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# Forensic Auditing and Financial Performance of Kenyan Counties

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## Abstract

County governments collect a small percentage of their own source revenue potential and the absorption rate of their budgets are low, this has slowed performance and service delivery. The study sought to find the effect of forensic auditing on the financial performance of the counties in Kenya. Data was collected from financial statements of 45 counties in Kenya in the custody of the controller of budgets for nine years from financial year 2014/2015 to 2022/2023 except Meru and Homabay because financial statements were not found. The study used a dynamic panel model to examine the relationship between forensic auditing and financial performance of all counties in Kenya and analyzed using R statistical tool. The findings showed that forensic auditing has a significant effect on financial performance of counties at first lag. The study concluded that forensic auditing is important and that each county should ensure that they invest in the forensic auditing function. The study recommends that county leadership, including governors, senators, members of the county assembly, and employees, should invest in forensic auditing. The leadership should ensure that accountants are well-trained in forensic auditing processes and consistently apply these skills. All accounting personnel should possess and practice forensic auditing skills. Additionally, county officials should provide supporting evidence for all activities conducted within or outside their counties to facilitate the forensic auditing process. County leadership should focus on spending strictly on budgeted projects, avoiding both overspending and underspending by monitoring ongoing and upcoming projects. Counties should also exhaust all revenue collection avenues and ensure that collected revenue is utilized for its intended purposes to meet collection targets. The study also recommends that the Institute of Certified Public Accountants of Kenya (ICPAK) should ensure its members are equipped with knowledge of forensic auditing by organizing regular training sessions and seminars to support the function. ICPAK should provide recommendations on accounting policies in counties to enhance the quality of financial statements. Furthermore, through ICPAK's guidance, counties should establish fully functional audit departments and ensure the independence of audit committee members.

**Keywords:** *Forensic auditing, financial performance, counties, Kenya*

## **1.0 Introduction**

Performance of South African municipalities has been on the decline due to lack of support from the national government, increase in struggle for power, over-regulation, increase in political instability, lack of adequate management systems, lack of trust and poor skills (Masiya et al., 2019). Atede et al. (2023) stipulated that financial performance of local governments is low because of lack of sufficient revenue; the states rely excessively on the allocation from the federal government, lack of the ability to collect their internal revenue, and inability to make financial decisions independently. Braimoh and Onuoha (2022) argued that the local governments are facing financial issues because the local governments are not able to collect enough revenue and that this affects the performance and service delivery of the states. Osawe (2015) noted that the major contributors of poor performance of the government are tribalism, corruption, political division, nepotism and favoritism.

The performance of counties and delivery of services to Kenyan citizens has experienced a slow growth due to failure to abide to rules and guidelines when discharging the county functions (Mbui & Minja, 2023). Daud (2022) stated that Mandera County has been facing challenges in delivery of services and overall performance; the challenges include lack of adequate ability to develop and improper use of financial and human resources due to poor leadership and dishonest management of funds in Mandera County. Kwale County could not account for sh. 305,958,297. Kilifi County also had expenditures that were not accounted for and also projects had stalled including a project they were awarded in 2016 but due to poor performance, the contract was terminated. Tana River had an expenditure of sh. 21,284,138 that they were not able to account for, the auditor general noted that the county had unsupported expenditure; they could not remit Pay As You Earn (P.A.Y.E.) and NHIF deductions (Auditor's Report, 2021/2022).

Raju and Nandini (2021) forensic auditing is the ability to help organizations maintain good performance levels, forensic audit involves evaluating financial reports of organizations in order to provide evidence in a court of law for legal purposes. According to Oyerogba (2021) forensic auditing is significant in detecting fraud and thus boost performance of the public sector in Nigeria. Okoye et al. (2015) forensic auditing is useful in improving the performance of the organization, forensic auditing measured using red flags. Forensic auditing entail use of investigative tools to uncover fraud and use the corroboration in a court for judicial proceedings, indicators were evidence-gathering tools, audit procedures and audit expenditures (Mosoti et al., 2022). American Institute of Certified Public Accountants (2019) red flags are indicators that financial issues exist e.g. recurring losses and declining net assets. Financial red flags for nonprofit making organizations include inadequate reserves which does not cover at least 25% of annual expenses, overdependence on one source of revenue, excessive debt, complex transactions and decline in finances (Insero and Co. CPA's, 2023).

According to the Auditor general (2023) an audit opinion is a report given by an independent auditor on the true and fair view position of an entity. An unqualified opinion indicates the auditor found the reports to be fair, otherwise, qualified, disclaimer and adverse opinion might indicate there exists a problem and the auditor was not satisfied with the reports due to material information (Institute of Internal Auditors, 2022). Audit expenditure is the amount of money spent on the audit function,

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if the firm invests in the function, then the company might uncover problems early, if the function is neglected then most problems will be unnoticed (Institute of Internal Auditors, 2022). The study used red flags, audit opinions and audit expenditures as indicators because they are important techniques that are used by a forensic auditor to identify possible risks facing the business, fraud committed and illegal activities going on in an organization. The researcher will use these techniques to study how the counties have been operating since financial year 2014/2015 until 2022/2023.

### **1.1 Research Objective**

To examine the effect of forensic auditing on financial performance of Kenyan counties.

### **1.2 Research Hypothesis**

H<sub>01</sub>: Forensic auditing does not have a statistically significant effect on the financial performance of Kenyan counties.

## **2.0 Literature Review**

The literature review was presented in sections.

### **2.1 Theoretical literature**

The study was anchored in Forensic Accounting Theory (FAT). Ozili (2020) the theory explains why and how forensic accountants and investigators choose creative accounting and graft manipulations techniques in financial reporting processes. Moreover, it sheds light on how the outcomes of these methods depend on various decisions made by forensic experts. The theory assumes if an individual is deemed guilty, the verdict should not affect firm continuity. Forensic accounting exploits accounting, auditing and investigation skills during court proceedings to eliminate fraud and improve performance (Modugu & Anyaduba, 2013). Azman (2021) stated forensic accounting theory explains tools to minimize fraud in organizations, fraud being committed in organizations increasing each day and therefore there is an increased desire and demand for forensic accounting. The theory is relevant to the study because it explains why forensic accounting is important. FAT ensure that the different financial records are accurate and complete and must further be able to identify any variances or irregularities that may inform the presence of fraud or any other associated financial crimes (DiGabriele & Huber, 2015). Singleton (2010) forensic accounting helps identify fraud in an organization and thus improve performance of an organization. Ozili (2020) forensic accounting theory helps firms solve financial crisis and thus boost performance. Forensic accounting theory also observes the significance of legal and other ethical considerations in accounting-related investigations (Ozil, 2020). This theory is useful to county governments to assess if forensic auditing is useful in mitigating the fraud that is on the rise in Kenya. If so, does it improve the performance of counties in Kenya or will the counties not sustain themselves in the future.

### **2.2 Empirical literature**

Umoh (2024) studied the effect of forensic auditing on the organizational performance of Nigerian brewery companies. The study utilized secondary data sourced from the financial statements of the breweries, which were analyzed using EViews version 10



and an ordinary least squares (OLS) model. The findings indicated no significant relationship between forensic auditing and organizational performance. However, the study did not specify the number of years for which data was collected or the number of companies targeted. In contrast, the current study employs a dynamic panel model using two lags, differing from the OLS model. Furthermore, the study's focus on the Nigerian brewery sector might yield different results compared to county governments in Kenya. Mosoti et al. (2022) investigated the relationship between forensic auditing and investigation techniques and the financial performance of Kenyan deposit-taking microfinance institutions. The study used primary data, sampling 281 employees from microfinance institutions operating between 2016 and 2021. Data was analyzed using both inferential and descriptive statistics. The results showed a significant relationship between forensic auditing and the financial performance of firms in the banking sector. However, contextual gaps exist, as the findings may differ if the study were conducted within Kenyan counties.

Osorio et al. (2022) examined forensic auditing as an emerging need in higher education institutions, surveying 100 associates of the Colombian Association of Public Accountants using a non-probabilistic sampling technique. The study concluded that forensic auditing is essential for eradicating fraud and improving institutional performance. However, methodological gaps were identified due to the use of non-probabilistic sampling, which increases bias. Conceptual gaps also emerged as the study did not clearly define the variables under investigation. The current study explores the effect of forensic auditing on the financial performance of Kenyan counties. Nandini and Ajay (2021) studied the impact of forensic audits on fraud investigation and prevention, focusing on financial performance. Primary data was collected from 125 individuals using questionnaires and analyzed with SPSS. The findings revealed a significant negative effect of forensic audits on reported graft cases and individuals engaged in fraud. However, the study did not specify the sector examined. In contrast, the current study focuses on Kenyan counties and conceptualizes forensic auditing with indicators such as audit expenditures, audit opinions, and red flags. Additionally, the current study incorporates financial performance, which was neglected in the earlier study, focusing on Kenyan counties over the past nine years.

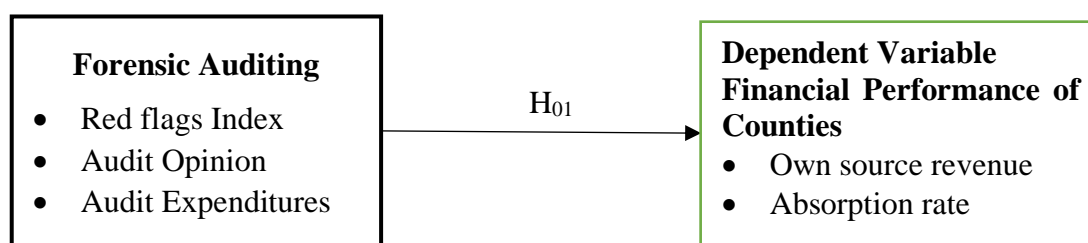
Oyerogba (2021) studied forensic auditing mechanisms and fraud detection in the Nigerian public sector. Data was collected through questionnaires from 298 respondents and analyzed using inferential and descriptive statistics. The study found that forensic auditors must possess skills and expertise, as their role is vital in predicting and detecting graft cases. Fraud detection by forensic auditors positively contributed to the growth of the public sector. Conceptual gaps were noted as the variables were not adequately defined and operationalized. The findings from the Nigerian public sector might differ from those in Kenyan counties, presenting contextual gaps. Saifulla and Abbas (2020) examined the role of forensic auditing in enhancing public sector efficiency. A survey of the public sector was conducted, and data was analyzed using partial least squares structural equation modeling. The findings indicated a positive relationship between forensic auditing and organizational efficiency. However, the study did not detail how variables were measured and assumed that only forensic auditing improves efficiency. Additionally, it lacked clarity on the target respondents within the public sector and the number of observations, resulting in multiple gaps.

Dilshad et al. (2020) provided empirical evidence on the relationship between forensic auditing, whistleblowing, fraud control, and organizational performance in Pakistan's public and private sectors. Using a positivist approach, 211 questionnaires were collected and analyzed with SPSS. The study concluded that forensic auditing, fraud control, and organizational performance are statistically significant. However, the findings, derived from multiple sectors in Pakistan, might contrast with those from Kenyan counties. Ali and Hafidh (2020) conducted a literature review on forensic auditing, analyzing 14 selected papers to assess the effectiveness of forensic auditing techniques, with a focus on artificial intelligence and data analytics. The study concluded that forensic auditing significantly enhances firm effectiveness. However, it was limited to a systematic review and did not explore current industry practices to provide up-to-date findings.

Okoye et al. (2015) investigated the effect of forensic auditing on the financial performance of quoted food and beverage firms in Nigeria. Secondary data covering six years was collected using an ex-post facto design and analyzed with STATA. The study found a positive relationship between forensic auditing and the financial performance of food and beverage companies listed on the Nigerian Stock Exchange. However, being conducted in 2015, the findings may not reflect the current position. Additionally, the study focused on the food and beverage industry, which might provide contrasting insights when applied to the government sector. Most studies demonstrate a significant association between forensic auditing and performance, although Umoh (2024) found the relationship to be positive but not significant. This highlights the importance of the current study, which aims to determine whether forensic auditing has a statistically significant relationship with the financial performance of Kenyan counties.

### 2.3 Conceptual Framework

Figure 1 presents the conceptual framework.



**Figure 1: Conceptual Framework**

### 3.0 Methodology

The population and sample for the study comprised data from 47 counties over a nine-year period, spanning from 2014/2015 to 2022/2023. However, the researcher conducted a census of 45 counties, excluding Meru and Homa Bay counties due to the unavailability of their financial statements at the Office of the Controller of Budget. This exclusion ensured the completeness and reliability of the data analyzed. Data analysis and presentation were guided by the principle that data becomes meaningful only when insights are drawn from it (Gujarati, 2003). The data was analyzed using

both inferential and descriptive statistics. A dynamic panel model with two lags was employed, as it satisfied all three model assumptions at lag 2. The analysis aimed to determine whether a relationship existed between forensic auditing and financial performance, guided by the research hypothesis. Historical data was meticulously collected, organized in Excel to eliminate irrelevant information, cleaned, and coded before being subjected to analysis using the R statistical tool.

Diagnostic tests were a critical component of the study, as highlighted by Baltagi (2003), who emphasized the importance of such tests before fitting a model. The researcher conducted tests for instrumentation, autocorrelation, and model specification to ensure the suitability and reliability of the dynamic panel model. These tests validated the analytical framework and strengthened the study's findings. To facilitate a direct association analysis between forensic auditing and financial performance, the study generated empirical models tailored to address the research objectives effectively. These models formed the basis for evaluating the relationship between the variables under investigation. The models were;

$$A.R_{it} = \alpha_1 A.R_{it-1} + \alpha_2 A.R_{it-2} + \beta_1 RFI_{it-1} + \beta_2 RFI_{it-2} + \beta_3 A.O_{it-1} + \beta_4 A.O_{it-2} + \beta_5 A.E_{it-1} + \beta_6 A.E_{it-2} + \varepsilon_{it} \dots \dots \dots 3.1$$

$$O.S.R_{it} = \alpha_1 O.S.R_{it-1} + \alpha_2 O.S.R_{it-2} + \beta_1 RFI_{it-1} + \beta_2 RFI_{it-2} + \beta_3 A.O_{it-1} + \beta_4 A.O_{it-2} + \beta_5 A.E_{it-1} + \beta_6 A.E_{it-2} + \varepsilon_{it} \dots \dots \dots 3.2$$

**Where:**

- $A.R_{it}$ ,  $A.R_{it-1}$  &  $A.R_{it-2}$  = Absorption rate in county i at time t, t-1 and t-2
- $O.S.R_{it}$ ,  $O.S.R_{it-1}$  &  $O.S.R_{it-2}$  = Own source revenue measured by the ratio of revenue collected/budgeted revenue in county i at time t, t-1 and t-2
- $\beta_1$ -  $\beta_6$ - Coefficients of the independent variable lagged for time period 1 and 2
- $\alpha_1$  &  $\alpha_2$  = Coefficients of lagged dependent variable for time period 1 and 2
- i- County
- t- time
- $RFI_{it-1}$  &  $RFI_{it-2}$  = Red flag index for county i at time t-1& t-2
- $A.O_{it-1}$  &  $A.O_{it-2}$  = Audit Opinion for county i at time t-1& t-2
- $A.E_{it-1}$  &  $A.E_{it-2}$  = Audit expenditures for county i at time t-1& t-2

The researcher concluded that forensic auditing is significant if any of the forensic auditing indicators (Red flag index, audit opinion and audit expenditure) has a p value < 0.05 in model 3.1 and model 3.2.

## 4.0 Findings

### 4.1 Descriptive statistics

The study collected data on forensic auditing and financial performance of counties in Kenya for a period of 9 years from financial year 2014/2015 to financial year 2022/2023. The data was obtained from 45 out of 47 counties in Kenya which excluded Homabay and Meru County because the financial statements were not available at the

office of controller of budgets. The descriptive statistics of the variables were as illustrated in table 1.

**Table 1: Descriptive Statistics**

Indicator	Number of observations	Mean	Standard deviation
Red Flag Index	405	0.14	0.10
Audit Opinion	405	0.03	0.18
Audit expenditure	405	0.03	0.03
Absorption Rate	405	0.89	0.19
Own Source Revenue	405	0.70	0.24

Based on results in table 1 it was observed that the average red flag index was 0.14, standard deviation of 0.1. This indicates majority of the counties were not able to finance their expenditure because a county should have an RFI of at least 0.25 for it to be able to finance its expenditures (Government Finance Officers Association, 2023). The average audit opinion was 0.03 with a standard deviation of 0.18. This indicates that most of the audited financial statements showed a qualified, adverse or disclaimer opinion meaning the auditor general was not satisfied that the financial statements showed a true and fair view position. The average audit expenditure was 0.03 with a standard deviation of 0.03. This indicates that some of the counties did not have an independent internal audit team and audit committees as stipulated in the county act across the 9-year period, this therefore made the audit function to be ineffective or non-existent at all. Own source revenue reported had a mean of 0.7 and a standard deviation of 0.24. This means that on average a county is able to collect revenue of 0.7 in relation to their budget for the 9-year period. Counties should aim to collect at least 0.8 of their revenue so as to have financial freedom in exercising their duty, a high Own source revenue ensures that the counties have financial independence and freedom (The Kenya Institute for Public Policy Research and Authority, 2024). The average absorption rate index was 0.81 with a standard deviation of 0.19. A high absorption rate is better because it means that counties are close to achieving the targets they set in terms of expenditure.

## 4.2 Inferential Statistics

### 4.2.1 Own Source Revenue Model

A dynamic panel model was fitted for the own source revenue for each of the 45 counties with two lags for the dependent variable and each of the independent variable. The researcher used two lag time periods because Wilkins (2017) stated that introducing more lags help to correct the problem of autocorrelation. Greene (2012) noted that a lag structure should be selected by deciding how many lags can be used to address the problem of autocorrelation and endogeneity. The study used two lags because at lag 1 the model assumption of autocorrelation was violated, thus the need for the second lag where all assumptions were satisfied. The lagged values of OSR from the 3<sup>rd</sup> to 405<sup>th</sup> lag was used as the instruments for the model. The results of the fitted model were as shown in table 2.



**Table 2: OSR GMM Direct Model Results**

=====	
##	Dependent variable:
##	-----
##	OSR
##	OSR Direct Model
##	-----
## lag(OSR, 1:2)1	-0.3542***
##	(0.0563)
## lag(OSR, 1:2)2	-0.2167**
##	(0.0903)
## lag(RFI, 1:2)1	0.3798**
##	(0.1552)
## lag(RFI, 1:2)2	0.0137
##	(0.1335)
## lag(AO, 1:2)1	0.0015
##	(0.0904)
## lag(AO, 1:2)2	-0.0790
##	(0.0518)
## lag(AE, 1:2)1	1.4141**
##	(0.6916)
## lag(AE, 1:2)2	0.0417
##	(0.5153)
-----	
## Sargan	35.5939
## Sargan (p-value)	0.2609
## AR(1)	-0.96
## AR(1) p-value	0.3367
## AR(2)	-1.37
## AR(2) p-value	0.1718
## Wald Coef (df)	115.5 (12)
## Wald Coef p-value	0
## Observations	45
##	
=====	

## Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
 Sargan is considered good (acceptable) if its p-value is between 25% and 100%

Based on results in table 2, at 95% level of confidence, the results showed that the instrument used in the dynamic panel model was a valid instrument based on the sargan test (Sargan = 35.5939, p = 0.2609). This shows that the assumption for proper instrumentation in the model was satisfied. The test for lack of autocorrelation in the first and second lag showed that there was no sufficient evidence at 95% confidence level to suggest presence of autocorrelation in the first and second lag (p = 0.3367 and p= 0.1718 respectively). This showed that the assumption for absence for autocorrelation was satisfied for both the first and second lag. Therefore, the model satisfied both assumptions for proper instrumentation and absence of autocorrelation.

At 95% confidence level the results showed that there was a joint significant effect of the independent variables on OSR at time  $t$  ( $\chi^2(12) = 115.5, p < 0$ ). This showed that the model was a good fit. There was negative persistent effect exhibited by both first lag of OSR ( $\alpha_1 = -0.3542, p = 0$ ) and second lag of OSR ( $\alpha_2 = -0.2167, p = 0.0164$ ). The persistent effect of lag 1 ( $\alpha_1 = -0.3542$ ) was higher than that of lag 2 ( $\alpha_2 = -0.2167$ ). However, due to the significance of both lag 1 and lag 2 of OSR in the model it shows that the persistent effect did not end on lag 1 but was transferred further to the second lag of OSR. This means that the autocorrelation effect could only be corrected with both lags being included in the model. From table 2 the following model was developed:

$$\begin{aligned} O.S.\widehat{R}_{it} = & -0.3542O.S.R_{it-1} - 0.2167O.S.R_{it-2} + 0.3798RFI_{it-1} \\ & + 0.0137RFI_{it-2} + 0.0015A.O_{it-1} - 0.0790A.O_{it-2} \\ & + 1.4141A.E_{it-1} + 0.0417A.E_{it-2} \end{aligned}$$

The above model was used to assess the significance of the model coefficients for the three independent variable indicators at both first and second lag. At 95% confidence level the results showed the coefficient of RFI at first lag was significant ( $\beta = 0.3798, p = 0.0144$ ). However, the coefficient of RFI at the second lag was not significant ( $\beta = 0.0137, p = 0.9183$ ). This showed that RFI at one financial year ago had a positive significant effect on OSR in the present financial year. However, RFI at two financial years ago had no significant effect on OSR in the present financial year. For AO the coefficients for both first ( $\beta = 0.0015, p = 0.9870$ ) and second lag ( $\beta = -0.0790, p = 0.1270$ ) were not significant. This showed that the AO at both first and second financial years ago had no significant effect on OSR in the present financial year. The coefficient of AE in the first lag was significant ( $\beta = 1.4141, p = 0.0409$ ) while the coefficient of AE in the second lag was not significant ( $\beta = 0.0417, p = 0.9356$ ). This showed that AE in the previous financial year had a positive significant effect on OSR in the present financial year. However, AE for two financial years ago had no significant effect on OSR in the current financial year. Given that two indicators of forensic audit (RFI and AE) had significant effect on OSR at first lag. It is evident that forensic auditing in the previous financial year had a positive significant effect on OSR in the current financial year.

#### 4.2.2 Absorption Rate Model

A dynamic panel model was fitted for the absorption rate for each of the 45 counties with two lags for the dependent variable and each of the independent variable. The lagged values of AR from the 3<sup>rd</sup> to 405<sup>th</sup> lag was used as the instruments for the model. The results of the fitted model were as shown in table 3.

**Table 3: Absorption Rate GMM Direct Model Results**

=====	
=====	
##	Dependent variable:
##	-----
##	ABSORPTION_RAT
##	Absorption Rate Direct Model
##	-----
## lag(ABSORPTION_RAT, 1:2)1	-0.4042**
##	(0.1947)
## lag(ABSORPTION_RAT, 1:2)2	0.1930***
##	(0.0426)
## lag(RFI, 1:2)1	-0.2302**
##	(0.0942)
## lag(RFI, 1:2)2	0.0306
##	(0.0658)
## lag(AO, 1:2)1	-0.0108
##	(0.0375)
## lag(AO, 1:2)2	0.0099
##	(0.0519)
## lag(AE, 1:2)1	0.1114
##	(0.3631)
## lag(AE, 1:2)2	0.1848
##	(0.1677)
-----	
## Sargan	21.6324
## Sargan (p-value)	0.3029
## AR(1)	-1.09
## AR(1) p-value	0.274
## AR(2)	-1.63
## AR(2) p-value	0.1033
## Wald Coef (df)	125.23 (12)
## Wald Coef p-value	0
## Observations	45
##	
=====	
=====	

## Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Sargan is considered good (acceptable) if its p-value is between 25% and 100%

From the results in table 3 above, at 95% level of confidence, the results indicated that the instrument used in the dynamic panel model was a valid instrument based on the sargan test (Sargan = 21.6324, p = 0.3029). This shows that the assumption for a valid instrument in the model was properly satisfied and that the independent variable is not correlated to the error term. The test for lack of autocorrelation in the first and second lag showed that there was no sufficient evidence at 95% confidence level to suggest presence of autocorrelation in the first lag (p = 0.274) and second lag (0.1033). This

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showed that the assumption for absence for autocorrelation was satisfied for both the first and second lag. Therefore, the model satisfied both assumptions for proper instrumentation and lack of autocorrelation.

At 95% confidence level the results showed that there was a joint significant effect of the independent variables on AR at time  $t$  ( $\chi^2(12) = 125.23, p < 0.05$ ). This showed that the model was valid and that model coefficients are different from 0. There was negative persistent effect exhibited by the first lag of AR ( $\alpha_1 = -0.4042, p = 0.0378$ ), the second lag of AR showed a positive persistent effect ( $\alpha_2 = 0.1930, p < 0.05$ ). The persistent effect of lag 1 ( $\alpha_1 = -0.4042$ ) was higher than that of lag 2 ( $\alpha_2 = 0.1930$ ). However, due to the significance of both lag 1 and lag 2 of AR in the model it shows that the persistent effect did not end on lag 1 but was transferred further to the second lag of AR. This means that the autocorrelation effect could only be corrected with both lags being included in the model. From table 3 the following model was developed:

$$\widehat{A.R}_{it} = -0.4042A.R_{it-1} + 0.1930A.R_{it-2} - 0.2302RFI_{it-1} + 0.0306RFI_{it-2} \\ - 0.0108A.O_{it-1} + 0.0099A.O_{it-2} + 0.1114A.E_{it-1} \\ + 0.1848A.E_{it-2}$$

The above model was used to assess the significance of the model coefficients for the three independent variables at both first and second lag. At 95% confidence level the results showed the coefficient of RFI at first lag was significant ( $\beta = -0.2302, p = 0.0146$ ). However, the coefficient of RFI at the second lag was not significant ( $\beta = 0.0306, p = 0.6427$ ). This showed that RFI at one past financial year had a negative significant effect on AR in the present financial year. However, RFI at two previous financial years had no significant effect on AR in the present financial year. For AO the coefficients for the first lag ( $\beta = -0.0108, p = 0.7728$ ) and second lag ( $\beta = 0.0099, p = 0.8490$ ) were not significant. This showed that the AO for two previous financial years had no significant effect on AR in the present financial year. The coefficient of AE in the first ( $\beta = 0.1114, p = 0.7589$ ) and second ( $\beta = 0.1848, p = 0.2705$ ) lags was not significant. This showed that AE for the previous two financial years had no significant effect on AR in the current financial year. Given that one indicator of forensic audit (RFI) had significant effect on AR at first lag. It is evident that forensic audit in the previous financial year had a positive significant effect on AR in the current financial year.

### 4.3 Discussion

The study revealed that in both the OSR model and AR model, forensic auditing has a significant effect on the financial performance of counties in Kenya, prompting the researcher to reject the null hypothesis. In the OSR model, forensic auditing exhibited a positive and significant effect, while in the AR model, forensic auditing had a negative but significant effect on the financial performance of counties. These findings align with Chukwuma et al. (2022), who established a positive and significant relationship between forensic auditing and the financial performance of MTN companies in Nigeria. Similarly, Mosoti et al. (2022) found a positive and significant relationship between forensic auditing and the financial performance of deposit-taking financial institutions. Nandini and Ajay (2021) reported a significant negative effect of forensic auditing on the number of graft cases reported and individuals engaged in fraud. Oyerogba (2021)

emphasized that forensic auditors must possess specialized skills and expertise, as these are essential for predicting fraud and graft cases in local governments in Nigeria, which, in turn, contribute positively to sectoral growth.

Saifullah and Abbas (2020) also found a positive and significant relationship between forensic auditing and the efficiency of public sector organizations, suggesting that organizations should heavily invest in forensic auditing. Dilshad et al. (2020) concluded that forensic auditing, fraud control, and organizational performance are statistically significant and positively related. Rashid and Hafidh (2020) highlighted the importance of forensic auditing in enhancing a firm's effectiveness, noting a positive and significant relationship. Okoye et al. (2015) observed a positive and significant relationship between forensic auditing and return on assets (ROA). However, the findings from this study contradict those of Umoh (2024), who examined the effect of forensic auditing on the organizational performance of Nigerian brewery companies and found no significant relationship between forensic auditing and organizational performance.

The current study demonstrated that forensic auditing had a significant relationship with the financial performance of counties in Kenya at the first lag, underscoring the relevance of forensic accounting theory. The theory highlights the importance of forensic auditing in enhancing firm performance. While most prior studies have identified a positive and significant relationship between forensic auditing and financial performance, this study found that the relationship between forensic auditing and absorption rate is negative but significant. Future research should explore the relationship between forensic auditing and absorption rate in greater detail. The findings of this study align with the principles of forensic accounting theory.

## **5.0 Conclusion**

The study concludes that counties in Kenya aim to bring service delivery closer to citizens. However, since becoming operational in the financial year 2013/2014, they have faced numerous challenges in fulfilling their mandate. Some county governments are not able to pay their employees, statutory deductions delay, county bosses spent money on subsistence without supporting document, county projects have stalled and thus the beneficiary who is the citizen of Kenya does not get proper services. This has been evident from the descriptive findings which highlighted that counties are having challenges to meet their expenditure which was averagely below 25%, the auditor general has a concern on the financial statements and that most of them do not reflect a true and fair view, counties are not investing in the audit function and that some counties do not have an independent auditor and independent audit committee. The counties are not collecting enough revenue because they are not meeting their targets and majorly rely on the national government. The counties absorption rate is also problematic meaning the counties are not properly spending as budgeted, it is either above targets or below targets. The study concluded that forensic auditing has a significant relationship with financial performance. Financial performance indicators included own source revenue and absorption rate. The relationship between forensic auditing and own source revenue (OSR) was positive and significant in the first lag, implying that forensic auditing in the previous year ensures an increase in own source revenue in the current year. The relationship between forensic auditing and absorption rate was negative and significant in the first lag which means that forensic auditing in



the previous year will result to a decline in expenditure and that expenditure will be regulated to avoid over and under expenditure.

## 6.0 Recommendations

The study recommends that county leadership, including governors, senators, members of the county assembly, and employees, should invest in forensic auditing. The leadership should ensure that accountants are well-trained in forensic auditing processes and consistently apply these skills. All accounting personnel should possess and practice forensic auditing skills. Additionally, county officials should provide supporting evidence for all activities conducted within or outside their counties to facilitate the forensic auditing process. County leadership should focus on spending strictly on budgeted projects, avoiding both overspending and underspending by monitoring ongoing and upcoming projects. Counties should also exhaust all revenue collection avenues and ensure that collected revenue is utilized for its intended purposes to meet collection targets. The study also recommends that the Institute of Certified Public Accountants of Kenya (ICPAK) should ensure its members are equipped with knowledge of forensic auditing by organizing regular training sessions and seminars to support the function. ICPAK should provide recommendations on accounting policies in counties to enhance the quality of financial statements. Furthermore, through ICPAK's guidance, counties should establish fully functional audit departments and ensure the independence of audit committee members.

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