compliance significantly influences bank performance (mean = 4.3429, std dev = .59125), bank routinely checks for compliance with exposure limits on this significantly affects banking performance (mean = 4.0857, std dev = .74247), periodic top level management reviews on control structures and activities significantly influences banks performance (mean = 3.9143, std dev = .78108), bank management has set up appropriate control structures that define specified control activities for specified banking operations in each banking sector (mean = 3.8571, std dev = .73336) and management has designed appropriate activity controls for different banking sections which significantly influences banking performance (mean = 3.286, std dev = .66358).

The results supported those of Goh (2009) who revealed that an indecent board is less susceptible to undue influence from the management and that such boards are more likely to exert pressure on management to effect amends to strengthen material weaknesses in internal controls. The results conform to Gathaiya (2017) who found that lack of bard independence compromised it ability to enforce changes to weak internal controls, and that this failure significantly contributed to the collapse of Chase Bank in Kenya. The findings negate those of Alawattagama (2018) who found an insignificant relationship between control activities and financial performance of a sample of forty-five banking and finance companies listed on the Colombo Stock Exchange.

Table 4: Descriptive Statistics for Control Activities

	Mean	Std. Deviation
	Statistic	Statistic
The bank management has set up appropriate control structures that define specified control activities for specified banking operations in each banking sector	3.8571	.73336
Periodic top level management reviews on control structures and activities significantly influences banks performance	3.9143	.78108
Management has designed appropriate activity controls for different banking sections which significantly influences banking performance	3.8286	.66358
The bank routinely checks for compliance with exposure limits on this significantly affects banking performance	4.0857	.74247
Follow ups on noncompliance significantly influences bank performance	4.3429	.59125
Confirmation of arithmetic accuracy is a common practice	4.6471	.48507
Segregation of duties authorization and approval of transaction by relevant officers influences bank performance	4.6857	.47101

4.1.4: Information and Communication

The respondents were asked to rate statements on information and communication. The results indicated that to a great extent; securing and independent monitoring of electronic data storage systems and usage significantly influences bank performance (mean = 4.5294, std dev = .50664), timely communication on changes in accounting policies reporting and disclosure requirements influence banks performance (mean = 4.5143, std dev = .65849), presence of adequate contingency arrangements on electronic data systems significantly influences bank performance (mean = 4.5000, std dev = .56408), banks information and communication channels support complete and timely financial reporting which then affects bank performance (mean = 4.4286, std dev = .60807), providing management with constantly reliable and timely information on all significant bank activities significantly influences bank performance (mean = 4.2647, std dev = .61835), management has established clear and efficient channels of communication with all departments and among the banking sections (mean = 3.9412, std dev = .60006) and effective communication is practiced across all levels (mean = 3.8235, std dev = .90355).

The results support those of Ironkwe and Otti (2016) who found that the preparation and dissemination of accounting information that had the quality of relevance to users showed significant influence on the banks profitability. Further, the results conform to those of Ali, Omar, and Bakar (2016) who found that with reference to accounting information, information quality, systems quality and service quality significantly influences firm’s performance. The results also supported the findings of Cheng et al., (2014) who showed that efficient internal controls reduce the probability of misappropriation of corporate resources and that they also support preparation of quality and timely internal reports for decision making.

Table 5: Descriptive Statistics for Information and Communication

	Mean	Std. Deviation
	Statistic	Statistic
Management has established clear and efficient channels of communication with all departments and among the banking sections	3.9412	.60006
Providing management with constantly reliable and timely information on all significant bank activities significantly influences bank performance	4.2647	.61835
Securing and independent monitoring of electronic data storage systems and usage significantly influences bank performance	4.5294	.50664
The presence of adequate contingency arrangements on electronic data systems significantly influences bank performance	4.5000	.56408
Effective communication is practiced across all levels	3.8235	.90355

Banks information and communication channels support complete and timely financial reporting which then affects bank performance	4.4286	.60807
Timely communication on changes in accounting policies reporting and disclosure requirements influence banks performance	4.5143	.65849

4.1.5: Monitoring

Respondents were asked to rate statements on monitoring. The results revealed that to a great extent; level of efficiency of the internal audit departments is in ICS management significantly influences bank performance (mean = 4.4571, std dev = .56061), Timely feedback on deficiencies in control significantly influences banks financial performance (mean = 4.3429, std dev = .63906), external audits of financial statements significantly influences banks performance (mean = 4.3429, std dev = .59125), deficiencies in control activities are reported and addressed effectively (mean = 4.2286, std dev = .87735), constant monitoring evaluation and control at section level significantly influences banks performance(mean = 4.0571, std dev = .75477), updating ICS to map and match changes in control environment has significant influence in banks performance (mean = 3.9143, std dev = .56211), regular evaluation of banks ICS significantly influences banks performance (mean = 3.8286, std dev = .45282), annual evaluation and reviews of banks controls significantly influences bank performance (mean = 3.4857, std dev = .74247) and bank has adequate staff for monitoring evaluation and control of procedures and processes (mean = 3.3143, std dev = .93215). The results are in line with those of Agyapong, (2017) who established that continuous lapse exhibited in internal control systems in the public sector makes fertile ground for misallocating public resources. The study further revealed that though internal controls exist, they are not effective, which makes it easier for people to commit fraud. The findings supported Eton1 et al., (2022) who revealed a significant effect of monitoring controls on financial accountability is corroborated by Kariuki and Reddy (2017) who found low monitoring and evaluation in municipalities, which was associated with inadequate resources, and competent personnel.

Table 6: Descriptive Statistics for Monitoring

	Mean	Std. Deviation
	Statistic	Statistic
Regular evaluation of banks ICS significantly influences banks performance	3.8286	.45282
Updating ICS to map and match changes in control environment has significant influence in banks performance	3.9143	.56211
External audits of financial statements significantly influence banks performance	4.3429	.59125
Level of efficiency of the internal audit departments is in ICS management significantly influences bank performance	4.4571	.56061
Constant monitoring evaluation and control at section level significantly influences banks performance	4.0571	.76477
Annual evaluation and reviews of banks controls significantly influences bank performance	3.4857	.74247
The bank has adequate staff for monitoring evaluation and control of procedures and processes	3.3143	.93215
Timely feedback on deficiencies in control significantly influences banks financial performance	4.3429	.63906
Deficiencies in control activities are reported and addressed effectively	4.2286	.87735

4.2 Correlation and Regression Analysis

Coefficient of correlation (r) measures both magnitude and direction of the relationship between the dependent and independent variables. It varies between -1 and +1. The nearer it approaches ±1, the stronger the correlation. The result indicates that the relationship between ROE and control environment was positive and statistically significant (r=.026, p-value = .006<0.05), ROE and risk assessment was positive and statistically significant (r=.267, p-value = .001<0.05), ROE and control activities was positive and statistically significant (r=.189, p-value = .004<0.05), ROE and information and communication was positive and statistically significant (r=.238, p-value = .006p<0.05) and ROE and monitoring was positive and statistically significant (r=.430, p-value = .001<0.05). Correlation coefficient further measures the strength of the relationship between the independent variables. A high correlation (r>0.5) indicated a high correlation between the independent variables which shows the existence of a problem of multicollinearity. The results in table 7, shows that there was no high correlation (r<0.5) between the independent variable hence no problem of multicollinearity. A five predictor variables model could be used in forecasting financial performance of commercial banks operating in Machakos Town, Kenya.

Table 7: Correlation Matrix

		ROE	Control environment	Risk Assessment	Control Activities	Information & communication	Monitoring
ROE	Pearson Correlation	1					
	Sig. (2-tailed)						
Control environment	Pearson Correlation	.026	1				
	Sig. (2-tailed)	.006					
Risk Assessment	Pearson Correlation	.267	.017	1			
	Sig. (2-tailed)	.001	.004				
Control Activities	Pearson Correlation	.189	.093	.095	1		
	Sig. (2-tailed)	.004	.004	.002			
Information & Communication	Pearson Correlation	.238	.230	.267	.323	1	
	Sig. (2-tailed)	.006	.005	.007	.006		
Monitoring	Pearson Correlation	.430*	-.027	.460**	.419*	.348*	1
	Sig. (2-tailed)	.001	.000	.006	.005	.004	
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

4.3 Regression Analysis results

Coefficient of determination (r^2) is a measure of goodness of fit of the model, that is, how well the independent variables explain the variations in the dependent variable. It varies between 0% and 100%. The nearer it is to 100% the higher the explanatory power hence the better the model for forecasting.

As shown in Table 4.11, 52.7% of the variation in financial performance (ROE) of commercial banks operating in Machakos Town, Kenya could be accounted for by the changes in control environment, risk assessment, control activities, information and communication and monitoring leaving 47.3% unexplained (error term). The model is moderately fit for forecasting.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.726 ^a	.527	.519	.81648	.527	2.233	5	29	.001	2.199
a. Predictors: (Constant), control environment, Risk Assessment, Control Activities, Information And Communication, Monitoring										
b. Dependent Variable: ROE										

The results in Table 9 indicates that the response variables jointly significantly statistically predict the dependent variable, $F(5, 29) = 2.233, p = .001 < .05$. Hence the model is significant in overall. This indicated that the model was robust enough to explain the relationship between control

environment, risk assessment, control activities, information and communication, monitoring and the financial performance (ROE) of commercial banks operating in Machakos Town, Kenya.

Table 9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.167	5	1.233	2.233	.001 ^b
	Residual	15.999	29	.552		
	Total	22.167	34			
a. Dependent Variable: ROE						
b. Predictors: (Constant), Control Environment, Risk Assessment, Control Activities, Information And Communication, Monitoring						

The unstandardized coefficients which indicate how much the dependent variable varies with an independent variable, when all other independent variables are held constant were used to write the model. The unstandardized coefficients were used because the model would be recommended for forecasting purposes, the established regression model was of the form.

$$Y = .077 + .537CE + .089RA + .223CA + .395ICS + .624M$$

The results indicated that monitoring had the highest positive influence on financial performance (ROE) of commercial banks operating in Machakos Town, Kenya followed by control environment, information and communication, control activities and risk assessment respectively.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-3.077	3.567		-0.863	0.397		
Control environment	0.537	0.272	0.446	1.974	0.003	0.901	1.11
Risk assessment	0.089	0.042	0.085	2.119	0.005	0.605	1.653
Control activities	0.223	0.112	0.209	1.991	0.008	0.576	1.737
Information and communication	0.395	0.174	0.392	2.270	0.003	0.767	1.304
Monitoring	0.624	0.248	0.622	2.516	0.007	0.494	2.024

a. Dependent Variable: ROE

Statistical significance of the response variables tests was carried out to confirm whether the Unstandardized coefficients are equal to 0 (zero) in the population. Independent variable is statistically individually significantly linearly related to the dependent variable if $P\text{-value} < 0.05$. Using p -values at $\alpha = 0.05$, the results indicated that; control environment ($p\text{-value} = 0.003 < 0.05$), risk assessment ($p\text{-value} = 0.005 < 0.05$), control activities ($p\text{-value} = 0.008 < 0.05$), information and communication ($p\text{-value} = 0.003 < 0.05$) and monitoring ($p\text{-value} = 0.007 < 0.05$) thus, each independent variable was linearly related with the dependent variable hence all the predictor variables were statistically individually significant in the model.

V. RECOMMENDATIONS

The study makes an important contribution in understanding effect of internal control systems on financial performance. It further brings out the factors that influence the relationship between effects of internal control systems on financial performance. Arising from the findings of this study, the researcher proposes the following recommendations. To the policy makers; embrace internal control systems in your business in order to enhance financial performance. Commercial banks should review their practices and policies in line with the internal control systems. The results of this study should be used for policy formulation and development in commercial banks in Kenya.

REFERENCES

- [1] Abdulmunim, O. (2018). Cloud accounting in Jordanian public shareholding companies: The role of internal audit. *Corporate Ownership & Control*, 15(4-1), 158-164. <http://doi.org/10.22495/cocv15i4c1p3>. Adagye, I. D. (2015). Effective Internal Control System in the Nasarawa State Tertiary

- Educational Institutions for Efficiency: A Case of Nasarawa State Polytechnic, Lafia. *International Journal of Educational and Pedagogical Sciences*, 9(11), 3902-3907.
- [2] Aduam, J. (2015). Assessing the Effectiveness of Internal Controls Mechanism of the Techiman Municipal Assembly, (Unpublished MBA Dissertation). Kwame Nkrumah University, Ghana.
- [3] Agyapong, K. E. (2017). International control Activities as a tool for financial Management in the Public Sector: A case of Ghana Post Company Limited. *Journal of the Advancement of Development Economics*, 6(1), 43-77.
- [4] Akwaa-Sekyi, E.K., & Moreno Gene, J. (2016). Effect of internal controls on credit risk among listed Spanish banks: *Intangible Capital*, 12(1), 357-389.
- [5] Alawattagama, K. (2018). The Impact of Enterprise Risk Management on Firm Performance: Evidence from SriLankan Banking and Finance Industry. *International Journal of Business and Management*, 13(1), 225-237.
- [6] AlawattagamaKingsley Karunaratne (2019). The Impact of Enterprise Risk Management on Firm Performance: Evidence from Sri Lankan Banking and Finance Industry. [International Journal of Business and Management](#) 13:1
- [7] Ali, B. J., Omar, W. A. W., & Bakar, R. (2016). Accounting Information System (AIS) and Organizational Performance: Moderating Effect of Organizational Culture. *International Journal of Economics, Commerce and Management*, United Kingdom, IV(4), 138-158.
- [8] Ali, Basel J .A, (2019) Information quality and the organizational effectiveness: the moderating effects of organizational culture among conventional and Islamic banks *Australian Journal of Business and Management Research*. 5 (10), 01-10
- [9] Ali, Basel J .A, 2019 Strategic alignment between information system and business strategy as performance factors; *Australian Journal of Business and Management Research*. 5 (10), 11-7.
- [10] Ali, H. K. (2013). Contribution of Internal Control System to the Financial Performance of Financial Institution: A Case of People's Bank of Zanzibar Ltd, (Unpublished MSC A&F Thesis). Mzumbe University, Zanzibar.
- [11] Ayagre, P. (2014). The effectiveness of Internal Control Systems of banks: The case of Ghanaian banks. *International Journal of Accounting and Financial Reporting*, 4(2), 377-389.

- [12] Barra, R. A. 2010. The impact of internal controls and penalties on fraud. *Journal of Information Systems* (Spring): 1-21.
- [13] Bayyoud, M., & sayyad, A. (2015). The Impact of Internal Control and Risk Management on Banks in Palestine. *International Journal of Economics, Finance and Management Science*, 3(3), 156 - 161.
- [14] Bett, J. C. (2017). Effects of internal control on the financial performance of processing firms in Kenya: A case of Menengai Company. *Academia*, 4(1), 105-111. https://www.academia.edu/attachments/56514556/download_file?st=mtu5nzm5ote4nswxmdiumty2ljqljw&s=swp-splash-paper-cover.
- [15] Chae, S. J., Nakano, M., & Fujitani, R. (2020). Financial reporting opacity, audit quality and crash risk: Evidence from Japan. *Journal of Asian Finance, Economics and Business*, 7(1), 9-17. <https://doi.org/10.13106/jafeb.2020.vol7.no1.9>
- [16] Cheng, Qiang; GOH, Beng Wee; and KIM, Jae Bum. Internal control and operational efficiency. (2014). Four-school conference, Beijing, China, 2014 October 1. Research Collection School of Accountancy. Available at: https://ink.library.smu.edu.sg/soa_research/1619 Ali, B. J., Bakar, R., & Omar, W. A. W. (2016). The Critical Success Factors of Accounting Information System (AIS) And It's Impact on Organisational Performance of Jordanian Commercial Banks. *International Journal of Economics, Commerce and Management, United Kingdom*, IV(4), 658-677.
- [17] Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting Organizations and Society*, 28, 127-16 Cohen, A., & Sayag, G. (2010). The Effectiveness of Internal Auditing: An Empirical Examination of its Determinants in Israeli Organizations. *Australian Accounting Review, CPA Australia*, 20(3), 296-307.
- [18] Cohen, A., & Sayag, G. (2010). The Effectiveness of Internal Auditing: An Empirical Examination of its Determinants in Israeli Organizations. *Australian Accounting Review, CPA Australia*, 20(3), 296-307.
- [19] Committee of Sponsoring Organizations (COSO). (1985). Organization background information. Available at: <http://www.coso.org/>
- [20] Committee of Sponsoring Organizations of Treadway Commission (COSO) (1992), Internal Control—Integrated Framework, 4 vols. COSO, New York, NY. Control—Integrated Framework, Executive Summary. <http://www.coso.org/>
- [21] Cooper, D., & Schindler, P. (2004). *Business Research Methods*. New Delhi: Tata McGraw Hill.
- [22] Cooper, D., & Schindler, P. (2004). *Business Research Methods*. New Delhi: Tata McGraw Hill.
- [23] COSO, S. (2013). Internal control—integrated framework: The Committee of Sponsoring Organizations of the Treadway Commission
- [24] COSO. (1992). Internal Control—Integrated Framework. New York: Committee of Sponsoring Organizations of the Treadway Commission. 111
- [25] COSO. (1992). Internal Control—Integrated Framework. New York: Committee of Sponsoring Organizations of the Treadway Commission. 111
- [26] Creswell, J.W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles, CA: SAGE Publications Inc
- [27] Donaldson, L. (2001). *The contingency theory of organizations*. Thousand Oaks, CA: Sage Publications London.
- [28] Drazin, R., & Van de Ven, A. H. (1985). Alternative forms of fit in contingency Theory. *Administrative Science Quarterly*, 30, 514-539
- [29] Ebenezer, O. O., & Omar, W. A. B. (2016). Risk Management and the Financial Performance of Commercial Banks in Nigeria: A Literature Review Revisited. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 7(2), 14-19.
- [30] Ejoh, N. and Ejom, P. (2014). The Impact of Internal Control Activities on Financial Performance of Tertiary Institutions in Nigeria. *Journal of Economics and Sustainable Development* vol. 5 no. 16, 133-143
- [31] Ejoh, N., & Ejom, P. (2014). The Impact of Internal Control Activities on Financial Performance of Tertiary Institutions in Nigeria. *Journal of Economics and Sustainable Development*, 5(16), 133-143.
- [32] Ejom, P., & Ejoh, N. (2014). The Impact of Internal Control Activities on Financial Performance of Tertiary Institutions in Nigeria. *Journal of Economics and Sustainable Development*, 5(16), 133-143.
- [33] Eton Marus, Mwosi Fabian and Ogwel Bernard Patrick (2022). Are internal controls important in financial accountability? (Evidence from Lira District Local Government, Uganda). *International Journal of Financial, Accounting, and Management (IJFAM)* 3: 4 Available online at <https://doi.org/10.35912/ijfam.v3i4.810>.
- [34] Eton, M., Murezi, C., Mwosi, F., & Ogwel, B. P. (2018). Internal control systems and financial accountability in Uganda: A Case of selected districts in Western Uganda. *International Journal of Commerce and Management Research*, 4(4), 106-111.
- [35] Ewa, U. E., & Udoayang, J. O. (2012). 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*, 2(2), 32-43. <http://ijecm.co.uk/wp-content/uploads/2015/12/3128.pdf>
- [36] Fadzilah, W., Mohamed, Z., Mat Zain, M., Subramaniam, N., & Yusoff, W. (2005). Internal audit attributes and external audit's reliance on internal audit: implications for audit fees. *International Journal of Auditing*, 16(3), 268-285.
- [37] Gamage C.T. (2014). A Proposed Research Framework: Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka. *International Journal of Scientific Research and Innovative Technology*, 1(5), 25-44.
- [38] Gathaiya, R. N. (2017). Analysis of issues affecting collapsed banks in Kenya from year 2015 to 2016. *International Journal of Management and Business Studies*, 7(3), 9-15
- [39] Ghani, R., & Rosli Mahmood, R. (2015). Risk Management Practices and Performance of Microfinancing Banks in Malaysia. *Academia Journal UiTMT*, 4(2), 26-33
- [40] Goh Wee Beng (2009). Audit Committees, Boards of Directors, and Remediation of Material Weaknesses in Internal Control. *Contemporary Accounting Research*. 26(2) DOI: [10.1506/car.26.2.9](https://doi.org/10.1506/car.26.2.9)
- [41] Gul, S., Faiza, I., Khalid, Z. (2011). Factors Affecting Bank Profitability in Pakistan. *The Romanian Economic Journal*, 2(3), 6-9.
- [42] Hu, Jieqiong, Weng, Yi-Che, and Wang Fusheng (2021). The effect of the internal control regulation on reporting quality in ChinaBorsa Istanbul Review. Available online on: <https://doi.org/10.1016/j.bir.2020.12.006>
- [43] Hussaini, U., & Muhammed, U. (2018). Effect of internal control on performance of commercial banks in Nigeria: A proposed framework. *Sahel Analyst*, 16(3), 86-105. https://www.academia.edu/attachments/58585529/download_file?st=MTU5NzQwNzkxNywxMDIuMTY2LjQxLjIw&s=swp-splash-header
- [44] Ibrahim, S. (2017). The Impact of Internal Control Systems on Financial Performance: The Case of Health Institutions in Upper West Region of Ghana. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 684-696.
- [45] INTOSAI, (2004). Internal Control Systems in Candidate Countries. Report to Supreme Audit Institutions of Central and

- Eastern European Countries, Cyprus, Malta, Turkey and European Court of Auditors, Vo 1.
- [46] Ironkwe UI, Otti JO (2016) Accounting Information and Financial Performance of Banks in Nigeria. *J Account Financ Manage* 2: 1-9.
- [47] Jensen, M.C., &Meckling, W, H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- [48] Joetta, C. (2007). *Credit Risk Management: how to avoid lending disasters and maximize earnings*. New York: McGraw Hill.
- [49] Johari, J. R., Sanusi, M. Z., Said, J., & Iskandar T. (2015). The Effects of Internal Control System, Financial Management and Accountability of NPOs: The Perspective of Mosques in Malaysia. 7th International Conference on Financial Criminology, UK, 28, 156-162.
- [50] Kambura, M. M. (2018). Effects of internal control systems on financial performance of Saccos in Nyeri Central Sub- County, Kenya [Master's Thesis, Dedan Kimathi University], Nyeri, Kenya. <http://repository.dkut.ac.ke:8080/xmlui/handle/123456789/727>
- [51] Kariuki, P., & Reddy, P. (2017). Operationalizing an effective monitoring and evaluation system for local government: Considerations for best practice. *African Evaluation Journal*, 5(2), 1-8.
- [52] Khrawish, H.A. (2011). Determinants of Commercial Banks Performance: Evidence from Jordan. *International Research Journal of Finance and Economics*, 5(5), 19-45.
- [53] Kimotho D.N., &Gekara, M. (2016). Effects of Credit Risk Management Practices on Financial Performance of Commercial: *International Journal of Economics & Finance*, 2(3), 161-189. 112
- [54] Kinyua, J. K. A. (2016). Effect of Internal Control Systems on Profitability of Companies Quoted in the Nairobi Securities Exchange (Doctoral dissertation, Jomo Kenyatta University of Agriculture and Technology). Kinyua, J. K. (2016). Effect of Internal Control Systems on Financial Performance of Companies Quoted in the Nairobi Securities Exchange (Unpublished PHD dissertation). JKUAT, Nairobi.
- [55] Kinyua, J. K., Gakure, R., Gekara, M., &Orwa, G. (2015). Effect of Internal Control Environment on the Financial Performance of Companies Quoted in the Nairobi Securities Exchange. *International Journal of Innovative Finance and Economics Research*, 3(4), 29-48.
- [56] Kipkemboi, C., Ayuma, C., &Terer, E. (2016). Effect of internal systems on financial management in Baringo county government, Kenya. *Journal of Economics, Finance and Accounting*, Vol3(Issue 1), 1 - 16.
- [57] Kiplangat, D. S. (2016). Assessment of internal control systems effects on revenue collection at Nakuru Five Hospital. *International Journal of Economics, commerce and Management*, 4(10), 1004 - 1022.
- [58] Kisanyanya, A. G., &Omagwa, J. (2018). Internal control systems and financial performance of public institutions of higher learning in Vihigacounty, Kenya. *IOSR Journal of Business and Management*, 20(4), 31-41.
- [59] Kiyieka, E. N., &Muturi, W. (2018). Effect of internal controls on financial performance of deposit taking saving and credit cooperative societies in Kisiicounty, Kenya. *International Journal of Social Sciences and Information Technology*, 4(10), 30-40.
- [60] Kombo, Mutua E. (2009). Their words, actions, and meaning: A researcher's reflection on Rwandan women's experience of genocide. *Qualitative Inquiry*, 15(2), 308-323.
- [61] Likalama, A. (2017). Effect of Monitoring and Evaluation on Financial Performance: A Survey of Selected Private Schools in UasinGishu County, Kenya. *Baraton Interdisciplinary Research Journal*, 7(Special Issue), 1-9.
- [62] Mawanda, S.P. (2008), "Effects of internal control systems on financial performance in an institution of higher learning in Uganda", thesis and Dissertations, available at: <http://hdi.handle.net/123456789/53>.
- [63] McNaily, J.S. (2013). The 2013 COSO Framework & SOX Compliance. One Approach to an Effective Transition, p. 1-8.
- [64] Mensah, G.A. (2016). The Effect of Information and Communications Technology on Financial Performance of Rural Banks in Ghana (Unpublished MBA Thesis). Kwame Nkrumah University, Ghana.
- [65] Mosago, M. J. (2013). The Effects of Financial Monitoring on Programme Performance for International Non-Governmental Organizations in Kenya (Unpublished MBA Thesis). University of Nairobi, Kenya.
- [66] Mugenda, O.M. and Mugenda, A.G. (2003) *Research Methods, Quantitative and Qualitative Approaches*. ACT.
- [67] Munene, J. Mugo. (2013). Effects of Internal Controls on Financial Performance of Technical Training Institutions in Kenya (Unpublished MBA Thesis). University of Nairobi, Kenya. 113
- [68] Muthusi, D. M. (2017). Internal controls and financial performance of commercial banks in Kenya [Master's Thesis, Kenyatta university], Nairobi, Kenya. <https://ir-library.ku.ac.ke/bitstream/handle/123456789/18078/Internal%20controls%20and%20financial.....pdf?sequence=20>
- [69] Mwakimasinde, M.O., Othiambo, A. &Byaruhanga, P.J (2018). Effect of internal control systems on profitability of sugar out grower companies in Kenya. *Journal of Business and Management*, 16(12), 62-73
- [70] Mwangi, B.M. (2012). The Impact of Information Communication Technology Development on Financial Performance of Commercial Banks in Kenya (Unpublished MBA Thesis). University of Nairobi, Kenya.
- [71] Mwangi, Y.K. (2014). The Effect of Risk Management on Financial Performance of Commercial Banks in Kenya (Unpublished MSC Thesis). University of Nairobi, Kenya.
- [72] Naibei, I., &Kipyego, L. (2017). Accounting Internal Control Systems and Firm Performance: Evidence from Commercial Banks in Kericho County, Kenya. *International Journal of Economics, Commerce and Management*, 5(11), 697-712.
- [73] Ngari, G. M. (2017). The Effect of Internal Controls on Financial Performance of Microfinance Institutions in Kenya. *International Academic Journal of Economics and Finance*, 2(3), 112-140.
- [74] Ngetich, K. M. (2017). The Effect of Internal Controls on the Financial Performance of Firms Listed at the Nairobi Securities Exchange (Unpublished MBA Thesis). University of Nairobi, Kenya.
- [75] Njagi, A. W., &Mwangi, M. (2019). Effect of internal controls on revenue collection of level five hospitals in Kiambu county. *International Academic journal of Economics and Finance*, 3(3), 98 - 116
- [76] Njeri, K.C. (2014). Effect of Internal Controls on the Financial Performance of Manufacturing Firms in Kenya (Unpublished MSC). University of Nairobi, Kenya
- [77] Nyakundi, D. O. (2014). Effect of internal control systems on financial performance of small and medium scale business enterprises in Kisumu City. *International Journal of Social Sciences and Entrepreneurship*, vol 4(No 1), 719-734.
- [78] Nyumoo, Ann Kinya ,Mwambia, Felix., Nancy Rintar (2020). Effect of Control Functions on the Financial Performance of Saccos in Meru County. *International Journal of Financial Accounting*. 5:1
- [79] O'Connor Henrietta, Madge Clare, Shaw Robert and Jane Wellens (2008). *The Sage handbook of online research methods*. SAGE Publications, Inc. Available online at: <https://dx.doi.org/10.4135/9780857020055.n15>

- [80] Oforori, W. (2011). Effectiveness of Internal Controls: A Perception or Reality? The Evidence of Ghana Post Company Limited in Ashanti Region (Unpublished Executive MBA Thesis). Kwame Nkrumah University, Ghana. 114
- [81] Ogetange, N. F. (2017). Effect of Internal Control Systems on Financial Performance of Supermarkets in Kajiado County (Unpublished MBA Thesis). University of Nairobi, Kenya.
- [82] Olweny, T., & Shipho, T. M. (2011). Effects of banking sectoral factors on the Profitability of commercial Banks in Kenya. *Economics and Finance Review* Vol. 1(5) pp. 01 – 30, July, 2011, 1(5), 01 - 30. Retrieved 8 2015, from <http://www.businessjournalz.org/efr>
- [83] Ondieki, N. M. (2013). Effect of internal audit on financial performance of commercial banks in Kenya [Master's Thesis, University of Nairobi], Nairobi, Kenya. <http://erepository.uonbi.ac.ke/bitstream/handle/11295/59308/Effect+Of+Internal+Audit+On+Financial+Performance+Of+Commercial+Banks+In+Kenya.pdf?sequence=3>
- [84] Ongore, V. O., & Kusa, G. B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237- 252.
- [85] Oyoo, O. C. (2014). Effect of Internal Control on Financial Performance of Micro-finance Institutions in Kisumu Central Constituency, Kenya. *Scholarly Journal of Scientific Research and Essay (SJSRE)*, 3(10), 139-155.
- [86] Postan, J. (2010). "Performance of financial control", *Theoretical and Applied Economics*, Vol. 17No. 7, pp. 77-86
- [87] Renox, G., & Asiligwa. (2017). The Effect of Internal Controls on the Financial Performance of Commercial Banks in Kenya. *Journal of Economics and Finance (IOSR-JEF)*, 8(3), 92-105.
- [88] Tsai, W.H, Chen H.C, Chang J.C, Lee H.L (2017). The Internal Audit Performance: The Effectiveness of ERM and IT Environments; *Proceedings of the 50th Hawaii International Conference on System Sciences*
- [89] Urquia L G M. (2018), Effects of internal control system on financial performance in an institution of higher learning. *Journal of Fundamental and Applied Sciences*. 10(3S), 110-125
- [90] Wachira, J. W., Ngahu, S., & Wagoki, J. (2014). Effects financial control on financial management in Kenya's public sector: A case of national government departments in mirangine sub county, nyandarua county. *IOSR Journal of business and Management*, 6(10), 105-115.
- [91] Woods, M. (2009). A contingency theory perspective on the risk management control system within Birmingham City Council. *Management & Accounting Resolution*, 20(1), 69-81. <http://isiarticles.com/bundles/Article/pre/pdf/16613.pdf>.
- [92] Worku, S. (2018). Perceptions on Internal control system and financial performance; Evidence from commercial banks in Ethiopia, (Unpublished MSC Thesis). Addis Ababa University, Ethiopia