



# Effect of Internal Audit on Financial Performance of Commercial Banks Listed in Nairobi Securities Exchange, in Nairobi County, Kenya

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## Authors' contributions

*This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.*

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## ABSTRACT

The recent collapse of major commercial banks in Kenya, including Imperial and Chase bank, which are currently under receivership, has raised concerns about the effectiveness of their audit practices in ensuring stability and improved financial performance. These failures have put pressure on commercial banks to reconsider how they align their internal audit processes to ensure stability and financial improvement. Consequently, this study aimed to assess the impact of internal audit on the financial performance of commercial banks listed on the Nairobi Securities Exchange (NSE). The study was guided by reliability theory. Using a descriptive survey design, the target population consisted of 10 commercial banks listed on the NSE. The unit of observation included 86 respondents from various roles within these banks, such as senior finance managers, credit managers, operations managers, risk managers, and internal auditors. Both primary and

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secondary data were utilized in the study. Primary data on internal audit practices were collected through a semi-structured questionnaire employing a Likert-type scale, while secondary data on the financial performance of the commercial banks were obtained from their audited financial reports. The gathered questionnaire data were quantitatively analyzed using SPSS software, incorporating descriptive statistics (mean and standard deviation) as well as inferential statistics, specifically regression coefficients and bivariate correlation, to examine the relationship between the dependent and independent variables. The study's findings revealed a significant relationship between internal audit, asset safeguarding, risk management, compliance with laws, and the dependent variables, which included return on assets, net income, and liquidity. These relationships were evident from the regression analysis conducted. Consequently, the study concluded that internal audit systems have an impact on the financial performance of commercial banks. The study recommends that commercial banks listed on the NSE reassess their internal audit systems and strengthen any identified weaknesses to enhance their financial performance. Furthermore, the study suggests that future research could explore the effects of new banking regulations, such as Basel Accord III, on the financial performance of commercial banks.

*Keywords: Internal audit; financial performance; commercial banks.*

## 1. INTRODUCTION

There is a global consensus that internal auditing may provide hitherto unmatched value to management in their day-to-day operations [1]. Changing focus from just assuring adherence to laws to really providing value takes more than just a shift in organizational priorities. Many financial firms mismanage their assets because of low pay and morale, lax ethics policies, and inefficient management procedures. Kithinji [2] claims that commercial banks have realized the importance of internal audit in enhancing the management of bank assets, which has resulted in better financial performance for the banks. Some financial institutions have also implemented an evaluation system for their operations; this system is not meant to replace internal audits, but rather to augment them.

The term "internal audit" refers to the administrative process that include verifying records, taking inventory, and reporting findings to the board of directors, management, or outside auditors. Organizations are under increasing pressure to show how they are being responsible stewards of shareholder funds and how effectively they are delivering services. Organizations now place a premium on internal audit's expertise and professionalism as a result of resource constraints, with the expectation that the department would maximize the effectiveness of its limited resources in the areas of risk minimization and management. The ability to monitor and analyze data at ever-increasing rates is made possible by technological progress,

underscoring the need of sound advice from the internal auditing department [3].

According to Badara and Saidin [4], internal auditing is an impartial and unbiased kind of consulting that helps businesses succeed. Put simply, it helps by giving a systematic, disciplined approach to evaluating and improving the effectiveness of risk management, control, and governance systems, hence enhancing an organization's capacity to fulfill its objectives [5]. It's a service that determines how well an organization manages risks, exercises control, and exercises sound corporate governance. The audit's findings are useful not just to the company's top brass, but also to those in charge of running the departments under scrutiny.

Contributing to an organization's performance, internal audit takes a methodical and systematic approach to assessing and enhancing the quality of risk management, control, and the management process. This helps the business get closer to accomplishing its objectives (Asare, 2019). When conducting an internal audit, there are a number of goals and guidelines that need to be adhered to. Management's use of an internal audit system, a system for analyzing risks associated to banking activity and bank capital, and an acceptable mechanism for assuring compliance with laws, rules, and internal policies are all matters ultimately under the purview of the bank's board of directors. The management of the bank is also in charge of developing policies that identify, quantify, track, and manage the risks the bank confronts [6].

There are three fundamental ratios that are used in the process of evaluating the monetary efficiency of an organization. These three measures are the Return on Assets (ROA), Return on Equity (ROE), and Return on Investment (ROI). These are very common tools for evaluating the effectiveness of businesses, particularly commercial banks. ROA and ROE have been used by bank regulators and analysts for a number of objectives, including those in which a measurement of profitability is sought, such as to evaluate industry performance and anticipate developments in market structure. According to Muga [7], the significance of profitability in the banking industry may be evaluated at both the micro and macro levels of the economy. At the local level, profit is not only the most cost-effective source of finances but also an important criterion for running a competitive financial organization. The maximization of profits should always be the primary focus of a bank's management.

Commercial banks are financial establishments that take deposits, lend money to businesses, and provide other services linked to these activities. The Central Bank of the Kingdom (CBK) has issued a number of Acts and other rules that regulate these banks. These laws include the Companies Act, the Banking Act, the Central Bank of Kenya Act, and other similar prudential laws. Assets, deposits, profitability, and the variety of banking services and products available in Kenya have all increased during the last several years. This growth may be attributed to a number of factors, including the industry's increased presence in Kenya and the broader East African Community region, the automation of many formerly manual processes, and the change toward catering to the specific needs of each customer. There has been a rise in the importance of internal auditing for banks to strengthen asset management, risk management, and management controls. As of this writing, there are 42 commercial banks in Kenya.

### 1.1 Statement of the Problem

Internal auditing, as stated by Hoitash, Hoitash, and [8], aids in introducing a systematic, disciplined approach to assessing and enhancing the efficiency of financial operations. A better bottom line is correlated with a more efficient and effective internal audit function that cuts costs, finds methods to increase productivity, and reduces risk from poorly protected assets.

Accordingly, a reliable internal audit is a crucial management resource for enhancing fiscal results. This is crucial not only for the reasons stated above, but also for the purpose of increasing the value to the shareholders. Internal auditing techniques help commercial banks detect financial fraud and contribute significantly to improved financial performance.

Nevertheless, despite the standards established by CBK in compliance with the Banking Act, there continue to be many instances of bank failures in performance owing to fraud and a lack of extensive internal audits. This is made worse by the banking industry's failure to adhere to both internal and external rules. For instance, CBK placed receivership on three banks in a span of nine months. CBK cited "inappropriate banking practices" as the reason for placing Imperial Bank of Kenya, Kenya's 19th biggest bank, into receivership. For similar reasons, the Dubai Bank of Kenya was also placed under receivership. Due to the bank's poor financial health, Chase was eventually placed under receivership [9]. These incidents together suggest that the commercial banking industry has been experiencing financial difficulties over the last several years.

Lack of empirical information on the impact of internal audit on financial performance among commercial banks in Kenya also inspired this research. The majority of previously published research has examined the effects of good corporate governance and risk management on financial results. Yousfi [10] investigated the impact of risk management practices on financial performance in Jordan, Khan et al. [11] looked at what factors influence financial performance across different sectors, and Mutua [12] studied the impact of risk-based auditing on Kenya's commercial banks' bottom lines. This study will deviate from the aforementioned investigations by focusing on internal audit's role in influencing commercial banks' bottom lines in Kenya.

### 1.2 Research objective

- i. To determine the effect of internal audit on financial performance of commercial banks listed in NSE

### 1.3 Scope of the Study

The purpose of the research was to determine the effect of internal audit on the bottom lines of

NSE-listed commercial banks. This research looked at how internal audits, asset protection, risk management, and legal compliance affected the bottom lines of commercial banks trading on the NSE. Because of the vulnerabilities and financial risks faced by the banks due to inefficient audit systems (CBK, 2017), commercial banks listed in NSE were selected as the unit of analysis for the research. The study will use a descriptive research strategy. This research focused on the 10 commercial banks traded on the NSE, and the unit of observation was made up of employees familiar with these institutions' internal auditing processes and financial standing. Commercial banks listed on the NSE was the focus of this research, namely their operations management, finance manager, credit manager, risk manager, and internal auditor. The target year for this study's execution is 2019.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Literature Review**

#### **2.1.1 Reliability theory**

The likelihood that a system will perform as predicted during a certain time period is described by reliability theory [13]. Companies in the insurance and life insurance industries have utilized the idea as a guide for determining what premiums would provide the most profits. Based on this notion, an organization's internal auditing setup should mainly serve to identify and manage potential threats. More substantive work, and hence higher costs, are predicted from this idea as a consequence of inadequate internal audit systems [14].

When evaluating the effect of an internal audit system on the firm's revenue risk, it might be helpful to compare the estimates of process and system dependability with financial data from the organization's prior performances. According to Messier and Austen [15], the reliability theory's direct link to the demands of an organization in comprehending the internal audit system and control risk assessment is one of the theory's key benefits. The core tenet of dependability theory is that a working system will perform as intended. Based on its significance as a key variable in risk management, the dependability theory is directly pertinent to our investigation.

## **2.2 Empirical Literature**

### **2.2.1 Internal audits and financial performance**

Researchers used both primary and secondary data, with the latter coming from the SACCOS' annual reports, to complete the study. The study's results demonstrated a favorable and statistically significant correlation between effective internal audit and profitable operations. All of the independent factors—control environment, risk assessment, control activities, and monitoring methods—have a positive effect on the financial performance of SACCOS in Kenya. The research demonstrated conclusively that in the absence of robust internal audits inside these institutions, not only would their performance be subpar, but the institutions would also be at danger of going bankrupt in the long run.

Jones (2008) studied the history of corporate governance, accountability, and internal audits in both medieval and contemporary Britain. The monitoring and control activities, information and communication, risk assessment, and control environment were all taken into consideration throughout the review. The internal audits of the royal exchequer and other medieval organizations were examined through the lens of a referential framework in this research. The research showed that most modern internal checks and balances were already in place in medieval England. The foundations of medieval internal audit were identified as stewardship and personal responsibility. The modern idea that people ought to be held to higher standards of responsibility is reminiscent of medieval ideas.

Similarly, Ewa and Udoayang [16] looked at how the architecture of internal audits for banks affected their ability to identify and prevent fraud. The results of the research show that the way in which internal audits are constructed affects the way in which employees see fraud. Employee fraud may be prevented by implementing stringent internal audit mechanisms and making it difficult to commit fraud in the first place. However, when there are holes in the system's defenses, dishonest employees may be able to take advantage of them to steal money. They pushed for the implementation of stringent internal audit procedures to prevent and identify fraud.

## Independent Variables

## Dependent Variable

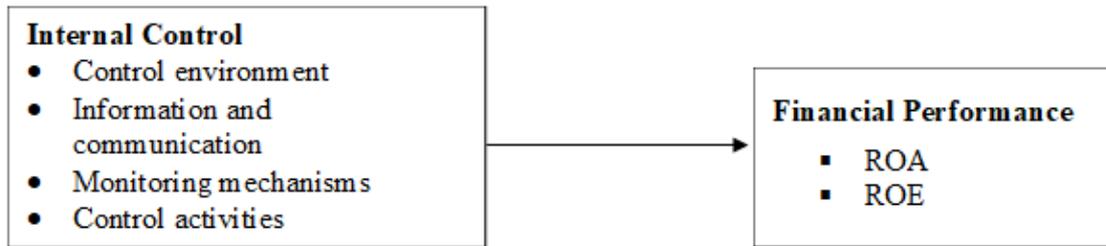


Fig. 1. Conceptual framework

The RMCs of the African Development Bank Group in Uganda had their internal audit systems assessed by Amudo and Inanga [6]. The factors considered were "control environment," "information and communication," "risk assessment," and "monitoring and control actions." According to the results of the research, the existing control structures in these projects are inefficient because they lack certain control components of successful internal audit systems. The research concluded that the projects' current internal audit mechanisms needed to be strengthened.

Internal audit systems' impact on the financial standing of Ugandan institutions was studied by Mawanda [17]. Financial performance was evaluated using liquidity, accountability, and reporting, while the quality of internal audits was evaluated using the control environment, internal audit, and control activities. This research provides empirical evidence that the effectiveness of an organization's internal audit system correlates with financial performance. Competency profiling is recommended for the internal audit department in this study, which takes into account the institution's expectations for the internal audit and the required number of people to meet those objectives.

An analysis of the efficiency of the internal audit system at a Nigerian bank was conducted by Atuk [18]. From the twenty-four (24) banks already in operation in Nigeria, five (5) were selected. Questionnaires, direct observation, and in-depth interviews were used to collect information from many branches of the banks of interest. Extensive analysis was performed on the collected data. Based on the results of this research, we may be certain that the banks in Nigeria are operating effectively and efficiently, that financial and managerial reporting can be

trusted, and that all relevant rules and regulations are being adhered to.

## 2.3 Conceptual Framework

Kothari [19] argues that a conceptual framework sums up the study's aims succinctly. It takes into account the theoretical and conceptual problems that arise throughout research and builds a consistent framework upon which to build when new variables are discovered and refined. The study's dependent variable is financial performance, whereas the independent variable is auditing done as part of a system of internal audits.

## 3. RESEARCH METHODOLOGY

### 3.1 Research Design

The research design is the plan for gathering the data and doing the statistical analysis needed to answer the research questions and achieve the study's goals. It has been decided to perform this research using a descriptive survey layout [20]. This methodology is appropriate since it can identify and evaluate causal connections between variables. Given the importance of having a comprehensive grasp of the problem before attempting to solve it, this kind of research approach is warranted [21].

### 3.2 Target Population

According to the definition provided by Mugenda and Mugenda [22], a study's population includes all of the people who are of interest to the study and who share certain other criteria. Ten commercial banks listed on the NSE will make up the study's sample population, with the senior finance manager, credit manager, operations manager, risk manager, and internal auditor of

these institutions serving as the study's units of observation. The participants in this survey were selected because they had shown expertise in both internal audit systems and commercial banks' financial performance. The research consisted of a sample of 86 people.

### 3.3 Sampling Procedures and Techniques

Since information was collected from each of the ten commercial banks traded on the NSE, a census sampling technique was employed. Because of the manageable size of the population, a census was used to obtain the necessary information.

### 3.4 Research Instruments

The research used both primary and secondary sources of data in its analysis. For the purpose of making the research more unique, primary data was gathered from the respondents, and secondary data was taken from the audited financial statements of the listed commercial banks. For the purpose of gathering primary data on the study's independent variables, the research project made use of a questionnaire with a semi-structured format.

## 4. RESULTS AND DISCUSSION

### 4.1 Response Rate

The selected commercial banks in Nairobi received a total of 86 structured questionnaires from the researcher. Senior finance managers, credit managers, operations managers, risk managers, and internal auditors were among the responders who were specifically targeted. Out of the 86 questionnaires that were given to the respondents in total, 78 questionnaires were returned with complete answers.

### 4.2 Demographic Information

This chapter provides the findings that came from data that was gathered and examined using a variety of statistical techniques, including surveys and the Statistical Package for Social Sciences. For simpler comprehension, frequency tables and figures have been employed to portray the study's results rather than descriptive and inferential statistics.

### 4.3 Descriptive Statistics

This study aimed to determine how long it takes the chosen commercial banks to assess their internal audit systems. The results were shown in Table 1 for your review.

**Table 1. Review of internal audit systems**

Duration	Frequency	Percent
After 5 years	2	2.6
Annually	33	42.3
Half yearly	21	26.9
When need arises	22	28.2
<b>Total</b>	<b>78</b>	<b>100</b>

### 4.4 Researcher (2023)

According to the findings presented in Table 1, the study reveals that the review of internal audit systems in commercial banks occurs at various intervals. The majority of respondents (42.3%) indicated that the review is conducted annually. Another significant proportion of respondents (28.2%) reported that the review takes place when the need arises. Around a quarter of the respondents (26.9%) stated that the review of internal audit systems occurs semiannually. A small percentage of respondents (2.6%) mentioned that the review is conducted after a period of five years. These findings suggest that commercial banks have different approaches and timing for reviewing their internal audit systems, adapting their reviews based on the specific needs and circumstances they encounter.

### 4.5 Effectiveness of Internal Audit Systems in Relation to Financial Performance

The study collected data from respondents in selected commercial banks to assess their perceptions of the effectiveness of internal audit systems in relation to financial performance. The findings of the data analysis are presented in Table 2.

According to the findings presented in Table 2, the respondents strongly agreed that the level of integrity practiced by operating personnel has a significant influence on the financial performance of banks (mean=4.064, std. dev.=0.944). They also strongly agreed that strict adherence to ethical values within the bank positively affects financial performance (mean=4.541, std.

**Table 2. Internal audit**

Statements	N	Mean	Std Deviation
Operating staff's degree of integrity can have an impact on the bank's financial performance.	78	4.064	.944
Strict commitment to the bank's core ethical principles affects its financial success.	78	4.541	.751
The staff's degree of dedication to their jobs has a significant impact on the bank's financial performance.	78	3.987	.987
The management team's ability to manage the banking system has an impact on the financial performance of the bank.	78	3.782	1.147
Commercial banks' financial results are typically impacted by internal audit.	78	3.923	.950
The board is capable and steadfastly devoted to putting the internal audit department's suggestions into practice in order to improve the bank's financial performance.	78	3.897	.920

Source: Researcher (2023)

dev.=0.751). Additionally, the respondents agreed that the level of staff commitment to their work (mean=3.987, std. dev.=0.987), management competency in handling the banking system (mean=3.782, std. dev.=1.147), the control environment within banks (mean=3.923, std. dev.=0.950), and the board's competence and commitment to implementing internal audit recommendations (mean=3.897, std. dev.=0.920) all play a role in influencing financial performance. These findings support previous research by Nyaga (2017) and Magara (2013), which highlight the impact of internal audit factors on financial performance.

#### 4.6 Regression Analysis

In this study, a multiple regression analysis was conducted to examine the relationship between the independent variable, internal audit, and the dependent variable, financial performance of the

selected commercial banks, which was measured by return on assets.

Based on the findings presented in Table 4, the significance value obtained for testing the reliability of the model assessing the relationship between financial performance and internal audit was 0.000, which is lower than the critical value of 0.05 at a 5% significance level. This indicates that the model is statistically significant in predicting the relationship between financial performance and internal audit in the commercial banks.

Based on the findings presented in the table, the coefficient of determination (R-Square) reveals that the predictor variables utilized in the study can account for 54% (0.540) of the variability in financial performance of commercial banks. Therefore, when other factors are held constant, it can be inferred that internal audit contributes to a 54% increase in the financial performance of commercial banks.

**Table 3. Analysis of variance**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	27.059	5	5.412	11.787	.000 <sup>b</sup>
Residual	33.057	73	.459		
<b>Total</b>	<b>60.115</b>	<b>78</b>			

Source: Researcher, (2023)

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), internal audit,

**Table 4. Model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	.735 <sup>a</sup>	.540	.512	.67759

a. Dependent Variable: Financial Performance

**Table 5. Regression coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.057	.587		1.801	.076
Internal audit	-.930	.496	-.971	-1.874	.065

a. Dependent Variable: Financial Performance

According to the findings presented in Table 5, the coefficient for internal audit is negative, indicating a negative effect on financial performance. The table shows that internal audit does not have a significant effect on financial performance, as indicated by the t-value ( $t = -1.874$ ) and the p-value ( $P = 0.065$ ). The regression equation is  $Y = 1.057 - 0.930X_1$ , where Y represents financial performance and  $X_1$  represents internal audit.

Based on these findings, it can be observed that internal audit alone may not have a significant positive effect on financial performance. The beta coefficient of -0.93 suggests that a one-unit increase in internal audit is associated with a decrease of 0.93 in financial performance. This implies that other factors or components may also be necessary to produce positive results in financial performance.

#### 4.7 Summary of the Findings

##### 4.7.1 Internal audit and financial performance

The objective of this study was to assess the impact of internal audit on the financial performance of commercial banks listed on the Nairobi Securities Exchange (NSE). The findings of the study indicate that internal audit has a negative and statistically insignificant effect on the financial performance of the selected commercial banks [23,24].

#### 5. CONCLUSIONS

Based on the findings, the study concludes that internal audit in commercial banks has a negative influence on financial performance, although the effect is not statistically significant. However, this suggests that there is room for improvement in the internal audit measures implemented by bank managers to potentially achieve a positive impact on financial performance. It is recommended that commercial banks explore and implement enhanced internal audit practices to optimize their financial performance.

#### 6. RECOMMENDATIONS

Based on the study findings and conclusions, the researcher recommends the following measures to be implemented by commercial banks listed on the Nairobi Securities Exchange (NSE) in Nairobi County to enhance their financial performance:

**Address Negative Aspects:** Bank management should give proper attention to every aspect of internal audit that is causing a negative influence on financial performance. By identifying and addressing these negative aspects, banks can work towards minimizing their impact on financial performance.

**Improve Internal Audit:** Management should explore alternative ways to improve the effectiveness of internal audit within the banks. This may involve implementing more robust internal control systems, enhancing audit procedures, and ensuring adherence to industry best practices. By doing so, the aim is to transform the negative effect of internal audit into a positive impact on financial performance.

**Continuous Monitoring and Evaluation:** Regular monitoring and evaluation of internal audit processes should be conducted to identify areas of improvement and ensure the effectiveness of implemented measures. This includes reviewing internal audit policies, procedures, and practices, and making necessary adjustments to align with changing regulatory requirements and industry standards.

**Professional Development:** Banks should invest in the professional development of their internal audit teams. This can be achieved through training programs, workshops, and certifications that enhance their skills and knowledge in conducting effective internal audits. By fostering a culture of continuous learning, banks can improve the overall quality and impact of their internal audit function.

Collaboration and Communication: Effective collaboration and communication between the internal audit department and other key stakeholders, such as senior management and board of directors, are crucial. Regular communication channels should be established to discuss audit findings, recommendations, and action plans. This fosters transparency, accountability, and ensures that internal audit findings are properly addressed and implemented.

By implementing these recommendations, commercial banks can work towards mitigating the negative effect of internal audit on financial performance and strive to achieve positive outcomes that contribute to their overall success.

### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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