

# **Relationship Between Internal Audit Practices And Performance Of Water Service Providers In Kenya**

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## **ABSTRACT**

**The purpose of this study was to establish the relationship between internal audit and organisational performance of Kenyan WSPs. To fulfil the study objective, hypothesis was derived and tested on a population of 93 Water service providers. This cross sectional descriptive study was guided by a positivist study paradigm. The Data Envelopment Analysis approach was used to codify the dependent variable and regression analysis was then applied to test the hypothesis. The null hypothesis was rejected as the regression analysis found that 10.1% of variations in firm performance are explained by variation in internal audit while 89.9% of variations are explained by other variables. This infers that internal audit influences performance of Water service providers in Kenya. The study made contribution to policy formulation and development to benefit the understanding on how internal audit in the Kenyan context influence organizational performance resulting to formulation of reforms in various public institutions to strengthen internal audit.**

**Keywords:** Internal Audit Practices, Firm Performance, Water Service Providers

## **INTRODUCTION**

The relationship between internal audit and firm performance has gradually created interest in Water service provider's management study (Al Matari, Swidi & Fadzil, 2014). Internal audit is an essential part of management and a tool for enhancing performance of organisations. Complex organisational structures demand competent and professional internal audit to ensure that scarce resources are utilized efficiently and effectively to enhance organisational performance (Chan, 2004). From the literature reviewed, there is sufficient empirical and theoretical evidence that internal audit influences organisational performance (Cohen & Sayag, 2010; Eko & Hariyanto, 2011; Theofaris et al., 2011). However, internal audit alone may not adequately explain variation in performance of companies. This shows that some other elements mediate to catalyse, decelerate or moderate the association between internal audit and firm performance.

Water service providers (WSPs) are legal public bodies licensed by Water Regulatory Boards (WRB) to offer water and sanitation services within their mandated areas. This is provided for in section 46 of Water Act of 2002 of the laws of Kenya. Water service providers therefore are vehicles useful to the government in order to achieve its goals to provide piped water to every home by the year 2030. Internal audit is an independent and objective appraisal, assurance and consulting function intended to improve and develop an organisations performance (IIA, 1999; Reid & Ashelby, 2002). It assists an organisation accomplish its goals by introducing an orderly, efficient method to assess and enhance the efficacy of risk assessment and control process. Internal audit practice is an independent and objective appraisal activity established within an entity to examine and evaluate its operations as a service to the organization (Subramaniam, 2006). Its aim is to assure management that the internal controls are adequate and operating satisfactorily (Reid & Ashelby, 2002).

Duffy, Fitzsimmons and Jain (2006) define organisational performance as the organisations capability to achieve its goals by means of resources effectively and efficiently. Performance of organizations is measured by outcomes achieved and determinants of that performance by assessing the efficiency with which that performance is achieved (Bethan et al, 2004). It is the extent to which a company achieves a set of pre- determined targets that are unique to its mission. Explaining and often predicting firm performance is a primary study objective of most management study. Organizational efficiency is a recurrent theme in most branches of management (Venkatramann and Ramanujam, 1981). Explaining and often predicting organizational performance is a primary research objective of most management research (March and Sutton, 1997). It has however become a contentious subject among organizational researchers (Barney, 1997) and continues to attract considerable contest in terms of measurement and definition (Keats & Hitt, 1985). The problems of measurement of performance arise from its multifaceted and multidimensional nature (Ongeti, 2014).

## LITERATURE PREVIEW

### Theoretical Review

Several theories explain the association between internal audit and efficiency of firm. This study is underpinned on the following theories: agency theory (Adams, 1974), monitoring theory (Wallace, 1980), and policeman theory (Adams, 1974). Jensen and Meckling (1976) developed the agency theory framework that explains the association between the principal and the agent; where one part (principal) delegate tasks to another (agent). Watts and Zimmerman (1986) posit that the audit serves the interests of both shareholders as well as the management. While the shareholders own the firm, the management (agent) exercises the control of that firm. If shareholders and management each seek to maximize their utility, the agent may possibly prioritize own interests to the detriment of those of the principal. The monitoring theory explains that employees are rational, risk-averse and are selfish actors who are motivated by self-interest (Beaver, 1989). Monitoring theory posits that when the agent accepts to work on behalf of the principal, the agent is well aware that he will be monitored to ensure optimum efficiency. Wallace (1987) and Beaver (1989) explained that the monitoring theory aims to reduce problems of moral hazard and information asymmetry between the principal and the agent. The policeman theory asserts that internal auditing is responsible for searching, detecting and preventing fraud. It focuses on a designed internal audit to safeguard the assets of companies and assist in verification of accounting information for decision making purpose (Van Peursen, 2005). However, the policeman theory cannot clarify the change of auditing to confirmation of the true and fair financial statements which is currently the main focus of internal audit as it gives reassurance to management on those statements. Nevertheless, the policeman theory contributes to the study due to its advocacy of

safeguarding the public company's assets and ensuring accountability on the part of managers of public institutions (Morgan, 1979).

### **Empirical Review**

According to Subramaniam and Cooper (2013), test on the influence of internal audit on financial reporting in Malaysian companies using a regression analysis approach. The study findings pointed to a positive relationship between internal audit quality and irregular accruals inferring that some internal audit qualities have an important part in the financial reporting process. Though the study is a contribution to regulatory reforms with Board of directors moderating the observed relationship, the study considered the quality of financial reports and not the levels of firm financial performance as influenced by internal audit quality.

The study by Aldamen, Duncan, Kelly, McNamara, Nagel (2012) on investigating whether Board Audit committee (AC) characteristics controls the performance of firms during adverse economic downturn event such as Global Financial crisis, that used the logit regression tests to analyze the data on audit committees and the Board of directors. The findings were that smaller audit committees with more experience and financial expertise enhance firm performance. Longer serving chairs of audit committees were however found to negatively influence financial performance of firms but have positive impact where the chair of the board and other members of the Board are independent and have many years of managerial experience. Corporate governance improves audit committee character that positively affect performance especially during adverse economic shocks like the global financial crisis revealed that performance is negatively related with the number of audit committee members.

Cohen and Sayag (2010) studied the efficacy of internal audit using descriptive analysis design by researching on the following variables: industry of the firm; expertise of internal auditors; worth of audit work; independence; training and top management support. Top administration support was seen to be the major determinant of internal audit effectiveness for enhancing performance of hotels in Israel.

A cross sectional survey on 108 Israel firms that employ internal audit to determine the perceptions on internal audit function, effectiveness and determinants of internal audit effectiveness in an organisation was done by Dominic and Nonna (2011). Data on the effectiveness of internal audit were derived from the managers as respondents and data on what determines effectiveness of internal audit from the internal auditors. The results were that effectiveness of internal audit is determined to a large extent by firm organisational structure, the status and relationship of internal audit works, staffing level of internal audit department and the competencies of staff in that department. An investigation on internal audit position in the firm's organisation chart and how it enhances the audit independence and its effects on audit role in promotion of corporate structures was carried out by Sarens and Beelde (2006). The survey of Chief Audit executives in European companies used multivariate regression analysis. The findings were that, the internal audit has a wide scope, free access to information, adequate resources to monitor various company decisions and adequately advice managers, provide oversight and ensure own independence and objectivity to promote corporate governance and firm efficiency.

Van Peursen's (2005) study on how internal audit deals with the conflict of interest between the double roles of consulting and assurance service provision to management. The survey of internal Auditors in Israel hotels found out that there is tension in maintaining the two roles leading to a mix up of roles which hinders internal audit effectiveness. There are both conceptual and contextual gaps. No consideration was given to internal controls, firm

characteristics of WSPs in Kenya and further no relationship between internal audit and firm performance was evaluated.

In the light of the foregoing, this research tested the null hypothesis below:

**H<sub>01</sub>:** The influence of internal audit on performance of water service providers in Kenya is not significant.

## RESEARCH METHODOLOGY

### Research Design

A cross-sectional survey was used in this study. The design was appropriate since it included data collection at a point in time which relates to two or more variables in an effort to determine associations between the variables. A survey was suited for the study because WSPs in Kenya are few but spread to all parts of the country.

### Population of the Study

The population of the study was 93 water service providers in Kenya which were regulated by WASREB as at 2015. Population census was best for the research as the WSPs are few and although spread in the entire country, Kenya, data collection costs were minimal as the respondents were within reach at WASPA monthly meetings and the secondary data was readily accessible from WASREB impact assessment reports. This context was chosen because there was a prevalent manifestation of the variables in this study as alluded to by the literature reviewed (WASREB, 2014).

### Data Collection Instrument

The study used both primary and secondary data. Primary data was obtained by self-administered, pre arranged questionnaire made up of closed ended questions prepared in line with the goals, theories upon which the study was anchored, empirical studies and corresponding hypotheses of the study. Study assistants were recruited and trained. The data collection instruments were delivered to the Chief Executive Officer who was considered as best placed to have the required information. According to Newbert (2008), one respondent who is knowledgeable on matters regarding a study is well placed to be a key informant. Secondary data on performance of WSPs was collected for the period 2011 to 2015 from WASREB impact assessment reports. An average of that data for the five years showing the performance of each WSP was computed and analyzed. The primary data collected on internal audit, institutional characteristics and internal controls was regressed on performance of the WSP to establish the linkages.

### Data Analysis

Data collected was cleaned and edited to ensure it was complete. It was then coded and entered into the statistical package for social sciences (SPSS) software version 21 and analysed through descriptive and inferential statistics. Linear regression models were used to evaluate the association between variables as hypothesized in the study at 5% level of significance.

### Empirical Model

The objective was to establish the association between internal audit and performance of water service providers in Kenya. The dependent- independent variables relationship is modelled as:

$$P = a + \beta_1 X_1 + \varepsilon$$

Where:

P= Performance

$\beta_1$  is beta coefficient

$a$ = intercept

$\varepsilon$ = Error term

$X_1$ = internal audit (composite)

## RESULTS AND DISCUSSION

### Response Rate

A total of 93 questionnaires were circulated to the 93 WSPs that were the target population for the study. A total of 73 questionnaires were correctly filled and returned. This represented a response rate of 78%. According to Borg (2007) a response rate of 50 percent in a survey is adequate. The response rate of 78% was considered adequate as it was above the benchmark of 50 percent. This implied that the findings of this study were representative of the overall population.

### Descriptive Analysis for Internal Audit

The researcher sought to carry out three types of analysis on internal audit. The pertinent results are presented below.

**Table 1: Descriptive Statistics on Oversighting Internal Audit**

	N	Mean	Std. Deviation	Coefficient of Variation
1. The policies and practices developed by the internal audit for risk management are approved by the audit board	73	3.758	1.313	35%
2. The audit board approves audit program before its forwarded to the board for implementation	73	3.773	1.310	35%
3. The audit boards review performance of internal auditors	73	3.652	1.295	35%
4. The auditboard meets with internal auditors and management on a regular basis to discuss issues of concern that may arise	73	3.485	1.438	41%
5. The audit board establishes procedures for accepting confidential information like whistle blowing	73	2.742	1.481	54%
6. Audit committee reports to the board of Directors regularly	73	4.283	1.133	26%

**Source: Author (2018)**

The results in table 1, indicates that internal audit is over sighted by other board organs to a large extent. Regular reports to the board by internal audit (Mean = 4.283, SD = 1.133), Audit committee approval of audit report before it is forwarded to the board (Mean = 3.773, SD = 1.310) and Audit board reviews performance of internal auditors (Mean = 3.652, SD = 1.259). On procedures established by the board, the variation was high above the average (C.V=54%) while there was a less variability on audit committee reporting to the board regularly at 26%.

### Provision of Resources to Internal Audit Function

The researcher computed descriptive statistics on the aspect of provision of resources to the internal audit function. Table 2 below shows the results of this analysis.

**Table 2: Descriptive Statistics on Provision of Resources**

	N	Mean	Std. Deviation	Coefficient of Variation
1. The audit board approves the budget of internal audit department	73	3.576	1.313	37%
2. The audit board determines compensation and benefits of chief internal auditor	73	2.813	1.271	45%
3. The audit board ensures the internal audit function has audit resources	73	3.554	1.118	31%

**Source: Author (2018)**

As indicated by the likert scale item responses in Table 2, the respondents indicate that to a moderate extent, the audit board determines compensation and benefits of the chief internal auditor (Mean = 2.813, SD = 1.271). Two likert item responses show that to a large extent, audit board approves budget of internal audit department (Mean = 3.576, SD = 1.313) and the audit board ensures that the internal audit function has resources (Mean = 3.554, SD = 1.118). On determining compensation and benefits of chief internal auditor by audit board the variation stood at 45% while audit board ensuring the internal audit function has audit resources was at 31%.

### Competency of Chief Internal Auditor

The study envisaged to establish the competency of chief internal auditor and got the results presented in Table 3

**Table 3: Descriptive Statistics on Competency of Chief Internal Auditor**

	N	Mean	Std. Deviation	Coefficient of Variation
1. The audit board is responsible for making sure competent chief internal auditor is hired	73	3.631	1.257	37%
2. The audit board monitors training needs of audit staff	73	3.159	1.221	39%
3. The audit board assesses the performance of the chief internal auditor regularly	73	3.516	1.297	37%

**Source: Author (2018)**

As presented in table 3 above, the respondents indicate that to a moderate extent, the audit board monitors training needs of audit staff (Mean = 3.159, SD = 1.221) and to a large extent, the audit board ensures competence in hiring the chief internal auditor (Mean = 3.631, SD = 1.257) and audit board assess performance of chief internal auditor regularly (Mean = 3.516, SD = 1.297). On Competency of Chief Internal Auditor the range on variability was between 37% and 39%, hence the audit board monitoring training needs of audit staff had the highest variability.

### Individual Sub- Variable Descriptive Statistics

The study collected primary data on specific internal audit attributes and internal control mechanisms among the identified water service providers. These internal audit attributes included; assurance services, compliance policies, consulting management, independence and objectivity. The internal control mechanisms included; segregation of duties, IT controls, human resources controls and operating procedures. The descriptive statistics of the responses to the specific questions based on a survey of 93 WSPS with N being 73 WSPs are indicated in tables 4 to 6 below.

## Assurance Services

The researcher carried a study on assurance services and obtained the results below.

**Table 4: Descriptive Statistics on Assurance Services**

	N	Mean	Std. Deviation	Coefficient of Variation
1. Internal audit is keen to provide comprehensive information on operations of the company	73	3.569	1.104	31%
2. Audit reports are accepted by management without further queries	73	3.258	.991	30%
3. Audit report contain status of previous reports	73	3.413	1.303	38%
4. The internal auditor review performance of internal control and gives recommendations	73	3.694	1.125	30%
5. Internal audit analyses and evaluates internal control mechanisms used to detect and deter fraud, evaluate the company's management of risk of fraud, requiring to be included in fraud investigations	73	3.794	1.180	31%
6. Internal auditor discusses reasonableness of audit reports with management	73	3.594	1.205	34%

Source: Author (2018)

Four likert item responses by the respondents (CEO) on assurance services all rated to a large extent. As presented in Table 5 above, Assisting management with analysis of internal controls for fraud detection (Mean = 3.794, SD = 1.180), review of performance of internal audit operations (Mean = 3.694, SD = 1.125), discussion of internal audit reports with management (Mean = 3.594, SD = 1.205) and provision of comprehensive information on organisational procedures (Mean = 3.569, SD = 1.104) are internal audit practices existent to a large extent in the companies. Two of the likert responses indicate that provision of previous status reports (Mean = 3.413, SD = 1.303) and management acceptance of reports without further queries (Mean = 3.258, SD = 0.991) are experienced by the respondents to a moderate extent. On assurance services the item on whether audit reports contain status of previous reports had the highest variability at 38%.

## Compliance to Policies

Descriptive analysis on compliance policies was conducted and yielded the following results.

**Table 5: Descriptive Statistics on Compliance Policies**

	N	Mean	Std. Deviation	Coefficients of Variation
1 The chief internal auditor is keen on safeguarding adherence to policies and procedures	73	3.641	1.213	33%
2 Audit plan is regularly reviewed to ensure compliance with IIA standards of reporting	73	3.286	1.224	37%
3 The chief internal auditor continuously review the operating procedures and gives recommendations	73	3.500	1.234	35%
4 The internal audit assesss the performance of policy implementation in the company	73	3.460	1.105	32%

Source: Author (2018)

As presented in Table 6, two likert item responses indicated that the chief internal auditor safeguards adherence to policies and procedures (Mean = 3.641, SD = 1.213) and continuously

reviews operating procedures and gives recommendations (Mean = 3.500, SD = 1.234) to a large extent

Two likert item responses indicate that to a moderate extent, the internal audit assesses performance of policy implementation in the company (Mean = 3.460, SD = 1.105) and audit plan is regularly reviewed to ensure compliance with international reporting standards (Mean = 3.286, SD = 1.224). On compliance policies the item that, audit plan is regularly reviewed to ensure compliance with IIA standards of reporting, had the highest variability.

### Consulting Management

The researcher conducted a study on the impact of consulting management on matters pertaining internal audit.

**Table 6: Descriptive Statistics on Consulting Management**

	N	Mean	Std. Deviation	Coefficients of Variation
1 The chief internal auditor is constantly consulted on best practices of financial management	73	3.031	1.168	39%
2 The chief internal auditor is proactive in initiating measures that curb frauds, and reduce potential waste in resources	73	3.344	1.185	35%
3 The chief internal auditor provides insights that focus on areas of enhanced performance	73	3.672	1.222	33%
4 The management implement proactively internal auditors recommendations	73	3.594	1.065	30%
5 The management constantly consults internal auditors on risk management strategies	73	3.172	1.203	38%

**Source: Author (2018)**

Table 6 indicates that to a large extent, internal audit provides insights that focus on areas of performance (Mean = 3.672, SD= 1.222) and management proactively implements internal auditors recommendations (Mean = 3.594, SD= 1.065). From three likert item responses in the table above, internal audit to a moderate extent proactively initiates measures to curb frauds and reduce potential waste in resources (Mean = 3.344, SD = 1.185), are constantly consulted by management on risk management strategies (Mean = 3.172, SD = 1.203) and are constantly consulted on best practices of financial management (Mean = 3.031, SD = 1.168). The item on whether the chief internal auditor constantly consults on best practices of financial management had the highest variability at 39% while on whether management implement proactive internal audit recommendations had the smallest variability of 30%.

### Independence

The study aimed at establishing the independence of internal auditor.



**Table 7: Descriptive Statistics on Independence**

	N	Mean	Std. Deviation	Coefficients of Variation
1 The head of internal audit reports functionally to the audit board and administratively to the chief executive officer	73	4.333	1.188	27%
2 The boards through the audit board approves the internal audit budget	73	3.742	1.267	34%
3 The boards through the audit board approves the budget plan and reviews audit plan	73	3.594	1.306	36%
4 The internal auditor determines the scope of auditing, and communicating results independently	73	3.862	1.171	30%
5 Audit board reviews the annual progress of the audit activities in relation to the audit plan	73	3.466	1.341	39%
6 internal audit function has been funded in away that promotes objectivity and consistency in quality of its delivery	73	3.463	1.206	35%

Source: Author (2018)

Table 7 presents four likert responses where respondents indicate to a large extent that the head of internal audit reports functionally to audit board committee and administratively to the CEO (Mean = 4.333, SD = 1.188), the internal auditor is free from interference in scoping work and communicating results (Mean = 3.862, SD = 1.171), the board through the audit board approves the internal audit budget (Mean = 3.742, SD = 1.267) and the boards through the audit board approves resource plan and reviews audit plans (Mean = 3.594, SD = 1.306). The respondents indicate that to a moderate extent, audit board reviews annual progress of audit activities in relation to audit plan (Mean = 3.466, SD = 1.341) and internal audit function has been funded in a way that promotes objectivity and consistency (Mean = 3.463, SD = 1.206). On Independence, on whether audit board reviews the annual progress of the audit activities in relation to the audit plan had the highest variability of 39% while on assessing whether the head of internal audit reports functionally to the audit board committee and administratively to the CEO had smallest variability of 30%.

### Objectivity

The researcher sought to find out whether there is objectivity in practice by the internal auditor.

**Table 8: Descriptive Statistics on Objectivity**

	N	Mean	Std. Deviation	Coefficients of Variation
1. The remuneration and terms of service for chief internal auditor are approved by the audit board	73	3.215	1.484	46%
2. The internal auditor is prohibited from auditing works which he has executed	73	3.322	1.559	47%
3. The chief internal auditor has direct access to all firm information without restrictions	73	4.062	1.309	32%
4. The chief internal auditor cannot review the operations conducted by a relative	73	3.422	1.434	42%

Source: Author (2018)

As presented in Table 8, the interviewees indicated that to a large extent, the internal auditor has direct access to all firm information without restrictions (Mean = 4.062, SD = 1.309). The respondents indicate that to a moderate extent, chief internal auditor can not review the

procedures conducted by a relative (Mean = 3.422, SD = 1.434), internal auditor is prohibited from auditing works he has executed (Mean = 3.322, SD = 1.559) and remuneration and terms of service for chief internal auditor are approved by the audit committee (Mean = 3.215, SD = 1.484). A high variability 47% was noted on whether the internal auditor is prohibited from auditing works which he has executed a low variability of 32% was noted on whether the chief internal auditor has direct access to all firm information without restrictions.

### Performance of Water Service Providers

The researcher examined the performance of WSPs in Kenya using DEA model with output/input relationship. Data envelop analysis which a non-parametric technique is assigned a performance score ranging from 0 to 1 to the decision making units.

**Table 13: Performance of the WSPs in Kenya**

Range/Statistic	Frequency	Value
0.0 to 0.3	4	5.5%
0.31 to 0.6	12	16.4%
0.61 to 0.9	41	56.2%
0.91 and above	16	21.9%
Total number of WSPs	73	100%
Arithmetic Mean		0.7259
Standard Deviation		0.2069
Maximum		1.0000
Minimum		0.1493

**Source: Author (2018)**

Table 13 shows the outputs used as: Water coverage, Revenue collection performance; Staff performance; Metering ratio; Non Revenue Water; Revenue turnover; and Number of hours of Water supply while the Inputs used were Personnel costs, Operating and Maintenance costs.

The observation is shown in Table 13 above. Fifty six percent (56%) of the WSPs had performance of between .61 and 0.9 which is above average. Sixteen percent of the WSPs have between .31 and .60 performance which is moderate. The highest performance was 1.0 and the lowest was 0.15. The DEA performance is captured in Appendix V.

## HYPOTHESES TESTING AND DISCUSSION OF FINDINGS

### Influence of Internal Audit on Organisational Performance

The first specific goal of the study was to determine the effect of internal audit on performance of Water Service Providers in Kenya. The study postulated that the relationship between performance and internal audit attributes namely; assurance services, compliance policies, consulting management, independence and objectivity were not significant. Organisational performance was measured through the performance ratio of each water service provider. Simple regression analysis was used to assess if there is linear relationship between the internal audit (independent variables: assurance services, compliance policies, consulting, independence and objectivity) and whether they predicted performance ratio (dependent variables) of the water service providers of Kenya.

**Hypothesis:** The influence of internal audit on performance of water service providers in Kenya is not significant.

The prediction equation was given as:  $P = a + \beta_1 X_1 + \varepsilon$

Where: P= Performance

$\beta_1$  is beta coefficient

a= intercept

$\varepsilon$ = Error term

$X_1$ = internal audit (composite)

The result of the regression model are given in Tables 5.1, 5.2 and 5.3.

### Goodness of Fit

Determination of the influence of internal audit on performance of Water Service Providers was conducted and obtained results in Table 15

**Table 15: Model Goodness of Fit of Internal Audit Practices and Performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.336 <sup>a</sup>	.113	.101	.17739

Source: Author (2018)

The regression results in Table 15 shows an adjusted  $R^2 = 0.101$ ,  $F(1,72) = 9.047$ ,  $p < 0.05$ . The outcome of the regression analysis in Table 15 shows that 10.1% of variations in organisational performance is explained by variations in internal audit amongst the WSPs while 89.9% is accounted for by other factors outside the study. The relationship is statistically significant ( $p < 0.05$ ) and thus we reject the null hypothesis and accept the alternative hypothesis. This shows that internal audit influences performance of water service providers in Kenya.

### ANOVA

Table 16 tested the goodness of fit of the model by interpreting the p-value as well as the beta coefficients.

**Table 16: Model Overall Significance of Internal Audit Practices and Organisational Performance**

	Sum of Squares	df	Mean Square	F	p-value.
Regression	.285	1	.285	9.047	.004 <sup>b</sup>
Residual	2.234	71	.031		
Total	2.519	72			

Source: Author (2018)

As presented in table 17, the regression model one shows a statistically significant positive relationship between internal audit and organisational performance ( $\beta = 0.336$ ,  $t = 3.008$ ,  $p < 0.05$ ) implying that for every unit increase in internal audit, there is an expected increase in performance that proxy organisational performance by 0.336 units.

**Table 17: Model Regression Coefficients of Internal Audit Practices and Organisational Performance**

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.385	.076		5.070	.000
	Internal audit practices	.336	.021	.336	3.008	.004

Source: Author (2018)

Based on the results of the regression analysis which shows a statistically significant positive association between internal audit and organisational performance, the study concluded that there is a significant relationship between internal audit and performance of water service providers in Kenya resulting to the rejection of hypothesis one ( $H_1$ ). This finding is consistent with earlier findings by Donaldson and David (1991), Serems and Bebedde (2006), Cohen and Sayag (2010) which confirmed that existence of internal audit in organisations influence their performance.

### **CONCLUSIONS AND RECOMMENDATIONS**

This study set out to examine the relationships between internal audit and performance of water service providers in Kenya. The study was anchored on Monitoring, Agency and Policeman theories. Primary and secondary data were collected from the Water service providers in Kenya. Out of 93 questionnaires issued to the respondents, 73 (78%) respondents filled and the data collected used for the analysis. Simple regression analysis results led to rejection of the hypothesis and concluded that internal audit significantly influence firm performance. Therefore, for improved performance of the WSPs, the firm managers and directors should ensure existence of sound internal audit practices including; assurance services, compliance policies, consulting management, independence and objectivity. There should also be an audit committee that oversee internal audit, provides resources and ensures competency of the chief internal auditor.

### **SUGGESTIONS FOR FURTHER STUDY**

This study collected and analysed secondary data covering five years only with respect to performance. Primary data was collected using a five point Likert type scale. There is need to extend this study over a longer period of time to allow for random effects influence of internal audit on firm performance. Future studies may use both open ended and closed ended questionnaire or use any other methods to collect primary data rather than relying on five point likert type scale.

Further studies should model other forms of relationships between the study variables including curvilinear relationships and dual causality relationships as well as introducing other characteristic variables to the study model. Third, a focus on a different organisational setting is also recommended to bring out the differential effect of internal audit on firm performance.

It is necessary and core to enquire into the existence of internal audit practices across time and across industrial settings other than public companies and how this affects the overall firm performance. Fourth, the study focused on public WSPs under the assumption that private WSPs perform better and have sound internal audit practices and internal controls. It may be necessary to carry out a study comparing the performance of Public sector and Private sector WSPs.

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