

# Journal of Finance and Accounting

ISSN Online: 2616-4965



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**ISSN NO: 2616-4965**

# Financial Performance of the Banking Sector in Kenya: The Role of Internal Audit

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## Abstract

The aim of the study was to investigate the role of internal audit in the performance of the banking sector in Kenya. The target population of the study was 44 licensed commercial banks in Kenya listed in the Central Bank of Kenya website. Descriptive research design was adopted in the study. The study employed both primary and secondary data to achieve its objectives. Questionnaires were employed to collect primary data while secondary data was retrieved from financial reports of the Central Bank of Kenya for five years from 2012-2016. Data analysis employed both descriptive and inferential statistics. The study findings showed that there was a positive relationship between internal audit function and financial performance in the commercial banks in Kenya. This implies that an improvement in audit function leads to an improvement in financial performance of the commercial banks in Kenya. The results further showed that non-performing loans and previous year's net income moderates the relationship between the internal audit function and financial performance of the commercial banks in Kenya. This implies that non-performing loans and previous year's net income has an impact on the relationship between internal audit function and financial performance of the commercial banks in Kenya. Non-performing loans reduced financial performance while last year's net income increased the financial performance. The study recommended further research to include internal audit committees and other internal audit staff to get their opinions regarding internal audit function within the commercial banks in Kenya, other financial sectors and also include other measures of financial performance including return on Assets, Net Interest Margin among others. This study is of help to academicians, the management of commercial banks in Kenya, the government, practitioners and the general financial sector for policy formulation in the promotion and development of financial performance of organisations in the country.

**Keywords:** *Internal audit, banking sector, financial performance, chief internal audit executives, non-performing loans, net income.*

## **1. INTRODUCTION**

The function of internal audit has evolved due to shifts in international corporate practices, for instance, Mihret, James and Mula (2010) and Lenz and Hahn (2015) concluded that consultation to management and assisting boards of directors to mitigate risk has emerged as opportunities for Internal Auditors. Internal auditing being an independent activity helps a firm achieve its goals by using a well-organized approach to manage their risk, control and governance (Stewart & Subramanian, 2010), as the ultimate goal of internal audit is to achieve better returns for the organization in shape of improved firm performance (Saud, 2012).

The internal audit function affects other parties within and outside the business organization for example the external auditor relying on internal auditor's work, shareholders placing their hope on them guiding the operations to required standards and this makes it a valuable research area (Tepalagul & Lin, 2015). Today the scope of internal audit is beyond regular assessments of operational and financial controls (Yasin & Nelson, 2012). Their role is emerging as key in providing timely insights to guide strategic decisions and successfully meet stakeholder expectations.

The independency of the internal auditors is at stake especially after the emerging of the audit committee, and its responsibility to the board of directors and the shareholders, that make this function worth investigating and researching. The audit committee is responsible for evaluating the effectiveness of the internal audit function (Yasin & Nelson, 2012). Basel committee's (2012), principles for enhancing corporate governance states that banks should have an internal audit function with sufficient authority, stature, independence, resources and access to the board of directors. Independent, competent and qualified internal auditors are vital to sound corporate governance. Furthermore, the Basel Committee on Banking Supervision (BCBS, 2015) highlighted that the internal audit should provide the board and senior management with independent review and objective assurance on the quality and effectiveness of internal control, risk management and corporate governance systems and processes, helping the board to secure the organisation and its reputation.

Internal auditing is an important link in the business and financial reporting processes for entities. The main aim of internal auditing is improving efficiency and effectiveness through constructive criticism. Effective internal auditing therefore is the cornerstone of good financial performance.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Review**

#### **2.1.1 Lending Credibility Theory**

The theory enforces the public perception that the primary function of auditing is the addition of credibility to the financial statements. Banks have different stakeholders such as stockholders, government, or creditors who have to make their investment judgments based on the information they receive (Stone, 2002). An audit thus reduces the information asymmetry between management and other stakeholders. This theory states that audited financial statements can enhance stakeholders faith in management's stewardship (Ittonen, 2010). The major recipients of the annual reports are the shareholders, including individuals with relatively small shareholding and large institutions such as banks or insurance companies (Holt, 2012). Their decision is usually based on the financial reports and the performance of the company's management, who have a responsibility to act in the interests of investors, thus, the purpose of the financial statements.

The aim of the auditor's report is to comment on how accurately the company presents its financial situation and how it is performing (DeZoort, Holt & Taylor, 2012). This should reassure the shareholders that their investment is secured and help to reduce the practice of misleading accounting procedures designed to show the company in a more favourable light (Brei & Schclarek, 2015). Internal auditors being employees are in a position to ensure strict compliances with policies and reporting standards and ensure accuracy of financial reports.

This theory is relevant to this study because it highlights the need for financial statements to be audited to enable stakeholders have faith in the management and an assurance that their investments are secured. Internal auditors must be competent, independent and have good relationship with management and the audit committee to help the commercial banks achieve their objectives in a cost-effective way. Since internal auditors are based within the banks, errors and misrepresentations will be detected and corrected earlier, they also offer consultancy services to management and also evaluating and improving the effectiveness of risk management, control and the management process, hence improved financial performance.

#### **2.1.2 Agency Theory**

Financial institutions need to generate shareholder wealth and as such in line with theories related to financial management, these businesses must incur risk by issuing loans, some of which are outside the comfort level of shareholders (Yang, Lin & Wang, 2009). Kenyan commercial banks fall in this category; the stake holders provide different types of financial support to the commercial banks, the agents do the management on behalf of the principals. Agency theory is concerned with resolving problems that can exist in agency relationships; that is, between principals (such as shareholders) and agents of the principals (for example, company executives) (Agoglia, Hatfield, & Lambert, 2015). The two problems that agency theory addresses are those that arise when the desires or goals of the principal and agent are in conflict, and the principal is unable to verify what the agent is actually doing and the problems that arise when the principal and agent have different attitudes towards risk.

Power and Gendron (2015) concluded that Agency theory can provide for richer and more meaningful research in the internal audit discipline. Agency theory contends that internal auditing, in common with other intervention mechanisms like financial reporting and external audit, helps to maintain cost-efficient contracting between owners and managers (Brennan & Kirwan, 2015). This therefore explains why there is a relationship between internal audit function and a firm's financial performance (Sultana, Singh & Van der Zahn, 2015). Agency theory is relevant to the study as it explains the need of internal audit function in organizations and some of the characteristics of the internal audit department, e.g. its size, and the scope of its activities, such as financial versus operational auditing, actually is associated with financial performance of firms.

### **2.1.3 Contingency Theory**

Contingency theory contends that there is no best way to organize a corporation, to lead a company, or to make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external situation (Mansbridge, 2014). A contingent manager effectively applies their own style of leadership to the right situation. The functions of audits are themselves, types of organizations that are affected by various factors in the environment, internal and external. The presence of such factors is why auditing can be managed by applying the contingency theory, with a recognition that processes and outcomes of audits are dependent on variables and contingent factors (Otley, 2016). Working environments in commercial banks in Kenya change more frequently due to new innovations, technology, competition and new regulations that are enforced by the central bank of Kenya and even the institute of internal auditors (IIA).

The goal of an audit is to test the reliability of a company's information, policies, practices and procedures. Government regulations require that certain financial institutions undergo independent financial audits, but industry standards can also mandate audits in other areas such as safety and technology (Badara, 2017). The audit sub-processes, particularly in planning and field work include contingencies such as business type, employee skill level, applicable laws, available audit workforce, available technology and systems, and deadline (Lenz & Sarens, 2012). Daft (2012) views contingency as one thing that depends on other things and Contingency theory means, it depends. Audit functions are task-oriented and can be loosely structured. The functions also can vary considerably, depending on the area of a company under audit and the type of business model, so auditors must carefully manage their inspections and consider variables to get the job done.

Contingency theory is relevant to the study as quality of audit reports is of great importance to commercial banks. The quality and output of audits remain assured when audit teams use resources according to expertise and experience, and when auditors are flexible and can adapt to process fluctuations. For example, an auditor experienced in evaluating financial instruments can be effective in an audit exercise of a bank or hedge fund, even when the financial instruments the institution offers do not fit the typical mould (Lenz & Sarens, 2012). This improves the financial performance of the commercial banks.



### **2.1.4 Stakeholder Theory**

The stakeholder theory is an organizational management and business ethics that addresses morals and values in managing an organization. It was originally detailed by Ian Mitroff in his book *Stakeholders of the Organizational Mind* (1983 in San Francisco) and updated by R. Edward Freeman, 1983. This theory describes existing situations or predicts cause-effect relationships as well as recommends attitudes, structures, and practices that, taken together, constitute stakeholder management (Jones, Wicks & Freeman, 2017).

Stakeholder management requires, as its key attribute, simultaneous attention to the legitimate interests of all appropriate stakeholders, both in the establishment of organizational structures and general policies and in case-by-case decision making. According to Harrison and Wicks (2013), this requirement holds for anyone managing or affecting corporate policies, including not only professional managers, but also shareholders, the government, and others. The theory does not imply that all stakeholders (however they may be identified) should be equally involved in all processes and decisions (Hörisch, Freeman & Schaltegger, 2014).

The stakeholder theory is relevant to study, it gives an idea about how business systems really work. It says that for any business to be successful it has to create value for customers, suppliers, employees, communities and financiers, shareholders, banks and other people with the money. In the Kenyan commercial banks stakeholder's interests and contributions must be taken into account as decisions are made. Internal auditors have the responsibility to provide advisory services to the commercial banks that conforms to the standards and interests of stake holders.

## **2.2 Empirical Review**

The study reviewed literature on similar studies conducted to ascertain the relationship between internal audit function and financial performance in the commercial banks in and outside Kenya. It examined the link between internal audit competence, internal audit independence, quality of internal audit work, top management support and financial performance.

### **2.2.1 Internal Audit Competence and Financial Performance**

Competency of internal auditors determines the quality of the audit work performed in an organization. According to Furiady and Kurnia (2015), competency is measured in terms of academic level, experience, skill and the effort of the staffs for continuing professional development. Competency determines the efficiency of the auditor in setting a systematic and disciplined approach to evaluate and improve the effectiveness of the organization's activities and financial management as well as governance processes (Pizzini, Lin & Ziegenfuss, 2014). Therefore, an appropriate staffing of an internal audit department and good management of that staff are keys to the effective operation of an internal audit. An audit requires professional staffs that collectively have the necessary education, training, experience and professional qualifications to conduct the full range of audits required by its mandate (Lee, Su, Tsai, Lu & Dong, 2016). There is need to investigate whether Kenyan commercial banks have professional staffs.

Mahadeo, Soobaroyen and Hanuman (2012) examined the key elements of board diversity (or heterogeneity) amongst listed companies operating in an emerging economy (Mauritius) and the extent to which these influence financial performance. Specifically, the study sought to determine whether educational background as one of the variables influenced financial performance among the listed companies in Mauritius. The study examined data from the 2007 annual reports of all 42 companies listed on the Stock Exchange of Mauritius. The findings from the study revealed that there is a relatively satisfactory level of heterogeneity in terms of educational background in the organizations and that there was a significant regression coefficient for the education background in terms of its impact on short-term performance. In addition, Baharud-din, Shokiyah and Ibrahim (2014) concluded that competency can be related to the ability of an individual to perform a job or task properly based on the educational level, professional experience and the effort of the staffs for continuing professional development.

According Bett (2014) the relationship between effectiveness of internal audit and financial performance of companies listed in the Nairobi Securities Exchange, professional competency is positively related to financial performance of companies listed in NSE. The study further concluded that effective internal audit function is positively related to financial performance. The researcher recommended that firms should engage skilled and competent professional internal auditors to strengthen controls of internal audit and mitigate fraud. With efficient internal controls, issues like fraudulent cases, cash embezzlement as well as mismanagement of funds will be controlled, thus improved financial performance of the companies.

### **2.2.2 Internal Audit Independence and Financial Performance**

Shukeri, Shin and Shaari (2012) examined the impact of board characteristics and firm performance. Specifically the study tested the effects of board meeting, board independence, board size and directors accounting expertise on firm accounting performance. The study used both financial and non-financial data from annual reports of the 700 public listed firms in Malaysia for the year 2009. The result showed that board independence does not affect firm performance, whilst board size and board accounting/financial expertise are positively associated with firm performance. Board diligence in terms of board meetings was found to have an adverse effect on firm performance.

Cohen and Sayag (2010) stated that IA independence reduces misunderstanding and conflict of interest in the managerial operations. Even though internal auditors are part of the management and equally expected to evaluate the activities of entire management, the required organizational independence allow them to function efficiently to the overall performance of the organization.

Tepalagul and Lin (2015) presented a comprehensive review of academic research pertaining to auditor independence and audit quality in Ghana. The literature review was conducted based on published articles during the period 1976-2013 in nine leading journals related to auditing. The scholars organized the reviews around four main threats to auditor independence, including client importance, non-audit services, auditor tenure, and client affiliation with audit firms. For each of the threats, the study discussed the findings related to the incentives, perceptions, and behaviours of the auditor and the client, as well as the effects of each threat on the actual and perceived quality of audits and financial reports. The study then concluded that the mixed evidence, together with recent regulatory changes, provides opportunities for future research on

auditor independence and audit quality. Therefore, this informed the intention on the investigation of the relationship between internal audit independence and financial performance.

### **2.2.3 Quality of Internal Audit Work and Financial Performance**

Al-Khaddash, Al Nawas and Ramadan (2013) focused on identifying the most important factors affecting audit quality in Jordanian Commercial Banks (JCBs). The perceptions of JCBs' internal and external auditor's in addition to financial managers were investigated. The study adopted questionnaire method as a means for data collection to examine the main factors affecting auditing quality. The study implemented a number of statistical techniques and procedures that help to examine research hypotheses. These techniques included reliability and validity test, frequency analysis, independent sample t-test, descriptive statistics, correlation matrix, linear regression, and simple regression. All statistical procedures were estimated using Statistical Package for Social Sciences (SPSS). Results were that the respondents believe audit quality in the Jordanian banking sector ranges from satisfactory to very good. The results indicate a positive and significant correlation between audit quality and audit efficiency, the reputation of auditing office, auditing fees, the size of audit firm, and the proficiency of auditor. This variable has not been used in any of the studies in the Kenyan scenario and needs to be researched. Wang, Yu, Zhang and Zhao (2012) carried out research on engaging audit partner experience and audit. The objective of the study was to examine the relation between individual audit partner experience and actual as well as perceived audit quality. They used questionnaire for data collection, descriptive statistics and Pearson correlation for data analysis. The result of the study reveals that; audit partner experience increases both actual and perceived audit quality, hence higher financial performance of the organization.

Abbott, Daugherty, Parker and Peters (2016) examined an interactive model of internal audit function (IAF) quality (comprised of competence and independence) to better understand the determinants of IAF effectiveness as a financial reporting monitor. The tests support the hypothesis that the joint presence of competence and independence is a necessary antecedent to effective IAF financial reporting monitoring. In sum, the results showed that, the answer to what is the effect of internal audit competence (independence) on financial reporting quality is that it depends on the independence (competence) of the internal auditor. The study extends the understanding of IAF quality determinants in the realm of financial reporting as it relates to ongoing discussions by researchers, standard setters, regulators, and practitioners.

Internal audit quality actually is characterized by competency and independence. The ability to communicate audit reports and other findings and recommendations in time and at the same time to have prompt response from decision makers is quite important in achieving organizational performance (Enofe, Mgbame, Otuya & Ovie, 2013). This leads us to the question that does a quality of internal audit report have an impact on the financial performance of commercial banks in Kenya?



#### **2.2.4 Top Management Support and Financial Performance**

Alzeban and Gwilliam (2014) assessed the factors influencing Internal Audit Effectiveness (IAE) in Saudi Arabia. Data were obtained from 203 managers and 239 internal auditors from 79 Saudi Arabian public sector organizations. Multiple regression analysis examines the association between IAE and five principal factors. Results suggest that management support for IAE drives perceived effectiveness of the internal audit function from both management's and the internal auditors' perspective. Management support is linked to hiring trained and experienced staff, providing sufficient resources, enhancing the relationship with external auditors, and having an independent internal audit department. The study generalized links between management support and internal audit effectiveness beyond the Saudi public sector context.

Roussy (2013) sought to understand the governance roles of internal auditors in public sector organizations. An analysis of 42 in-depth semi-structured interviews conducted with experienced internal auditors working in public administration in Quebec indicated that internal auditors perform two key roles: a protector role, further subdivided into two roles, protective shield and keeper of secrets, and a helper role, also subdivided into two roles, support of organizational performance and guide. The analysis also showed that internal auditors have developed a nuanced conception of independence defined as 'grey independence' in order to perform their roles. Internal auditors consider that their primary role is to serve the top manager and the organization and they must prioritize the top manager at the expense of audit committee members. In the return, they also expect to be supported by the top management in order to perform effectively. Overall, the study findings suggested that internal auditing is not the governance watchdog expected by the regulatory bodies since this is not the role performed by internal auditors.

#### **2.2.5 Non-performing Loans and Financial Performance**

The financial leverage of a company is the ratio of its total debts, both short and long-term, to the amount of its equity capitalization. A high ratio of debt to capital puts the company at risk when there are fluctuations in sales volume and cash flow. Debt obligations must be paid on time regardless of the profit level or the amount of cash flow. A major advantage of financial leverage is optimization of shareholders' wealth through mix of debt and equity, taking advantage of the tax system which favours debt financing by making interest deductible from income when calculating the company's tax liability. Low cost debt, especially when interest is low, would increase the return of equity relative to the return of assets. Non-performing loans negatively affect efficiency and return on assets.

Beck, Jakubik and PiloIU (2013) used a novel panel data set to study the macroeconomic determinants of nonperforming loans (NPLs) across 75 countries during the past decade. According to the study dynamic panel estimates, the following variables were found to significantly affect NPL ratios: real GDP growth, share prices, the exchange rate, and the lending interest rate. In the case of exchange rates, the direction of the effect depends on the extent of foreign exchange lending to unhedged borrowers which is particularly high in countries with pegged or managed exchange rates. In the case of share prices, the impact is found to be larger in countries which have a large stock market relative to GDP.

Karim, Chan and Hassan (2010) investigated the relationship between non-performing loans and bank efficiency in Malaysia and Singapore. To achieve the objective, cost efficiency was estimated using the stochastic cost frontier approach assuming normal-gamma efficiency distribution model proposed by Greene (1990). The cost efficiency scores were then used in the second stage Tobit simultaneous equation regression, to determine the effect of non-performing loans on bank efficiency. The results indicate that there is no significant difference in cost efficiency between banks in Singapore and Malaysia although banks in Singapore exhibit a higher average cost efficiency score. The Tobit simultaneous equation regression results clearly indicate that higher non-performing loan reduces cost efficiency. Likewise, lower cost efficiency increases non-performing loans.

As per the CBK annual supervision reports net non-performing loans were as follows 2012-21,222(KshM) growing by 64% from 2011. The year 2013 reported 4,442(Ksh.M), the year 2014-2,823(KshM), the year 2015-4,650(Ksh.M) and the year 2016-4,858(Ksh.M). In the last two years non-performing loans had a steady increase and this had a negative effect on the financial performance of commercial banks.

### **2.2.6 Previous Year's Net Income and Financial Performance**

Performance was measured by comparing current year's results with previous year to establish whether performance is more favourable or adverse than before, current year's results with those of other banks to establish whether the company is performing better or worse than its competitors and current performance against a benchmark or standard of performance. From the CBK annual supervision report the banks reported total net income i.e. profit before tax (PBT) as follows 2012-106,996(Ksh.M.), 2013-124,547(Ksh.M),in 2014-139,861(Ksh.M),in 2015-132,280(Ksh.M) and in the year 2016-146000(Ksh.M).There is a steady increase in commercial banks income due to innovations, diversification and competition strategies. However some commercial banks are collapsing, retrenching staff, operational costs have risen and even reporting negative results.

### 3. CONCEPTUAL FRAMEWORK AND METHODOLOGY

The conceptual framework contains the theoretical framework and the empirical (analytical) framework. The theoretical framework entails the interrelationships of the variables employed in the study while the empirical framework focuses on the data analysis procedures. The governing premise of the study is the Agency Theory.

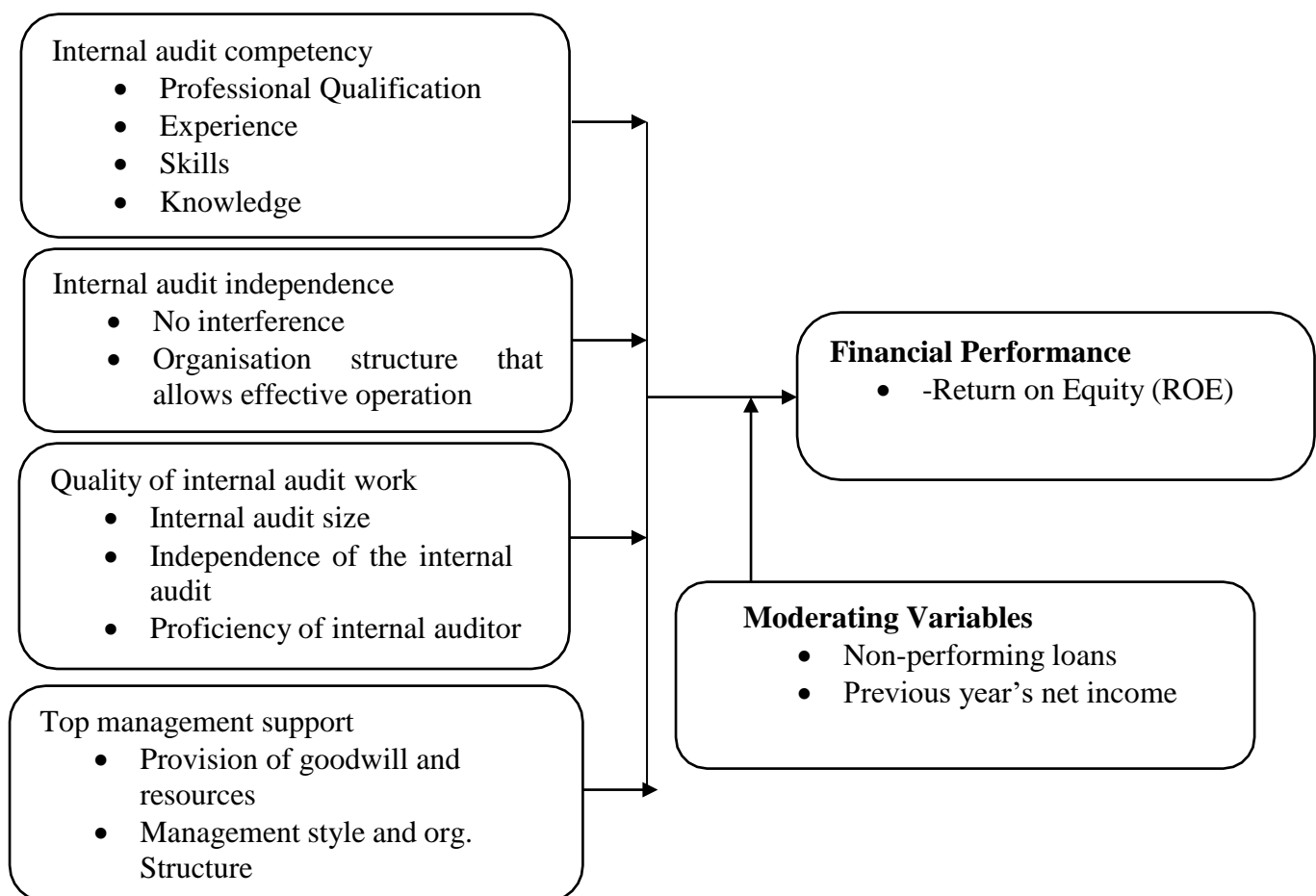
#### 3.1 Conceptual Frame work

The conceptual framework entails the interrelationships of the variables employed in the study.

##### 3.1.1 The conceptual Framework.

This is depicted in the figure below.

**Figure 3.1: Theoretical Framework of Internal Audit and Financial Performance**



Source: Own Formulation Based on Jensen and Meckling (1976)

### 3.1.2 Empirical Framework

The empirical framework focuses on the data analysis procedures. The empirical model of the study was written as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Where:

Y = Return on equity

X<sub>1</sub> = internal audit competence

X<sub>2</sub> = internal audit independence

X<sub>3</sub> = quality of internal audit work

X<sub>4</sub> = top management support

X<sub>5</sub> = non-performing loans

X<sub>6</sub> = previous year's net income

e = error term

β<sub>0</sub> – β<sub>6</sub> = Regression coefficients

The study also adopted Kenny and Baron (1986) moderating technique. The p-values were used to confirm moderating effect of non-performing loans on the relationship between the internal audit and financial performance of commercial banks in Kenya. The moderating effect of previous years' income on the relationship between the internal audit and financial performance of commercial banks in Kenya was also conducted. A p value of <0.05 confirms the moderating effect, while p value of >0.05 denies the presence of moderating effect.

### 3.2 Methodology

The methodology deals with data concerns of the study including research design, target population, sampling and data collection procedures. The current study adopted a descriptive research design. The target population of the study was forty four (44) licensed commercial banks in Kenya as listed in the Central Bank's supervisory reports. A census of 44 commercial banks listed in the bank supervisory report 2016 was employed. Therefore, 44 chief audit executives drawn from these banks were the study respondents. The study relied on primary and secondary data.

## 4. Results and Discussion

### 4.1 Correlations

A Pearson's correlation was conducted between the dependent variable of financial performance (ROE) and the independent variable of internal audit competence. A positive relationship was established between internal audit competence and performance. The relationship is strong as  $r = 0.652$ ,  $p < 0.05$ . It shows that the presence of internal audit competence enhances financial performance. These findings are in agreement with Mahadeo *et al.* (2012) and Almajali *et al.* (2012) who also found a significant association between internal audit competence and financial performance.

**Table 1: Correlation between Internal audit Function and Financial Performance**

		ROE	Internal audit competence	Internal audit independence	Quality of internal audit work	Top management support	Non- performing loans	Previous Year's Net Income
ROE	Pearson Correlation	1.000						
	Sig. (2-tailed)							
Internal audit competence	Pearson Correlation	.652**	1.000					
	Sig. (1-tailed)	0.000						
Internal audit independence	Pearson Correlation	.713**	.682**	1.000				
	Sig. (2-tailed)	0.000	0.000					
Quality of internal audit work	Pearson Correlation	.792**	.706**	.643**	1.000			
	Sig. (2-tailed)	0.000	0.000	0.000				
Top management support	Pearson Correlation	.932**	.581**	.604**	.633**	1.000		
	Sig. (2-tailed)	0.000	0.000	0.000	0.000			
Non- performing loans	Pearson Correlation	-.987**	.572**	.571**	.595**	.504**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		
Previous Year's Net Income	Pearson Correlation	.879**	.741**	.605**	.561**	.489**	.372**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	

\*\* Correlation is significant at the 0.01 level (2-tailed).

It was also established that there was positive relationship between internal audit independence and financial performance. The relationship is strong as  $r = 0.713$ ,  $p < 0.05$ . It shows that the presence of internal audit independence improves financial performance. These findings agrees with Tepalagul and Lin (2015) found a significant association between internal audit



independence and financial performance and disagrees with Shukeri *et al.* (2012) who found that there is no significant association between auditor independence and financial performance.

Quality of internal audit work and performance of the banking sector indicated a positive relationship. The relationship is strong as  $r = 0.792$ ,  $p < 0.05$ . It shows that the presence of quality of internal audit work improves financial performance. These findings are in agreement with Al-Khaddash *et al.* (2013), López and Peters (2012), Cahan and Sun (2015) Baharud-din *et al.* (2014) and Wang *et al.* (2012) who found that there is a significant relationship between quality of audit work and organizational performance.

Top management support revealed a positive relationship with financial performance. The relationship is very strong as  $r = 0.932$ ,  $p < 0.05$ . It shows that the presence of top management support enhances financial performance. These findings are in agreement with Alzeban and Gwilliam (2014), Roussy (2013) and Sarens *et al.* (2012) who found that presence of top management support to internal auditors had was positively significant to financial performance.

A negative relationship was established between non-performing loans and financial performance. The relationship is very strong as  $r = -0.987$ ,  $p < 0.05$ . It shows that the presence of none-performing loans lower financial performance.

A positive relationship was established between previous year's net income and financial performance. The relationship is very strong as  $r = 0.879$ ,  $p < 0.05$ . It shows that the presence of previous year's net income enhances financial performance.

## 4.2 Model Summary

**Table 2: Model Summary**

Model	R	R Squared	Adjusted R Squared	Std. Error of the Estimate
1	.892	.825	.807	.42107

Predictors: (Constant), internal audit competence, internal audit independence, quality of internal audit work, and top management support; moderating variables on the other hand comprise non-performing loans and previous year's net income  $\alpha = 0.05$ . Correlation co-efficient (R) shows the relationship among the study variables, revealing a strong positive relationship of 0.892 among the study variables. The R-squared (the co-efficient of determination) explains the variation in financial performance that predictors of internal audit cause. The R-squared provided a high correlation of 82.5% between internal audit (internal audit competence, internal audit independence, quality of internal audit work, and top management support, non-performing loans, previous years income and financial performance (ROE)). The study findings presented in table 4.8 indicate the R-squared value as 0.825, implying 82.5% financial performance of the banking sector is positively correlated to internal audit competence, internal audit independence, quality of internal audit work, top management support, non-performing loans and previous year's net income at 95% confidence interval.

### 4.3 Analysis of Variance

The current study adopted probability value (p-value) to test the null hypothesis. The null hypothesis the null hypothesis  $H_0$  (internal audit is not related with financial performance of the banking sector in Kenya) should be rejected when  $p > 0.05$ . The F-value 185.275 shows that there is a low variability between the variables of internal audit and financial performance.

**Table 3: ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	31.001	3	31.001	185.275	.000
Residual	58.228	35	.167		
Total	89.229	38			

a. Dependent Variable: ROE

b. Predictors: (Constant), internal audit competence, internal audit independence, quality of internal audit work and top management support, non-performing loans and previous year's net income.

The generated F-value (185.275) is high enough to reject the null hypothesis that internal audit is not associated with financial performance of the banking sector in Kenya using a significance level of 0.05. The findings outcome depicted by the ANOVA table 3 also reveals a positive association between internal audit and financial performance of the banking sector in Kenya since the generated significance (p- value) of 0.01 that is less than 0.05. Hence, alternative hypothesis that internal audit is associated with financial performance of the banking sector in Kenya is accepted as the p-value is less than 0.05.

### Regression Coefficients

**Table 4: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Interpretation
	B	Std. Error	Beta			
(Constant)	0.019	.017		1.1176	.344	not-significant
internal audit competence	1.418	.026	.019	54.538	.023	Significant
internal audit independence	1.398	.017	.014	82.235	.000	Significant
quality of internal audit work	1.531	.026	.023	58.885	.019	Significant
top management support	1.409	.029	.022	48.586	.026	Significant

Dependent Variable: ROE

Source: Research Data (2018)

Level of Significance ( $\alpha$ ) = 0.05

Where:

$X_1$ =internal audit competence,  $X_2$ =internal audit independence,  $X_3$  =quality of internal audit work,  $X_4$ =top management support,  $X_5$ =Non-performing loans,  $X_6$ = Previous year's net income.

The study findings, with a constant of 0.019, showed that a unit measure of internal audit competence, internal audit independence, quality of Internal audit work, and top management support, non-performing loans, and previous year's net income on financial performance of the commercial banks in Kenya is shown as 0.019.  $X_1 = 1.418 < 0.05$  shows a unit change in internal audit competence leading to 1.418 units increase in financial performance.  $X_2 = 1.398 < 0.05$  shows a unit change in internal audit independence leading to 1.398 increases in financial performance.  $X_3 = 1.531 < 0.05$  shows a unit change in quality of internal audit work leading to 1.531 increase in financial performance  $X_4 = 1.409 < 0.05$  shows a unit change in top management support leading to 1.409 increases in financial performance. The findings outcome reveals that all independent variables are significant to this study because their p-values are less than 0.05.

The study adopted t-value to measure the size of the difference relative to the variation in the research sample data. T-values presented in table 4.10 for internal audit competence (54.538), internal audit independence (82.235), quality of internal audit work (58.885) and top management support (48.586). The regression coefficient table (4.0) shows that t-values are greater than the critical value of 1.96, thus giving a strong evidence to reject the null hypothesis that internal audit is not related with financial performance of the banking sector in Kenya. The p-values are low enough, in fact lower than the significance values (p-value) of 0.05 to support the rejection of the null hypothesis, and thereby validating the acceptance of the alternative hypothesis that internal audit is associated with financial performance of the banking sector in Kenya.

The fifth objective of the study was to establish the effect of non-performing loans on the relationship between the internal audit function and financial performance of commercial banks in Kenya. Each of the independent variables was moderated by non-performing loans to give a composite (interaction term). The results presented in Table 5 shows model the fitness for a regression model after moderation.

**Table 5: Model Fitness for the moderating effect of non-performing loans**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.754	.706	.589	.39578

The  $R^2$  of non-performing loans on the relationship between the internal audit and financial performance before moderation was 82.5% but after moderation the  $R^2$  reduced to 70.6%. This implies that performing loans reduces the financial performance of commercial banks in Kenya. Further the moderating term has significance with P value  $0.000 < 0.05$ . The ANOVA results in table 6 shows that the overall model after moderation was statistically significant as supported by an F statistic of 65.128.

**Table 6: Analysis of Variance moderating effect of non-performing loans**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	35.345	3	7.069	65.128	.000
Residual	53.885	35	.157		
Total	89.229	38			

A regression model was run after moderation. The results are presented in table 7. The results showed that non-performing loans do not moderate the relationship internal audit competence and financial performance of commercial banks in Kenya as indicated by P value .426>0.05.

**Table 7: Regression of Coefficients moderating effect of non-performing loans**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.610	.306		8.529	.000
Internal audit competence *M <sub>1</sub>	.123	.078	.022	1.577	.426
Internal audit independence * M <sub>1</sub>	.100	.021	.849	4.762	.037
Quality of Internal audit work * M <sub>1</sub>	.108	.017	.079	6.353	.024
Top management support * M <sub>1</sub>	.132	.020	.318	6.600	.012

The results showed that non-performing loans moderates the relationship between internal audit independence and financial performance of commercial banks in Kenya as indicated by P value .037<0.05. It was also established that non-performing loans moderates the relationship quality of internal audit work and financial performance of commercial banks in Kenya as indicated by P value .024<0.05. The results further indicated that on-performing loans moderates the relationship quality of top management support and financial performance of commercial banks in Kenya as indicated by P value .012<0.05.

The sixth objective of the study was to establish the relationship between previous year's net income and financial performance of commercial banks in Kenya. Each of the independent variables was moderated by previous year's net income to give a composite (interaction term). The results presented in Table 8 shows model the fitness for a regression model after moderation.

**Table 8: Model Fitness moderating effect of previous years' income**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.907	.853	.789	.50956

The  $R^2$  of previous year's net income on the relationship between the internal audit and financial performance before moderation was 82.5% but after moderation the  $R^2$  increased to 85.3%. This implies that previous year's net income increases the financial performance of commercial banks in Kenya. Further the moderating term has significance with P value  $0.000 < 0.05$ . The ANOVA results in table 9 shows that the overall model after moderation was statistically significant as supported by an F statistic of 72.068.

**Table 9: Analysis of Variance for the moderating effect of previous years' income**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.650	5	9.130	72.068	.000
Residual	43.580	35	.127		
Total	89.229	38			

A regression model was run after moderation. The results are presented in table 10. The results showed that previous year's net income moderates the relationship internal audit competence and financial performance of commercial banks in Kenya as indicated by P value  $.000 < 0.05$ . The results showed that previous year's net income moderates the relationship internal audit independence and financial performance of commercial banks in Kenya as indicated by P value  $.039 < 0.05$ . It was also established that previous year's net income moderates the relationship quality of internal audit work and financial performance of commercial banks in Kenya as indicated by P value  $.043 < 0.05$ . The results further indicated that previous year's net income moderates the relationship quality of top management support and financial performance of commercial banks in Kenya as indicated by P value  $.024 < 0.05$ .

**Table 10: Regression of Coefficients for the moderating effect of previous years' income**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.043	.214		14.320	.000
Internal audit competence * $M_2$	.263	.033	.110	68.576	.000
Internal audit independence * $M_2$	.151	.042	.961	3.595	.039
Quality of internal audit work * $M_2$	.207	.066	.037	3.136	.043
Top management support * $M_2$	.318	.078	.312	4.077	.024



## 5. CONCLUSION

The conclusion of this study was drawn, bearing in mind the objective to establish the relationship between internal audit function and financial performance of the banking sector in Kenya. This objective was attained by using a descriptive statistical analysis and correlation analysis (inferential statistical analysis) to compute financial performance (ROE), considering the independent variables of internal audit competence, internal audit independence, quality of internal audit work and top management support. The relationship between internal audit and financial performance were analysed by the statistical tools of analysis mentioned above. The findings outcome of the present study, established by the rising unit levels in internal audit competence, internal audit independence, quality of internal audit work and top management support are positively related with financial performance of the banking sector in Kenya. The study concludes that non-performing loans and previous year's net income moderates the relationship of internal audit function and financial performance of commercial banks in Kenya.

## 6. RECOMMENDATIONS

The section discusses the recommendations for practice and policy. It outlines the implication on policy, theory, and practice. This study, therefore, recommends that the banking sector in Kenya to review their internal audit, specifically on internal audit competence, internal audit independence, quality of internal audit work and top management support to enhance their financial performance (return on equity). The study outcome gives the basis for strengthening internal audit within the commercial banks in Kenya.

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