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EFFECT OF FORENSIC AUDITING AND INVESTIGATION TECHNIQUES ON THE FINANCIAL PERFORMANCE OF DEPOSIT-TAKING MICROFINANCE INSTITUTIONS IN KENYA

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ABSTRACT

The Microfinance institutions in Kenya have experienced notable financial losses in the first 10 years since of the enactment MFIs act of 2006. Many of these have been occasioned by fraud which not only affects the MFIs, but the entire financial sector. In order to minimize the effects of these losses, these institutions' deposit-taking microfinance have adopted the use of forensic auditing and investigation techniques that are used to investigate and deter financial improprieties. The study's main objective was; to assess the effect of forensic auditing and investigation techniques on the financial performance of Deposit-taking Microfinance Institutions in Kenya. The study was guided by the fraud diamond theory. The study targeted all the Deposit-taking microfinance institutions in Kenya that were in operation between 2016 and 2020. The target population was 387 employees and managers of these firms that included: management and operations, Finance and credit control, Internal audit and Risk, External Audit, ICT, and Litigation departments of the Twelve Microfinance Institutions that were in operation in Kenya during the period of the study. The sample size was 281. The researcher used purposive and stratified Random sampling methods to select the sample. Both descriptive and inferential statistics were used in analyses. The findings showed that the micro-finance institutions used forensic auditing and investigation techniques in the fight against fraud. The findings further showed that the use of forensic auditing and investigation techniques have reduced incidences of fraud in the banking sector which have positively contributed to financial performance. The study concludes that there is a significant positive relationship between forensic auditing and investigation techniques and the financial performance of the deposit-taking microfinance institutions in Kenya. The study recommends that the management of microfinance institutions should invest more in auditing and investigation techniques and should implement the recommendations of external auditors

Keywords; *Forensic Auditing and Investigation, Financial Performance, Microfinance Institutions, and Fraud Diamond Theory*

INTRODUCTION

Forensic auditing and investigation techniques are those tools that are used to detect and discover fraudulent activities such as; data analysis, document reviews, undercover operation, Data Mining, Benford's law, financial transaction analysis, document reviews, laboratory analysis of evidence, interview of knowledgeable persons, background investigations and undercover operations (Kundu,2017). Financial performance is a subjective measure that is used to measure how well a firm uses its assets to generate revenue from its main business activities. It is a measure of the overall financial health of a business over a specified period of time, (Gitari,2013).

Forensic auditing and investigation techniques are designed to unearth fraudulent activities. While financial impropriety is a global phenomenon, the losses in the financial sector due to fraudulent activities are high and significantly affect profits (Odelabu, 2014). Microfinance institutions have been cited as being a soft target by the perpetrators of fraudulent activities because of their low levels of operation compared to other financial institutions such as commercial banks (Abdinasir,2017).

The microfinance institutions were designed to fill the gap in the market that was created by the commercial bank's inability to penetrate the low-income savers. Gilbert and Hannah (2014), noted that Microfinance institutions contribute to the growth of the economy, by providing credit to the active but poor members of society, which ends up creating employment and eradicating poverty. The same views have been presented by Mwangi (2015), who noted that Microfinance Institutions provide financial services effectively to the sectors and individuals who cannot access the formal banking system. The central bank of Kenya report of 2019, corroborates the assertions and further reiterates the significance of this sector in the economy. The report shows that the demand for microfinance institutions' services grows at a rate of 5.6% per annum. The continued growth of this sector is therefore critical for the attainment of the government's development goals since it supports the small and microenterprises that form the backbone of the economy (Mwabu, (2013).

The financial performance of microfinance institutions in Kenya has been poor in the recent years. The financial reports as per the central bank of Kenya shows that nine out of the thirteen microfinance institutions in Kenya were making losses (central bank report of 2019). The failure of microfinance institutions to make profits greatly affect their ability to raise funds to lend to their customers who's demand for credit has grown over the years (Ochieng', 2018). The inability of the microfinance institutions to lend to the customers has a negative impact on the economy because it reduces the level of activity of the small and microenterprises who form the bulk of the business sector in Kenya (Nyaga, Jagongo and Omagwa 2020).

Mwabu (2013) observed that, one of the major causes of losses to MFIs, is financial improprieties. While Ochieng' (2018) in his study on the factors affecting the profitability of Deposit-taking MFIs in Nairobi, noted that, financial improprieties are the major contributors to the declining profits of MFIs in Kenya. the study by Samociuk, et al (2010), showed that a typical MFI loss between 5-7% of its annual revenue to fraud. Mwabu (2013), observed that deposit-taking microfinance institutions in Kenya have embraced the use of forensic auditing and investigation techniques. Similar studies by Ochieng (2018) indicates that forensic auditing and investigation techniques are used by microfinance institutions in Kenya

Statement of the Problem

Despite the use of forensic auditing and investigation techniques by the microfinance institutions in Kenya, majority of the deposit taking institutions are reporting losses occasioned by financial improprieties. Samociuk, et al (2010), asserts that a typical microfinance institution loss between 5-7% of its annual revenue to fraud. This is in spite of the adoption of forensic auditing and investing techniques. Ochieng (2018) indicates that microfinance institutions in Kenya have adopted the use of forensic auditing and investigation techniques to detect and deter fraud which has an effect on the financial performance of these institutions. This creates a need to look into the effect of this techniques on the financial performance of these institutions in Kenya.

Various studies have been done on forensic auditing and investigation techniques and financial performance. for instance, Odelabu (2014) carried out a study on the effect of forensic auditing and investigation techniques on the financial performance in Nigeria, where he found out that forensic auditing positively affected financial performance. In addition, Okoye, Adeniyi & Nwankwo (2019), carried out a study on the effect of Forensic auditing on the financial performance in Nigeria where they found out that forensic auditing and investigation affected financial performance. none the less, whereas the study by Odelabu (2014) was limited to commercial banks in Nigeria, Okoye, Adeniyi & Nwankwo (2019), focused on food processing firms in Nigeria. Few studies have however been done in forensic auditing and investigating on the financial performance in Kenya and in particular on the microfinance institutions. This study sought to fill this gap by looking at the effect of forensic auditing and investigation techniques on the financial performance of microfinance institutions in Kenya.

Objectives

To examine the effect of Forensic auditing and investigation techniques on the financial performance of Deposit-taking Microfinance Institutions in Kenya.

Hypothesis

Ho: Forensic auditing and investigation techniques have no statistically significant effect on the financial performance of Deposit-taking Microfinance Institutions in Kenya.

Theoretical Review

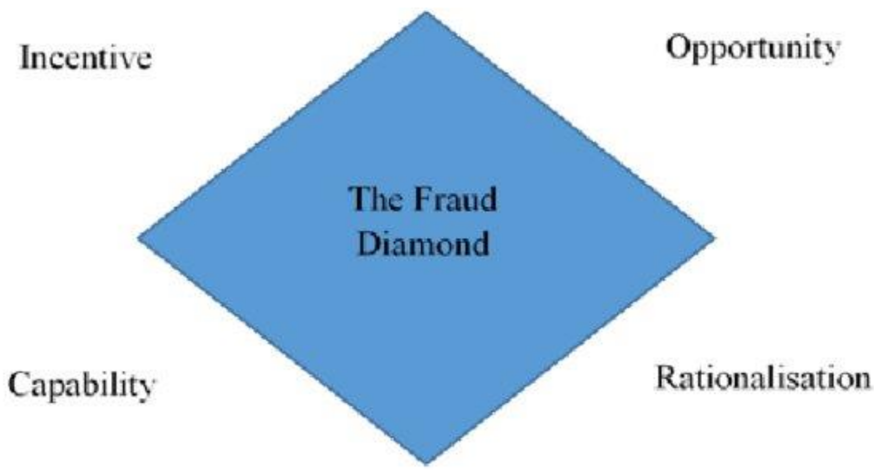
Fraud Diamond Theory

This theory was propounded by Wolf and Hermanson in 2004 as a development to the fraud triangle theory. They extended the fraud triangle through the addition of one variable to the three in the triangle known as the “capabilities”. They were of the view that for fraud to occur there must be a right person in an influential position who is in possession of the right capabilities to implement the schemes of the fraud. this therefore means that for a fraud to occur there are four important features: a person in a position of authority or function in the organization; ability to comprehend and make use of the existing accounting structures and internal control; be confident that he/she will not be caught or if detected will be able to get out of it; has the necessary courage to handle the strains of committing the crime (Shelton, 2014).

The theory works on the Assumptions that for a financial crime to be committed, there must be a person in an authoritative position who understands and exploits the accounting and internal systems. The internal system must have gaps or weaknesses that can be exploited by the person and that the person is confident that he/she will not be detected or caught after committing the crime. Lastly is the assumption that the person will have the capabilities to deal with the stress and pressure of committing an evil act (Gbegi & Adebisi, 2013).

The theory has been criticized on the grounds that much as it is able to fill in the fourth dimension of the triangle theory some aspects of fraud are not visible. Gbegi &Adebisi, (2013) argue that, it is not possible to observe two of the edges of the fraud diamond namely the incentive or pressure side and the rationalization part since they are invisible to the observer.

This theory is appropriate for the current study in the sense that, it explains the motivations and thinking behind financial crimes therefore aids the audit team when designing the audit plans and pointers on how the crime may have been done. Most financial crimes are performed by people in authority, in the right place and have the capabilities to coerce the juniors to conceal the financial crimes. This theory is therefore important in explaining the causes of fraud in a coherent and logical manner. The theory identifies factors and conditions that either directly or indirectly contributes to the occurrence of the financial crime. This theory is therefore used in this study to underpin the forensic auditing and investigation variable on financial performance.



Source: Adopted from Wolfe and Hermanson (2004)

Empirical Literature

Amal (2019) carried out a study on the Impact of Forensic Auditing and investigation on the Financial Performance of Investment Firms in Iran. The study focused on forensic auditing and forensic accounting and their effect on the profitability of investment firms. The study used available data on the profitability of these firms up to the year 2018. The findings showed that forensic accounting impacted positively on the integrity of financial reports which is a major pillar of financial performance.

Okoye, Adeniyi & Nwankwo (2019), carried out a study on the effect of Forensic auditing on the financial performance of quoted food and beverage firms in Nigeria. The study covered a period of six (2010-2016) and employed a research design of Ex-Post Facto(cause-effect) relationship between forensic auditing and investigation and financial performance. the study made use of secondary data whereby STATA 13 software was used to test the relationship between the dependent and independent variables. The study made use of the coefficient of correlation for measuring the relationship between the variables. The dependent variable (financial performance) was represented by ROA, ROE, and EPS. The target population was the food and beverage firms quoted on the Nigeria stock exchange. The level of significance used was 5%. The study findings showed that forensic auditing and investigation have a positive and statistically significant effect on financial performance as measured by ROA, ROE, and EPS. The researchers recommended that the management of beverage firms enhance the use of forensic auditing and investigation to increase their profits. They also recommended that appropriate sanctions be applied when fraud is detected where prosecution is considered to be appropriate sanction, proper forensic audit procedures be followed when investigating frauds.

Olukayode (2018) did a study on the effect of Forensic Auditing and Investigation Techniques in Successful Prosecution of Corruption Cases in Nigeria. The focus was on forensic investigation techniques. Survey research design was used for the study, while questionnaires and interviews were used to collect primary data from anti-corruption agencies in Nigeria. The respondents were the staff of the four investigative and prosecution units in Nigeria namely The Economic and Financial Crimes Commission (EFCC), Independent Corrupt Practices Commission (ICPC), Code of Conduct Bureau (CCB) and Police Special Fraud Unit (PSFU). Yamane's formula for calculating sample size was used to select the sample for the study. The techniques used for analyzing the returned questionnaires were descriptive and inferential statistics methods, Kolmogorov-Smirnov test was used to test the hypothesis of the study. The result of the study shows that the use of forensic accounting techniques in corruption investigations has no significant and positive relationship with successful prosecution of corruption cases in Nigeria. The study recommended that all the anti- corruption agencies in Nigeria should always adopt forensic accounting techniques in all their corruption investigations so as to come up with evidence that will be beneficial in the prosecution of corruption cases in the courts of law.

Ekechukwu, Ugwu and Mbah (2018) sought to find out the effect of forensic auditing and investigation techniques on the performance of banks in Nigerian. Forensic Auditing Technique was used as the proxy for forensic accounting while the proxies for financial performance were net profit margin (NPM), Profit after tax (PAT) and dividend per share (DPS). The data used for the study was gathered from sample of Guarantee trust bank and Access Bank Plc's annual reports and accounts for (12) twelve years (2006-2017). The model used for the study was multiple regressions and the software used for data analysis was E-view 9.0 software package. The study findings showed that forensic audit has significant effect on the net profit margin of selected Nigerian banks. It was also observed that forensic audit influences profit after tax of Nigerian banks. The study also revealed that forensic audit has significant effect on retained earnings and dividend per share of Nigerian banks. Based on the findings of this study, the researcher recommends that the management of the commercial banks should emphasize and enhance use of forensic financial information as this will help in increasing the profitability.

Adekoya (2015) did a study on the effect of Forensic Auditing on Organization Financial Performance. The study aimed at investigating the effectiveness of forensic auditing in financial fraud control, in improving the quality of financial reports and whether it is a tool for improving internal controls system in organizations. The auditing techniques studied were mainly Electronic Devices analysis and Cyberspace investigation. The theories used for the study were the agency theory, the attribution theory and the reliability theory. Data was analyzed using simple percentage and frequency distribution. The findings of the study show that Forensic auditing plays a significant role in financial fraud control in an organization. This has an effect on the reduction of instances fraud and corruption that enhance organizational performance. The study also found out that forensic auditing assisted organization in improving internal controls thus improving financial performance. The study recommended that forensic auditing should be adopted as a tool for combating financial fraud and controlling of related activities in an organization. Further forensic accounting should be adopted to be used in the verification of financial reporting quality.

Onodi, Okafor and Onyali (2015) did a study on the impact of forensic auditing investigative methods on corporate fraud deterrence in banks in Nigeria. They focused on the effects of forensic accounting skills on the management of bank fraud in Nigeria. Both primary and secondary data were appropriately used. 140 questionnaires were administered to the staffers of the five (5) selected Banks in Imo state. The statistical tool used to test hypotheses was ANOVA (Analysis of Variance). The study revealed among other things that possession of enhanced skills aids the forensic Accountant in discharging his duties. The paper, therefore, recommended that among other things the management of banks should make use of forensic Accountants' skills.

Nwosu, (2015) did a study on Forensic Auditing and Financial Accounting in Nigeria the aim of the study was to examine if there was a significant agreement amongst stakeholders on the effectiveness of forensic auditing in financial fraud control, financial reporting, and internal control quality. The target group was the accountant auditors, users, and academicians. The research design used for the study was a survey and stratified random sampling was used to select 146 respondents from the target groups. A structured questionnaire was used to collect primary data. Nonparametric tests were used to examine whether a relationship between the dependent and independent variables existed. The findings were: there is a significant agreement amongst stakeholders on the effectiveness of forensic auditing in fraud control, financial reporting and internal control quality.

Odelabu (2014) did a study on the effect of forensic auditing and investigation techniques on the financial performance of commercial banks in Nigeria. Forensic investigation techniques were used as a proxy for forensic accounting. The population of the study was 609 forensic managers, their staff, and internal control managers. 21 commercial banks were sampled for the study. The research design used for the study was explanatory. The theories used by the study were fraud management life cycle, Agency theory, and Fraud preventive theory. Primary and secondary data were used, with the primary data being collected using a structured questionnaire. A regression model was used to test the relationship between the two. The findings showed that forensic investigations influenced the financial performance of commercial banks in Nigeria. The study concluded that the use of forensic financial information greatly influenced and improved the performance of commercial banks in Nigeria and improved transparency and helped to curb fraud that has led to increased profits. The study recommended that the management of commercial banks should emphasize and enhance the use of forensic financial information as this will help in increasing profitability. It is also recommended that the management ensures that the bank adapts to new technological changes taking place in the world to ensure that they have a well-structured system to accommodate these changes.

Abdinasir (2017) carried out a study on the impact of forensic auditing services on fraud detection among commercial banks in Kenya. The variables being studied were forensic investigation and Litigation Support. The target population was all the commercial banks registered in Kenya as of 2016. The secondary data was obtained from the financial reports submitted by the banks, the reports by the Central Bank of Kenya (CBK) and the Forensic Reporting Centre (FRC), and Anti Money Laundering Compliance management reports on money Laundering. The data used was collected for a period of 5 years (2012 to 2016). Data were analyzed using both descriptive and inferential statistics. The findings showed that fraud detection has an inverse relationship with forensic investigation services. The study recommends that commercial banks should embrace forensic investigation to eradicate fraud in banks.

Ogutu and Ngahu (2016) did a study on the application of Forensic Auditing in Fraud Mitigation: A Survey of Accounting Firms in the County Government of Nakuru, Kenya. The theories used by the study were: the fraud triangle theory and the diamond theory of fraud, the research design used was a descriptive survey with the target population being 25 respondents from 25 accounting firms. The instruments used for the study were the Questionnaires were used as instruments of data collection. Quantitative data were analyzed using frequency, means, and percentages tables. The findings showed that areas that needed forensic auditing were fraud prevention and detection, bankruptcy, insolvency and reorganization; financial statement misrepresentation; economic damage calculations, and family disputes. The study recommended that training and adoption of scientific forensic auditing skills by accounting firms as well as internal auditors is necessary in order to ensure efficient operation and mitigation of fraud.

Conceptual Framework

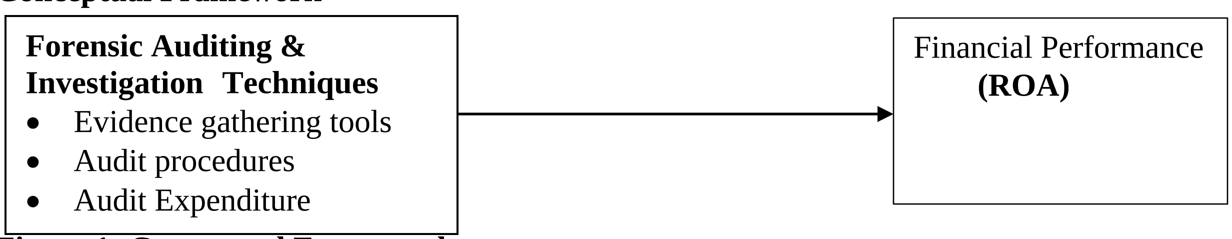


Figure 1: Conceptual Framework

Methodology

The study adopts positivism philosophy and descriptive research design. The study was conducted in all Deposit-taking microfinance institutions in Kenya that were in operation between 2016 and 2020. The target population was 387 employees and management comprising of: management and operations, Finance and credit control, Internal and Risk, External Audit, ICT, and Litigation departments of the Twelve Microfinance Institutions that were in operation in Kenya between 2016 and 2020. The researcher used purposive and stratified random sampling techniques to select a sample size of 281. The study used past financial performance of the Deposit-taking microfinance institutions to derive the secondary data that was used for the study. A structured self-administered questionnaire was used to collect primary data while the secondary data for this study was collected from the Published financial statements of all the Deposit-taking Microfinance Institutions for the period 2016- 2020. To test for validity of the data collection instruments, the researcher sought for expert opinion and carried out methodological triangulation by use of interviews and questionnaires in the data collection process. For the determination of the content validity of the instrument items, the researcher used pretesting and expert advice from forensic accountants; internal and external auditors. The study used a pilot test for external reliability.

Table 1: Reliability Test Results

Study Variables	Test Items	Alpha Coefficient
Forensic Auditing and Investigation	8	0.747

The gathered information by the use of the questionnaire was sorted, coded and input into the excel package for data cleaning before they were fed into the statistical package for social sciences (SPSS V.25) for data analysis.

Model Specification

Objective: To examine the effect of Forensic Auditing and investigation techniques on financial performance of Deposit-taking Microfinance Institutions in Kenya.

$Y_i = \beta_0 + \beta_2 X_2 + \varepsilon$………………………………………………………………... (1.1)

Where Y_i = the financial performance of Deposit-taking Microfinance Institutions where i= ROA

X_2 = Forensic Auditing & investigation Techniques (FAIT) is the independent variable

β_0 = Constant (the Y intercepts)

β_2, Coefficient of the regression

ε = Error Term

Table 1: Research Methodology Matrix

Objective	Hypothesis	Method of Analysis
To examine the effect of Forensic auditing and investigation techniques on the financial performance of Deposit-taking MFIs in Kenya.	**H02**: Forensic auditing and investigation techniques have no statistically significant effect on the financial performance of Deposit-taking MFIs in Kenya.	Minimums, Maximums, Mean, Standard deviation, Karl Pearson Correlation coefficient,

Study Findings

Table 3: Descriptive Statistics Summary for Forensic Auditing and Investigation Techniques

	N	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis
The Evidence-gathering tools used in the organization are appropriate for detecting fraud	204	1.00	5.00	3.843	0.923	-1.163	1.155
The use of Audit Evidence gathering tools has reduced incidences of financial crimes in the organization	204	1.00	5.00	3.824	0.961	-1.486	1.987
The organization provides sufficient information to auditors during audits	204	1.00	5.00	3.907	0.874	-1.558	2.881

The provision of sufficient information to auditors during audits has reduced incidences of financial crimes in the organization	204	1.00	5.00	3.726	0.994	-.945	.151
The audit procedures used by the auditors in the organization are effective in detecting financial crimes	204	1.00	5.00	3.677	1.124	-1.141	.475
The audit procedures used by auditors have reduced incidences of financial crimes in the organization	204	1.00	5.00	3.804	1.046	-1.503	1.799
The organization allocates sufficient funds for conducting audits	204	1.00	5.00	3.858	0.954	-1.566	2.454
The allocation of sufficient funds for conducting audits has reduced the incidences of financial crimes	204	1.00	5.00	3.495	0.944	-.252	-.282
Valid N (listwise)	**204**			**3.76653**	**0.9779**	**-1.20175**	**1.3275**

Forensic Auditing and Investigation Techniques and Financial Performance

The study sought to evaluate the relationship between Forensic Auditing and Investigation and the financial performance of Microfinance Institutions in Kenya. To achieve this objective, the following hypothesis was tested: ***Ho₂***: Forensic Auditing and Investigation has no statistically significant effect on the financial performance of Deposit-taking Microfinance Institutes in Kenya. the model was formulated as $Y_i = \beta_0 + \beta_2 X_2 + \varepsilon$Where Y_i = The financial performance (FP) of Deposit-taking Microfinance Institutions where *i*= ROA, X_2 = Forensic Auditing and Investigation Techniques (FAIT) the independent variable β_2, Coefficient of the regression; ε = Error Term. To achieve objective two and test the hypothesis, the researcher carried out a regression analysis of the variables whereby the R and R^2 were obtained. The results are shown in table 4 below.

Model Summary on Forensic Auditing and Investigation Techniques and Financial Performance

The model summary below shows the values of R, $R^{2,}$ and the adjusted R2, as well as the standard error of the estimate, which was used to determine how well a regression model, fitted the data. the summary showed the extent of variation in the outcome variable to the predictor variables in the model. The results are shown in table 4.28 below.

Table 4: Model Summary of Forensic Auditing and Investigation Techniques and Financial Performance

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.319[a]	.102	.097	6.61166	.102	22.921	1	202	.000

a. Predictors: (Constant), Composite Effect of Forensic Auditing and Investigation Techniques

b. Dependent Variable: Financial Performance

Source: Field Data 2022

The results as shown in table 4 above indicate that the value for R^2 is 0.102 or 10.2%. This implied that 10.2% of the variations in financial performance as measured by Return on Assets in Kenya were explained by Forensic Auditing and Investigation Techniques. While 89.8% of the variations in ROA were explained by other factors

ANOVA on Forensic Auditing and Investigation Techniques and Financial Performance

The Analysis of Variance (ANOVA) was a means of establishing the fitness of the model in predicting the link between the dependent and independent variables this case, the link between forensic Auditing and Investigation Techniques and financial performance. The results of the analysis for the variables were presented in table 5 below.

Table 5: ANOVA on Forensic Auditing and Investigation Techniques and Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1001.988	1	1001.988	22.921	.000[b]
	Residual	8830.244	202	43.714		
	Total	9832.231	203			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Composite Effect of Forensic Auditing and Investigation Techniques

Source: Field Data 2022

Table 5 shows the computed F values and the p-value. The calculated value of F (1,202) = 22.921 and the p-value = .000). Using the p-value to check the model's fitness, showed that there was a correlation between the predictor variable (forensic Auditing and Investigation Techniques) and the dependent variable (Financial Performance) since the p-value obtained 008< 0.05. Hence, the model was fit for computing the relationship between the two. Further was confirmed by the use of the F values. The Calculated Value F (1,202), where 1 was the numerator and 202 was the denominator showed that the calculated F value was 22.921 while the critical F value at a 5% level of significance was 5.0239. This confirmed the suitability of the model in predicting the relationship between the dependent and independent variables.

Similar results were found by Okoye, Adeniyi & Nwankwo, who studied the relationship between forensic auditing and investigation on financial performance. Their results showed that there was a positive and statistically significant relationship between forensic auditing and investigation and financial performance with a p-value of 0.00259 at a 5% level of significance.
Okoroyibo & Omoregie (2019), also posted similar results in their study on the effect of forensic investigation and auditing on the financial performance of the banking sector in Nigeria, where they reported an Adjusted R-squared of 0.491630. they concluded that 49% of the financial performance of the Nigerian banks would be explained by forensic auditing.

Coefficient of Forensic Auditing and Investigation Techniques and Financial

Based on the foregone results and discussion, the study conducted a regression coefficient to establish the mean change in financial performance for a unit variation in forensic Auditing and Investigation Techniques among deposit-taking institutions in Kenya. The regression coefficients were thus established to show the mean change in the dependent variable as a result of the change in the independent variable. This model permits the prediction of a dependent variable given an independent variable. The findings are presented in table 6 below.

Table 6: Coefficients on Forensic Auditing and Investigation Techniques and Financial Performance

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-36.098	6.706		-5.383	.000
	Composite Effect of Forensic Auditing and Investigation Techniques	8.508	1.777	.319	4.788	.000

a. Dependent Variable: Financial Performance

Source: Field Data 2022

Table 6 above shows the coefficients, in the straight line equation that were used to predict the dependent variable given an independent variable. The constant as shown in table 6 above was negative, meaning that the regression line started at a negative point on the y-axis. This was explained by the negative return on assets reported by most Microfinance institutions. The slope of the line was however positive meaning that, as the forensic auditing and investigation techniques improved, there was an increase on the return on assets. Table 6 above showed the results for the analysis of the change in return on assets as a result of the change in Forensic Auditing and investigation Techniques. The results showed that the constant coefficient β_0 is -36.098 while the standardized coefficient β_2 is 8.508. This showed that a unit change in forensic Auditing and Investigation Techniques brought about a change in the return on assets at the rate of 8.508.

To test the hypothesis using the t-test, the t-value obtained by the study of 4.788 at 95% level of significance is higher than the critical t-value of 1.960 for the sample size used in the study. This led to the rejection of the null hypothesis ***Ho*** since 4.788>1.96. Based on the above results the study derived the following simple linear regression equation for Forensic Auditing and Investigation Techniques on financial performance.

$Y= -36.098+8.508X_2 + \mathcal{E}$

The objective of the study was to find out the effect of forensic Auditing and investigation techniques on financial performance. from the findings, it was established that there was a relationship between Forensic Auditing and Investigation Techniques and the financial performance of deposit-taking in Kenya. based on the result, the null hypothesis ***HO***: Forensic Auditing and investigation techniques has no statistically significant effect on the financial performance of Deposit-taking Microfinance Institutions in Kenya, was rejected since the obtained t-value of 4.788> 1.960. The results corroborate the findings by Okoye, Adeniyi & Nwankwo (2019), who concluded that Forensic Audit has a positive and statistically significant effect on ROA at a 5% level of significance. They observed that forensic auditing influenced the general performance of firms; since it acted as a check for the behavior of both the management and staff. Further, the results agree with the findings of Adekoya (2015) who observed that Forensic auditing plays a significant role in financial fraud control in an organization and contributes to financial performance.

The results also agree with Odelabu (2014) who studied the effect of forensic auditing and investigation techniques on the financial performance of commercial banks in Nigeria and found out that forensic auditing and investigation had a positive and statistically significant effect on financial performance. the study observed that forensic auditing and investigation were instrumental in curbing fraud and contributing to financial performance. The results however contradict the results by Modugu and Anyaduba (2013), who found that there was no consensus on the effect of forensic auditing and investigation on financial performance, with some respondents not being fully convinced that forensic auditing and investigation techniques can help in curb fraud and lead to financial performances.

Table 7: Summary of Hypothesis and Major Results

Objective	Hypothesis	Rule	Results	interpretation
To examine the effect of Forensic auditing and investigation techniques on the financial performance of Deposit-taking MFIs in Kenya	**Ho:** Forensic auditing and investigation techniques have no statistically significant effect on the financial performance of Deposit-taking MFIs in Kenya	Reject Ho if p-value <0.05	p-value $=0.005$	Reject the null Hypothesis

Source: Field Data 2022

The findings of the regression analysis showed that forensic auditing and investigation techniques and the financial performance of microfinance institutions have a positive and significant relationship. This significant moderate positive relationship implies that an increment in forensic auditing/investigation leads to a corresponding increment in financial performance. These results indicate that forensic auditing and investigation techniques are adequate in explaining the financial performance of microfinance institutions in Kenya.

Conclusion

The study concluded that forensic auditing and investigation techniques positively and significantly affected the financial performance of deposit-taking microfinance institutions in Kenya and that there existed a positive and significant relationship between forensic auditing and investigation techniques and the financial performance of deposit-taking microfinance institutions in Kenya.

Recommendations

The study, recommends that the management of microfinance institutions use forensic auditing and investigation techniques whenever fraud is suspected in the organization. The management of microfinance institutions should also invest more in auditing and investigation tools so as to act as a deterrent to fraud in the organization. The management of microfinance institutions should implement the recommendations made by external auditors on how to improve their internal control systems.

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