
**EFFECT OF CONTROL ENVIRONMENT AND CONTROL ACTIVITIES
INTERNAL CONTROL SYSTEM ON MANAGEMENT OF LOCAL REVENUE BY
COUNTY GOVERNMENTS OF KENYA**

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ABSTRACT

An adequate and effective internal control system is necessary for better organizational performance. Studies show that an effective internal control mechanism prevents and detects fraud which then enables management to take necessary steps to remedy the situation. This study attempted to examine the effect of internal control systems on the management of local revenue by the county governments of Kenya. The study was guided by the COSO (1992) integrated framework. The two components of the internal control system framework included in the study were the control environment and control activities. Statistical data was collected by a COSO questionnaire that was adapted for use in public entities. The County Chief Officers for finance from all counties provided information on the adequacy and effectiveness of their internal controls respectively. Data was processed and analyzed using descriptive statistics such as frequencies, percentages, mean and standard deviation and inferentially using correlation and regression analysis to describe characteristics and show relationships that predict effective management of revenue in county governments. The hypotheses were tested statistically at the 0.05 level of significance. There was a significant positive relationship between the internal control environment and the management of local revenue. There was also a significant positive relationship between internal control activities and the management of local revenue. The county governments should also ensure that their organizations have a strong internal control environment where internal control activities inform policies and procedures that are adequate.

Keywords: *Control Environment, Control Activities, Management of Local Revenue, County Governments*

INTRODUCTION

Organizations around the world face operational risks that may hinder the achievement of their financial and non-financial objectives. Effective management of an entity's resources may not be possible without a deliberate control system to direct decisions and activities towards a desired goal. Studies among them by Gupta, (2006) and Muthusi, (2017) have documented that in the absence of a contemporary internal control system, local government units are vulnerable to wastage, fraud and misuse of available resources. Increasing fraud and misappropriation of company assets have consequently been linked to agency conflict where

the agent (manager) pursues interests that are different from the principals' (shareholders') interest. Agency theory is rooted in economic theory posited by Alchian and Demsetz (1972) and expounded by Jensen and Meckling (1976). Inherent in this theory is that the principal and agency have different attitude towards risk. This leads to conflict between agents and principals and associated costs of monitoring the activities of the agent.

An internal control system is the instrument through which the management aims to acquire reasonable certainty of the existence of appropriate measures to protect company property and related accounting records (Messier, 2000). The internal control system should therefore help the company towards its goals and to pursue its mission, minimizing the risks associated with the rapidly changing economic, political, and social context, and minimizing the risks connected to the possible unreliability of the enterprise operating systems that are responsible for the daily strategies and management implementation.

Since the wave of cooperate failures in the 1980s in America and Europe, increasing interest in controlling activities and quality of information shared with the public have gained currency. This led to the development of international control frameworks like the committee of sponsoring organizations of the tread-way commission (COSO, 1992). The risk control framework was to be followed by corporate managers and internal auditors to reduce fraud in financial reporting which resulted in corporate scandals (Enron, WorldCom, Tyco International in the United States and Maxwell Communications, Bank of Credit and Commerce International in Europe). These accounting scandals were widely publicized in 1990's and early 2000's. Regulators then instituted additional controls to restore public confidence in financial markets (VanHorne & Dhamija, 2012) where congress passed Sarbanes-Oxley Act (2002) which emphasized effective internal control system, monitoring and reporting. The Act enforces measures to ensure independence of auditors, enhances financial disclosures, improved internal controls and procedures and accountability of top management to the information contained in the financial reports. Internal control weaknesses were blamed for much of corporate failures, fraud and mismanagement of assets, particularly with regard to financial reporting. Companies including Enron, Tyco International, world com and global crossing are some of the companies, whose values plummeted, thus shattering investor confidence (Elmady & Thirivadi, 2014).

Internal control involves interventions that managers and auditors undertake to control risk in organisations. The framework applies to both public and private organisations although the goals may differ with non-profit organisations in the public sector like county governments which are devolved units responsible for managing local resources to ensure achievement of development needs of its people. Control activities designed into organizational structure and authority continues to be challenged by certain emerging management techniques. For instance, management style that empower employees require a change in the control philosophy and process (Simon 1995). Particularly, it would be unreasonable to empower staff to make decisions and still expect them to obtain prior authorization. In addition, organizational structures that are flatter and in technologically innovative organizations, result in fewer middle manager who are gatekeepers of control (Noorve, 2016).

The COSO (1992) internal control framework is described by five elements namely control environment, risk assessment, control activities, information, and communication and monitoring. Prudent financial management of public sector organisations is important for the achievement of public good (Prowle, 2010). Pramod's (2004) study on challenges of tax collection in developing economies, with specific reference to India found out that predominance of cash transactions without trail make governments loose much needed

revenue. He emphasized on the need for strong internal control systems if governments have to realize tangible outcomes for their citizens.

In assessing factors affecting revenue management in the public sector, Tiwari (2017) established that inadequate operational procedures and lack of full automation contributed to loss of revenue in Halaba Special Worada Town Administration Ethiopia. The level of development (human and infrastructural) and the rate of financial misappropriation are determinants to the revenue base of any local government (Dada, Adebayo & Adeduro, 2017). The researchers in their study recommended that local government authorities should ensure a carrot and stick approach whereby members of staff are rewarded on performance and strictly punished for perpetrating financial misappropriation. Tabuza (2013) in carrying out an evaluation of local revenue collection performance and service delivery in local governments in Kaliro district Uganda found out that the level of revenue collection has a positive significant effect on the services delivered to the community. She observed that weak internal control systems contributed to the pilferage of revenue.

The constitution of Kenya (2010) elaborates the need for prudent financial management in the public sector (Chapter 12). This entails proper and accountable use of public money at all levels of governance. This requirement motivates the study to determine the effect of internal control system on effective management of revenue in the county governments of Kenya. Local revenue collection by counties was noted to be low at about 24 percent against an expected target of 50 percent for the first half of FY 2015-2016. The counties collected Kshs 13.92 billion against expected collection of Kshs 28 billion for half-year performance. The revenue therefore could not finance many budgeted activities while pending bills continued to pile up according to the budget implementation review report for the first half of the FY 2015-2016. Local revenue collection was thus poor due to weaknesses in the internal controls that would have resulted in leakages or weak implementation strategies. Thus, the study is a status review of progress made (if any) regarding the improvement of the effect of internal control system on revenue management anchored on the COSO (1992) framework.

Statement of the Problem

The Constitution of Kenya (2010) created 47 county governments and one national government. The purpose of the new structure of government was to make governance more accountable and transparent, responsive and effective to the citizens of Kenya. Since 2013, the national government has been sharing revenues with county governments as stipulated in the constitution and together with locally generated revenue, county governments are expected to finance their budgets and achieve set goals. However, reports by the Auditor General and the office of the controller of budget captured by the budget implementation review for the first half of the financial year 2015/2016, indicate that administration of county funds is fraught with internal control weaknesses which result in failure to meet revenue collection targets and unplanned spending. Revenue collection, spending and banking activities have continued to violate Public Finance Management Act. Many devolved units continue to report less than expected revenue collection at less than 50% performance compared to performance before the inception of county governments.

The reports indicate that among the challenges county governments face are revenues spent at source, poor monitoring of development projects, poor accounting for conditional grants and road levies and dysfunctional internal audit and committee activity. These issues are connected to the internal control systems operating in the devolved units. When organizational systems, procedures and programs for controlling and managing resources are weak or non-existent, then fraud, pilferage, misappropriation and wastage of funds become

more common. It is claimed that some public servants at whatever level are tempted to be corrupt in systems where they think measures of accountability and transparency are deemed insufficient to deter such behaviour or opportunities for collusion provide incentives for dishonesty (Muthusi, 2017).

Lack of effective revenue management has been attributed to absence or weak internal control systems. It is not clear however which aspects of these systems are the main contributors of the prevailing poor management of county resources and hence this study. Research done in this area among them by Crutchley et al. (2007), Mwachiro (2013), and Nyaata (2017) using COSO, (1992) internal control framework all indicate that each of the aspects contributes variously to ineffective revenue management. What remains unclear is which of these components are significantly contributing to the state of affairs among the County Governments of Kenya, hence the need to conduct this study.

Objectives

- i. To determine the effect of control environment on management of local revenue by county governments of Kenya
- ii. To establish the effect of control activities on management of local revenue by county governments of Kenya.

Hypotheses for Study

H_01 : Control environment has no significant effect on management of local revenues by county governments of Kenya.

H_02 : Control activities has no significant effect on management of local revenues by county government of Kenya.

Theoretical Review

Agency Theory

Agency theory has been widely used in literature to investigate the information asymmetry between principals (shareholders) and agent (management). This study will use the agency theory to determine the effect of effective internal control systems on the financial management of local revenues of county governments of Kenya. Sarens and Abdolmohammadi (2011) state that according to the agency theory, a company consists of a set of linked contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling these resources. A significant body of work has been undertaken in this area within the context of the principal-agent framework. The work of Jensen and Meckling (1976) in particular as well as that of Fama (1980) is important. Agency theory identifies the agency relationship where one party, the principal, delegates work to another party, the agent.

The agency relationship can have a number of disadvantages relating to the opportunism or self-interest of the agent: For example, the agent may not act in the best interests of the principal, or the agent may act only partially in the best interests of the principal. There can be several dimensions to this including for example, the agent misusing their power for pecuniary or other advantage, or the agent not taking appropriate risks in pursuance of the principal's interests because he (the agent) views those risks as not being appropriate while on the other hand the principal may have different attitudes to risks. There is also the problem of information asymmetry whereby the principal and the agent have access to different levels of information; in practice this means that the principal is at a disadvantage because the agent has more information (Jensen & Meckling (1976). The theory was therefore very relevant in this study as shareholders who are the citizens of the counties have delegated the

responsibilities of daily running of the Counties to the county management who acts as their agents and hence great need for strong internal control systems to ensure shareholders and other stakeholder’s interests are adequately safeguarded.

Institutional Theory

Institutions are social structures that have attained a high degree of resilience. They are composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life. Institutions are transmitted by various types of carriers, including symbolic systems, relational systems, routines and artefacts. Institutions operate at different levels of jurisdiction, from the world system to localized interpersonal relationships. Institutions by definition connote stability but are subject to change processes, both incremental and discontinuous. Institutional and neo-institutional theory suggests that adoption of organizational practices and environmental alignment is an institutional process subject to the effect of three pressures or forces – coercive, mimetic and normative. This theory further suggests that these forces can encourage organizations to adopt similar strategic actions thereby leading to organizational homogeneity (Adebanjo, Ojadi, Laosirihongthong & Tickle, 2013).

The interests of shareholders have been strengthened over time, especially through efforts by the government and professional bodies. More specifically, there has been increased pressure on management to ensure that an organization is governed efficiently, effectively and economically for the benefit of shareholders. Much of this pressure has been a result of social expectations in response to recent corporate scandals (Christopher, Sarens & Leung, 2009). This study draws on institutional theory, which essentially points out that organizational management and control structures tend to conform to social expectations. The theory, therefore, advances argument for enhanced corporate governance in management of organizations resources.

Conceptual Framework

A conceptual framework illustrates the relationships between study variables. The framework helps to conceptualize the problem and therefore direct researcher to the tools and approach to use in the investigation. The study adapted part of COSO (1992) internal control integrated framework since it has been widely used in studying internal control weaknesses in many organizations both public and private. Independent variables are control activities and control environment. The dependent variable is management of local revenue by the county governments. Figure 1 presents the conceptual framework.

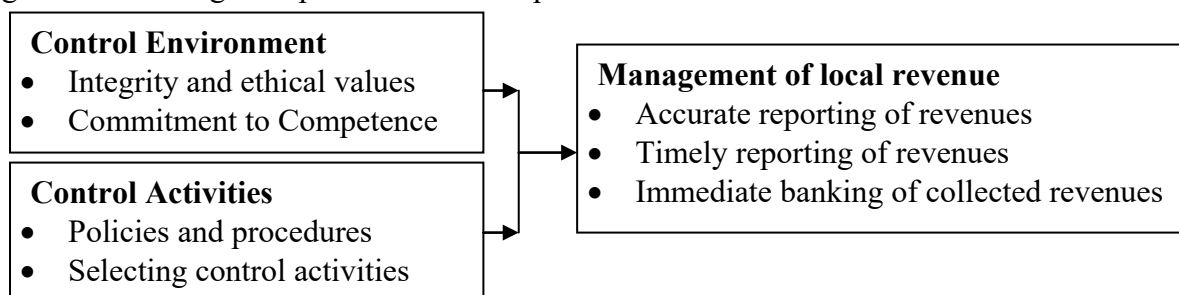


Figure 1: Conceptual framework.

Empirical Review

This component sets the ‘tone at the top’ (Cohen, 2002) influencing the control consciousness of its people. Management and directors of the company should set an example for other cadres of staff. The internal control environment is argued to provide discipline and structure

(Noove, 2016), controlling consciousness of the people (Whittington & Pany, 2001) for other control mechanism to thrive. Many of the cooperate finance failures reported since the 1980s were linked to weakness at the tone at the top. COSO (1994) posit control environment having a pervasive influence on risk assessment, control activities, information and communication system and monitoring activities. The same environment determines the nature of objectives formulated and is broad enough to capture more concepts in risk management. The control environment has been defined as operational of organizational culture (Hook et al., 1994) and is also referred to as control philosophy that influences the motivation and behaviour of employees.

Rittenberg et al. (2005) explained the control environment as starting with the board of directors and management setting the tone through policies, behaviour and effective governance. He argues that a lax tone from management encourage fraudulent financial reporting with many cases involving top management. Elements of an effective control environment include integrity and ethical values (COSO, 1994) and which affect the design, administration & monitoring of other internal control components. It is important that outside monitoring of activities inside an organization be undertaken to ensure effectiveness of internal control mechanism. This however applies to pubic organizations who intend to seek external capital or is already financed by external capital. County leadership depends on revenue collected from county residents. If there is lax from top management, less revenue will be reported and thus collected inhibiting the county's ability to meet its financial objectives. However, small entities that are owned and managed by the owner may not find it necessary to involve extended supervision.

Noorve (2006) posits control activities as related to already defined objectives and risk. It is defined by an entities procedure or practice and easily measured. The component is described as policies and procedures that help ensure necessary action are taken to address risk in an organization (Wainaina, 2011). Implied activities include segregation of duties, proper authorization, proper documentation and record, physical control over assets and record and independent checks on performance. Control activities according to Noorve (2006) occur at all levels in the organization and in all functions. Reid and Asheley (2002) contend internal control effectiveness will be met when the manager designs a reasonable assurance that can achieve company goals and objectives. Control activities is also explained to provide adequate information for auditors' examination of the overall adequacy of control design over financial management practices (Aikins, 2011).

In public organizations like county governments, control activities, procedure and practices are meant to protect and preserve public assets both real and financial. The county government take custody of various movable and immovable assets inherited from previous administrations. These may be buildings, furniture, vehicles, office equipment and other equipment etc. The assets ought to be preserved under appropriate laws and regulations by auditing and recording every item. Movements of assets should be monitored and accounted for by users and supervisors. There has been increased incidence of losses associated with theft of county facilities sometimes perpetrated by senior county staff. A recent case of a governor carting away a power generator belonging to the county government in the previous administration points to weakness in internal control leading to such theft. Other cases reported are disappearing vehicles, computers, files containing important information, among others. Then it becomes more critical to institute sufficient control measures in the devolved units to safeguard county assets. Beyond loss of revenues collected and failure to bank money collected and spending revenues at source, there is good reason to ensure control and management of local revenues collected for better budget support.

METHODOLOGY

This study adopted a survey research design. A survey research design is a process of collecting information from a sample of people who have been selected to represent a defined target population. The target population of the study based on the key respondents was all Chief Officers in charge of Finance in the county governments of Kenya. The Chief Officers play a key role in designing and implementing internal control systems that mitigate operating and financial risks inherent in the devolved units. A census of all the forty-seven counties were taken and the elements of interest. This shows that each county provided one (1) respondent totalling forty-seven county (47) respondents.

A questionnaire containing a 5-point Likert scale was used to collect the data. Quantitative methods were used to analyse the data collected. The data was cleaned, organized and analysed using SPSS 21. Descriptive and inferential statistics were used in data analysis and interpretation. Descriptive statistics describe the characteristics of data using measures like frequencies, percentages, mean and standard deviation. Further, inferential statistics, log linear regression analysis was also envisaged. A Logit regression on the other hand was used to determine the likelihood of internal control components to predict revenue management in the county governments of Kenya.

RESULTS

Descriptive Analysis

Internal Control Environment and Effective Management of Local Revenue

The variables considered were whether the county has appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct have been established and whether they adequately communicated. The questions required the respondents to choose the following: strongly disagree, disagree, neutral, agree and strongly agree. The respondents' opinion summary is shown in Table 1.

Table 1: Respondents' opinion on internal control environment

Respondents Opinion	SD	D	N	A	S A	Mean	Stdev
The county has appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct have been established and they adequately communicated	0.0	0.0	4.4	39.1	56.5	5	1
A top officer demonstrates the appropriate "tone at the top", including explicit moral guidance about what are right and wrong and is this communicated in both words and deeds?	0.0	0.9	11.3	57.4	30.4	4	1
Dealings with employees, suppliers, citizens and auditors are based on honesty and fairness?	0.0	0.9	22.6	47.0	29.6	4	1
Employee job descriptions, including specific duties, reporting responsibilities, and constraints are clearly established and effectively communicated to employees?	0.0	0.9	14.8	51.3	33.0	4	1

County service board determines the level of knowledge and skills needed to perform a particular job and this information is used in the hiring process	0.0	1.7	19.2	48.7	30.4	4	1
The county adequately compensates employees in order to attract qualified individuals.	0.9	5.2	34.8	42.6	16.5	4	1
Employee performance evaluation techniques are implemented to identify incompetent or ineffective employees	0.0	5.2	27.0	47.0	20.9	4	1
County service board and operating decisions are not dominated by a few individuals	3.5	5.2	39.1	35.7	16.5	4	1
County service board analyses the risks and potential benefits of a venture before making a decision	0.9	2.6	26.1	48.7	21.7	4	1

In the table: SD, strongly disagree; D, disagree; N, neutral; A, agree; SA, strongly agree; Stdev, standard deviation

The result indicated that the majority (56.5%) of the respondents strongly agreed that their county have appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct and that they were adequately communicated, while 39.1% agreed and 4.4% were neutral. Further, the study sought opinion on whether the Governor demonstrate the appropriate “tone at the top”, including explicit moral guidance about what is right and wrong and the same communicated in both words and deeds. The majority (57.4%) of the respondents agreed, 30.4% strongly agreed while 11.3% were neutral and 0.9% disagreed. As to whether management dealings with stakeholders are based on honesty and fairness, most of the respondent (47%) agreed, 29.6% strongly agreed while 22.6% were neutral and a few (0.9%) disagreed.

The result agrees with the finding by (Whittington & Pany, 2001) that Control environment factors include: Integrity and ethical values; the commitment to competence; leadership philosophy and operating style; and the way management assigns authority and responsibility, and organizes and develops its people. The study also agrees with COSO (2013) that outlines control environment factors to include the integrity, ethical values and competence of the entity's people; management's philosophy and operating style; the way management assigns authority and responsibility, and organizes and develops its people; and the attention and direction provided by the county chiefs

In view of the above results, it can be concluded that devolved units in the 47 county governments have appropriate entity policies on business practices, conflict of interest and code of conduct and that they are adequately communicated. The study also confirms that management of those counties demonstrates appropriate tone at the top and that management dealing with stakeholders is based on honesty and fairness. This confirms that most devolved units have entrenched in their systems integrity and ethical values which is a clear indication of good internal control environment.

The commitment to competence variables considered in this study were existence of employee job description, management determination of the employee level of knowledge and skills required to perform a job, adequacy of employee compensation and evaluation of employee performance. The result of the finding indicated that majority (51.3%) of the respondents agreed that employees in their counties have job descriptions, including specific

duties, reporting responsibilities, and that constraints are clearly established and effectively communicated to employees while 33% strongly agreed and 14.8 % were neutral. The rest 0.9% disagreed with the opinion. As to the opinion whether county service board determines the level of knowledge and skills needed to perform a particular job and if this information is used in the hiring process, most (48.7%) of the respondents agreed, 30.4% strong agreed while 19.2% were neutral and a few 1.7% disagreed.

Further opinion on whether the county adequately compensate employees in order to attract qualified individuals, most (42.6%) of the respondents agreed while 16.5% strongly agreed, 34.8% were neutral, 5.2% disagreed while a few (0.9%) strongly disagreed. On the opinion about if employee performance evaluation techniques are implemented to identify incompetent or ineffective employees, the majority of the respondent (47%) agreed while 20.9% strongly agreed. Only a few 5.2% disagreed while 27% remained neutral. The result agrees with the finding by (Whittington & Pany, 2001) that Control environment factors include: Integrity and ethical values; commitment to competence; leadership philosophy and operating style; and the way management assigns authority and responsibility, and organizes and develops its people.

The findings tend to confirm that employees in devolved units in 42 county governments have clear job descriptions and that county service board determines the level of knowledge and skill needed to perform a particular job. The counties adequately compensate their employees and have performance evaluation mechanism in place. This confirms that the county public service boards of most counties are committed to competence, a clear indication of existence of good internal control environment. This is expected to have positive impact on effective management of local revenues in county governments in Kenya.

Control Activities and Management of Local Revenue

Table 2: Respondents control activity and information communication

Respondents Opinion	SD	D	N	A	SA	Mean	Stdev
The county has developed effective policies and procedures on information and communication	0.9	3.5	26.1	48.7	20.9	4	1
The county policies on information and communications provide well established techniques and mechanisms to address non-compliance in financial matters.	0.9	4.3	28.7	52.2	13.9	4	1
The county has clear segregation of duties for the various financial functions?	0.9	0.0	13.0	62.6	23.5	4	1

In the table: SD, strongly disagree; D, disagree; N, neutral; A, agree; SA, strongly agree; Stdev, standard deviation

Opinion as to whether the company has developed effective policies and procedures on information and communication, 48.7% of the respondent agreed, 20.9% strongly agreed, 26.1% were neutral while 3.5% disagreed and 0.9% strongly disagreed. Further opinion on whether the county policies on information and communications provide well-established techniques and mechanisms to address non-compliance in revenue matters, most (52.2%) of the respondents agreed, 13.9% strongly agreed, 28.7% remained neutral while 4.3% disagreed and 0.9% strongly disagreed. Finally, on whether the county has clear segregation of duties for the various revenue functions, the majority (62.6%) of the respondents agreed, 23.5% strongly agreed, 13% remained neutral and 0.9% strongly disagreed. The result agrees

with the finding by Ray and Pany (2001) that asserts that control activities are another component of internal controls and that control activities are policies and procedures that help ensure that management directives are carried out.

The study agrees with COSO (2013) that outlines control activity factors to include the integrity, ethical values and competence of the entity's people; management's philosophy and operating style; the way management assigns, communicates authority and responsibility, and organizes and develops its people; and the attention and direction provided by the county service board. The result confirms that devolved units in county governments have well-defined channels of information and communication, an indicator of good internal control. The results also agree with the finding of Tunji (2013) and Dhillon (2001) who argued that internal controls encompass a set of rules, policies, and procedures an organization implements to provide reasonable assurance that: (a) its financial reports are reliable, (b) its operations are effective and efficient, and (c) its activities comply with applicable laws and regulations.

Management of Local Revenues

Table 3: Respondents on management of local revenues

Respondents' opinion	SD	D	N	A	SA	Mean	Stdev
There is accurate reporting of revenues collected	1.7	11.3	15.7	34.8	36.5	4	1
There is timely reporting of revenues collected	0.9	12.2	24.3	34.8	27.8	4	1
Revenues are banked immediately they are collected	1.7	17.4	35.7	19.1	26.1	4	1

Respondents' opinion on management of local revenues by county governments in Kenya over a period of seven years has been increasing steadily and the results were 36.5% of the respondents strongly agreed, 34.8% agreed and 15.7% were neutral. The balance 11.3% and 1.7% disagreed and strongly disagreed respectively. On whether there is accurate reporting of revenues collected over the last 7 years has been growing steadily, the majority 34.8% agreed followed by 27.8% who strongly agreed. About 24.3% of the respondent were neutral, 12.2% disagreed while 0.9% strongly disagreed. Opinion on whether there is timely reporting of revenues collected over the last 7 years has been increasing steadily, 26% of the respondents strongly agreed, 19.1% agreed and the majority 35.7% were indifferent. The remaining 17.4% and 1.7% of the respondents disagreed and strongly disagreed, respectively. As to whether the revenues collected by counties are banked immediately they are collected over the last 7 years, most (44.3%) of the respondents agreed, 21.8% strongly agreed while 28.7% were neutral and an equal 2.6% disagreed and strongly disagreed respectively. Further opinion on whether debt financing in the company over the last 10 years has been decreasing steadily, most (35.7%) of the respondents disagreed, 26.1% agreed and 11.3% strongly disagreed. The balance 19.1% of the respondent were neutral and 7.8% strongly disagreed.

Regression Analysis

The study carried out regression analysis to establish the statistical significance relationship between internal control environment and internal control activities on the dependent variable which was management of local revenue by the county governments in Kenya. The regression analysis results were presented using model summary, Analysis of Variance (ANOVA) table and beta coefficients tables.

Internal Control Environment and Management of Local Revenue

The null hypothesis is, H_0 : There is no significant relationship between internal control environment and management of local revenue.

Table 4 presents the regression model on internal control environment versus management of local revenues by county governments in Kenya. As presented in the table, the coefficient of determination (R^2) is 0.176 with R being 0.420 at 0.05 significance level. The coefficient of determination indicates that 16.9% of the variation on local revenue is influenced by internal control environment. This implies that there exists a positive significant relationship between internal control environment and management of local revenue by county governments in Kenya.

Table 4: Correlations of internal control environment and management of local revenue

		Management of local revenues	Internal control environment
Management of Local Revenue	Pearson Correlation	1	0.420**
	Sig. (2-tailed)		0.000
	N	42	42
Internal Control Environment	Pearson Correlation	0.420**	1
	Sig. (2-tailed)	0.000	
	N	42	42

R = 0.420; R^2 = 0.176; Adjusted R² = 0.169; Std error of estimate = 5.19227

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

Predictors: (Constant), internal control environment

ANOVA results as shown in Table 5 further confirms that the model fit is appropriate for this data since p-value of 0.000 which is less than 0.05. This implies that there is a significant linear relationship between internal control environment and management of local revenue.

Table 5: ANOVA for internal control environment

Model	Sum of squares	Df	Mean square	F	Sig.
Regression	652.788	1	652.788	24.214	0.000 ^a
Residual	3046.439	41	26.960		
Total	3699.228	42			

The results further indicate that internal control environment have positive and significant effects on management of local revenue (6). The fitted model was: $FP = 8.07 + 0.246 * X_1$. This implies that a unit change in internal control environment will increase management of local revenue by the rate of 0.246. Even when internal control environment is non-existence, management of local revenue is still positive at 8.07 indicating that there are other drivers of management of local revenue including internal control activities, risk assessment activities, internal monitoring activities and information and communication activities.

Table 6: Internal control environment and management of local revenue

	Unstandardized coefficients		Standardized coefficients		
	B	Std. Error	Beta	T	Sig.
Constant	8.077	2.061		3.919	0.000
Internal control environment	0.246	0.050	0.420	4.921	0.000

Control Activities and Management of Local Revenue

The null hypothesis is that, H_0 : There is no significant relationship between internal control activities on management of local revenue.

Table 7 presents the regression model on internal control activities versus management of local revenue. As presented in the table, R^2 is 0.209 and R is 0.457 at 0.05 significance level.

The low coefficient of determination indicates that 20.2% of the variation on management of local revenue is influenced by internal control activities. This implies that there exists a positive significant relationship between internal control activities and management of local revenue.

Table 7: Correlations of control activities and management of local revenue

		Management of local revenue	Control activities
Management of local revenue	Pearson correlation	1	0.457**
	Sig. (2-tailed)		0.000
	N	115	115
Control activities	Pearson correlation	0.457**	1
	Sig. (2-tailed)	0.000	
	N	42	42

** . Correlation is significant at the 0.01 level (2-tailed)
 R = 0.457; R² = 0.209; Adjusted R² = 0.202; Std error of estimate = 5.08977

ANOVA results as shown in Table 8 confirms that the model fit is appropriate for this data since p-value of 0.000 which is less than 0.05. This implies that there is a significant positive relationship between internal control activities and management of local revenue.

Table 8: ANOVA for control activities

Model	Sum of squares	Df	Mean square	F	Sig.
Regression	771.882	1	771.882	29.796	0.000 ^a
Residual	2927.346	41	25.906		
Total	3699.228	42			

a. Predictors: (constant), control activities
 b. Dependent variable: management of local revenue

The results further indicate that internal control activities have a positive and significant effects on management of local revenue (Table 9). The fitted model is: $Y = 8.523 + 0.660 \cdot X_2$. This implies that a unit change in control activity will increase management of local revenue by the rate of 0.660. Even when internal control activities is non-existence, management of local revenue is still positive at 8.523 indicating that there are other drivers of management of local revenue.

Table 9: Control activities and management of local revenue

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. Error	Beta	T	Sig.
Constant	8.523	1.788		4.766	0.000
Control activities	0.660	0.121	0.457	5.459	0.000

Conclusions

Confirming the argument of the findings of this study suggests that internal control systems is one significant area county governments in Kenya should give attention to in order to enhance effective management of local revenues. The findings of this research support the findings of previous researchers. Further it can be concluded that management of local revenues must incorporate the effects of control environment, and control activities.

This study elicits the role of internal control systems, which can be nurtured by the county governments in Kenya to better their effective management of local revenues. Hence this

study widens the scope of identifying measures that will enhance effective management of local revenues by county governments in Kenya like control environment and control activities.

Recommendations

The county governments should ensure that their organizations have strong internal control environment where internal control activities inform policies and procedures that are adequate. In order to provide counties with the assurance that mitigation controls that counties have put into place are adequate and effective, the control environment and control activities should be examined on a regular basis by the internal audit department.

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