

RESEARCH ARTICLE

INTERNAL CONTROLS IMPACT ON THE EFFECTIVE MANAGEMENT OF DEVOLVED REVENUE FUND IN THE COUNTY GOVERNMENT OF KAKAMEGA, KENYA

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ABSTRACT

Effective internal controls play an important role in preventing and minimizing occurrence of errors, wastage and fraud in different organisations. Many devolved units in Kenya known as county governments have consistently failed to fully account for collected revenues and the spending of funds that they receive from the national treasury according to reports by the Auditor General and the Controller of Budget of Kenya. Kakamega county was one of the counties with questionable revenue collection performance and spending in the financial year 2015-2016. The county collected only about 25 percent of the estimated revenues while resource allocation was also inconsistent with planned spending. Hence this occurrence motivated the study to investigate effectiveness of existing internal controls in managing devolved revenue fund in the county government of Kakamega. The study used a survey method to collect and analyse cross-sectional data from a sample of 56 Accounting, Auditing and Revenue Officers spread out in the sub units of the county. A Committee on Sponsoring Organization (COSO) on the Trademill Framework Questionnaire was administered to the sampled respondents. Five components of internal controls; control environment, control activities, risk assessment, information communication and monitoring activities were tested by correlation and regression techniques using SPSS 21. The results of analysis show that while all the five components of internal control are directly and significantly associated with an effective internal control system, control environment had the strongest relationship and also the only predictor of an effective system of internal control in the county government of Kakamega. It explained about 70 percent of the variation in the effectiveness of internal control in the Kakamega county government. Therefore the paper recommends that county governments should lay more emphasis on the control environment in order to mitigate risks of fraud, corruption and wastage of the revenue fund.

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INTRODUCTION

Internal Controls is a means by which organizations resources are put into economic use. The overall objectives of internal control are to assist management in the effective discharge of their responsibility. Adams (1994) points out that if the system of internal control is adequate the probability that fraud or other errors exist is remote. Internal control plays an important role in preventing and minimizing the occurrence of errors and fraud. Contemporary internal control and well functioning internal audit systems are meant to deliver assurance to all stakeholders against corruption and inefficiencies. The degree of control employed is a matter of good judgment. When controls are found to contain weaknesses, management must choose among the following alternatives; increase supervision and monitoring and institute risk mitigation measures

associated with control weaknesses. According to COSO (1992) model internal controls have five interrelated components namely control environment, risk assessment, control activities, information and communication, and monitoring. This model provides a framework for the study of effects of internal controls on the effective management of county revenue funds in the county government of Kakamega. According to Bankan et al. (2001), objectives of internal control can be categorized into: performance objectives; information objectives and compliance objectives. The performance objectives should focus on protection of assets, efficiency in the operation and risk management. The information objective requires accuracy of records and adequacy of disclosure. Compliance objective require that laws, regulations and internal policies relevant to the organization are properly implemented. So, internal control is basically directing people's actions in the best interest of the organizations. To identify a proper control, an organization must know its associated risks that create hindrance against the achievement of its objectives. Every organization either profit

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making or non-profit making must define its objectives then observe its associated risks and finally implement necessary controls to get the desired results. Kenya's new constitution promulgated in 2010 ushered in a new governance structure in Kenya where two levels of government were envisaged. The national government and the forty seven county governments were created after the elections in the year 2013. County governments were(are) to manage their affairs using local revenues along with the shared revenues from the national government which is stipulated in the constitution as at least fifteen percent of the most recently audited national accounts. Devolved revenue funds (DRF) or county revenue funds (CRF) are therefore financial resources that are accumulated by county governments from both national disbursement and local revenues collected through fines, fees, charges and penalties from businesses and property owners in the county. The funds (DRF or CRF) have not been properly managed going by the report by the office of the Controller of Budget of Kenya (OCOB, 2016) titled "County governments budget implementation review report for the first half of the financial year 2015-2016."

The Controller of Budget (COB) identified key challenges that county governments are facing including; i) borrowing from commercial banks without guarantee of national government or approval of county assemblies ii) inadequate administration and reporting on county established funds iii) underperformance in local revenue collection iv) using locally generated revenue at source and v) inadequate internal audit arrangements. Clearly the devolved units are experiencing problems of managing resources at their disposal with every county government facing different challenges identified. Accounting for revenue collected locally by county governments has been the greatest challenge for county governments across the country. Control of the financial decisions covers the organization, method, process and internal audit established by the administration in order to ensure that the activities are carried out in compliance with the purpose of the administration and determined policies and legislation, and that assets and resources are protected, accounting records kept in an accurate and complete manner and financial and management information produced in line and reliable manner (Barth et al., 2005). Generally county governments collection of local revenues as a percentage of annual target for the financial year 2015-2016 was low at about 25 percent. (OCOB, 2016). This is testimony that either local revenue targets are overstated or collection is not efficient or effective or still leakages as a result of theft and fraud is responsible. Risks of corruption, embezzlement of funds and wastage have been mentioned in the controller of budget review report to affect fund performance in the counties. Poor revenue collection by counties has serious implications for the county budgets because resources to finance development programs continue to be strained and as a result project completion rate are low while other projects are kept on hold until sufficient funds are available. Kakamega county collected kshs.217.5 million in local revenue according to the report of the controller of budget against a target of kshs.1.0 billion in the first half of the FY 2015-2016 (OCOB,2016). This represents a 21.7 percent performance which is way below national average of 25 percent. Here lies the challenge of effective revenue collection management facing Kakamega county government. Expenditure analysis for the county of kakamega in the said period shows that out of a total of kshs 5,018 million released

to the county, personal emoluments increased sharply from previous period of kshs.1544million to kshs. 1992million an increase of 29percent while operations expenditure also rose by 28 percent from kshs. 578million to kshs.742million. However spending on development rose marginally by four percent from kshs.1316million to kshs. 1369 million (OCOB, 2016). The scenario shows that much of the county funds go to personell emoluments and operations compared to development. If this continues then residents of Kakamega county may not see the benefits of devolved governments as their lives will probably be worse. The controller of budget identified problems with high wage bill , failure to prepare comprehensive budgets, and failure by some members of county assembly (MCA) to repay Car and mortgage loans advanced (Ibid). As a result project completion rate in the county is low while other programs have not been initiated. These issues motivated the study to try and find answers to the problem of ineffective revenue management. The purpose is enable the county become a model for others in devolved resource management through reduction of wastage, elimination of corruption and embezzlement of funds.

Effective management of county revenue fund is critical to stakeholders who are; suppliers of goods services and works, project beneficiaries, the auditor, and managers of devolved revenue funds (county treasury). Supplier-county entities relationship shall be enhanced when financial obligations are met in time from improved fund management. Secondly, project beneficiaries who are residents of the county are likely to enjoy improved lifestyles from high project completion rates. Thirdly the internal auditor would be able to prepare quality audit reports of county revenues and expenditures thus attracting more investments into the county. Forth managers of DRF who are the county executive and assembly are going to be perceived as hard working people keen on transforming the lives of the county residents. This has political dividends for elected leaders in the form of increased likelihood of re-election in subsequent general elections. In addition the county treasurer is likely to face less constraints in executing budget programs hence better performance rating for his office. The challenges identified above can be mitigated by instituting proper internal control mechanisms that shall address weaknesses in the system. Internal Control has become a debatable topic in all organizations due to latest financial crises which spread all over the world (Glance, 2008). Internal control issues are very important to assure the accuracy, timeliness and reliability of the financial reports to the organizations (Holsapple et.al, 2001). Attention to internal controls has significantly increased because of regulatory and competitive forces since 1990s (Changchit et.al, 2001). According to Brewer & List (2005), the objective of internal control is to get work done efficiently and effectively without the wastage of economic resources. Common objectives of internal control include: reliability of financial reporting; effectiveness and efficiency of operations and compliance with applicable laws and regulation (American institute of Certified Public Accountants, 1996). In Kenya, the public finance management Act (2012) stipulate that the responsibility and powers of a county treasurer include; monitoring, evaluating and overseeing the management of public finances and economic affairs of the county government and effective management of funds, ensure efficiency, transparency and proper accountability for the expenditure of county funds. The Act also directs the treasurer to report regularly to the county

assembly on the implementation of annual county budget. County recurrent expenditure according to the Act is not supposed to exceed county government total revenue. More so a minimum of 30 percent of county government budget must be spent on development activities. Borrowing should only be for development projects while short term borrowing to be used only to manage cashflows and must not be more than 5 percent of most recent county revenue collected. Therefore the purpose of the study was to investigate effects of internal control on the effective management of devolved revenue fund in the county government of Kakamega. The problem statement here below thus identifies the research gap by highlighting each component of internal control that bears on the effectiveness of revenue fund management.

COSO Integrated Framework for Internal Control

Internal control according to COSO (1992) integrated framework consists of five interrelated components applicable to either small or large entities. These components are; control environment, risk assessment, control activities, information and communication and monitoring activities. For effective and efficient operations, all the five components must be present and functioning effectively to conclude that internal control over operations is effective (Ibid).

Control Environment

According to COSO (1992) the control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure. Control environment factors 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 board of directors (Harry, 2006).

Control Activities

Policies and procedures that help ensure that management directives are carried out. Control activities occur throughout the organization at all levels in all functions. These include activities like approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties. Ognera (2007) also mention control activities as another component of internal controls. He noted that control activities are policies and procedures that help ensure that management directives are carried out.

Monitoring Activities

Whittington & Pany (2001) suggest that internal control is performed as part of the monitoring activity of an organization. It involves investigating and appraising internal controls and the efficiency with which the various units of the organization are performing their assigned functions. An Internal Auditor is normally interested in determining whether a department has a clear understanding of its assignment, is adequately staffed, maintains good records, properly safeguarding cash, inventory & other assets and cooperates harmoniously with other departments Goodwin & Kent (2006) on the other hand asserts that "Internal audit is an independent

appraisal function established within an Organization to examine and evaluate its activities as a service to the organization".

Information and communication

According to the high internal control system efficiency, reliability of financial reporting is the only quality of internal control efficiency system of internal control (Hughes, 2007). Pertinent information must be identified, captured, and communicated in a form and time frame that enable people to carry out their responsibilities . information systems produce reports, containing operational, financial and compliance related information that make it possible to run and control an organization. Managers should recognize that subordinates perform better when there is a clear understanding of the mission and goals of the organization and the purpose being served by the activities they are asked to undertake. Channels of communication are a part of management control system. For instance management should communicate their performance expectations to subordinates who in turn define the components in the organization needed to accomplish the overall goal of the organization. Information need to flow both upward and downwards where managers freely and clearly share information about expectations while employees suggest ways to achieve greater efficiency in the attainment of those goals (Allen and Tommasi, 2001). Managers stand to learn a lot from frontline workers who are often aware of the procedural inefficiencies that may escape the attention of senior managers. Workers should also be able to communicate to external parties like customers, suppliers, regulators and shareholders.

Risk Assessment

Assessment of risk facing organisations must be done carefully and thoroughly so as to identify necessary controls to mitigate those risks. This may be difficult in a complex organisation and may require management to use expert advice from either internal or external auditors. Controls implemented are those that managers shall use in the day to day running of the organisation (Allen and Tommasi, 2001) controls must be cost effective in that it should not be out of proportion to the risk it seeks to manage. The budget department is important in strengthening management controls of the operating units.

Empirical Literature Review

According to Cohen (2002), control environment must be created and supported by top management and consequently cascade to employee behaviour. This is noted to be an important ingredient for effective control. The control environment starts with the board of directors and management who set the tone of an organization through policies, behavior and effective governance. If the tone set by management is lax then fraudulent financial reporting is more likely to occur (Rittenberg et al., 2005) Flatter organization structures and technological innovations result in fewer middle managers (Gate keepers) who control information flow by authorizing transactions. This is likely to result in reduced risk of fraud if especially re-engineering is undertaken (Sia et al., 1997). Information systems produce reports containing operational, financial, and compliance related information that make it possible to run and control organisations. This is

important to decision making and external reporting (Sawyer, 2003) Monitoring performance and allocating resources is made easy through financial information generated and with operating information help in preparing financial statements that would be considered accurate and reliable. Cohen et al, (2002) found that businesses are less likely to undergo separate evaluation of their internal control system when monitoring activities are effective. But those performing monitoring function must be independent of those being monitored. Separately, a study conducted by Muraleethran, (2011) titled the internal control and impact on financial performance of public and private organisations in Jaffna district, sri-lanka which was based on COSO (1992) framework realized a statistically significant association between internal controls and financial performance of studied organisations. When components of internal controls were tested for predictive power on financial performance, monitoring, control activities and risk assessment were statistically significant with slope coefficients of 0.909, 1.1, and 0.81 respectively. However Information and communication and control environment wer not good predictors of performance. The model had a goodness of fit of 82 percent which was very good. The relationship between internal controls components and financial performance was positive and significant except for control environment which was not significant.

Research Gaps

The literature reviewed in this study pointed to the fact that a number of studies relating to the subject matter of this study had been done. Results from various studies indicate that internal controls for organisations continue to preoccupy top management to achieve efficiency and effectiveness in operations and reporting. Public entities like devolved units (counties) in Kenya collect a lot of money from national and local sources. These resources have not been prudently managed as reported by the controller of budget in her implementation review report 2016. Internal controls were reported as weak and proper structures said to be lacking. This has lead to the mismanagement of devolved funds leading to wastage, fraud, and corruption. The situation therefore require remedy urgently to reduce wastage and grow counties and the country at large by creating wealth and employment for millions of unemployed youth. Hence the study was chosen to plug that gap by using Kakamega county as a case given its unique position as most populous and one with the highest poverty index. Internal control framework by COSO (1992) was chosen to guide the study. A Public organisations goal is usually not profitability but public good and outcomes that are not necessarily quantitative. Therefore measurement for the outcome was effective and efficient management of devolved

Table 1. Measurement of variables

Factor/Component	Operationalisation	Indicator	Measurement Scale
Control Environment	Legislative and regulatory policies like Acts regulations and procedures	Respondents rating of existence and implementation of policies and regulation	5 point likert scale from weak-1 to strong-5 Question 1-15
Risk assessment	Government policy on risk identification and mitigation measures for county treasuries	Level of satisfaction with existing risk identification, assessment and mitigation measures.	5 point likert scale from weak-1 to strong-5 Questions 16-27
Control Activities	Policies and procedures that help ensure that management directives are carried out.	Assess respondents satisfaction level with the degree of compliance with internal control procedures	5 point likert scale from weak-1 to strong-5 Question 28-36
Information and communication	Policy on ICT in the organisation	Satisfaction of respondents with level of compliance with ICT policy	5 point likert scale from weak-1 to strong-5 Question 37-45
Monitoring Activities	Mechanism for evaluation, supervision and communication of feedback.	Satisfaction level of responders with existing supervision and monitoring activities.	5 point likert scale from weak-1 to strong-5 Question 46-50
Effective management of revenue fund	Efficient and effective collection and utilization of county funds	Respondent level of satisfaction with existing systems for collection and control of county funds.	5 point likert scale from Very Low-1 to Very High -5 Question 51.

Source: Authors 2017

Table 2. Descriptive Statistics for Control Environment

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Mgt expectation is statement of belief, value and standards	56	4	1	5	2.86	1.103
Standards are communicated and reinforced at all levels	54	3	1	4	2.63	.917
processes to evaluate performance against expected standards	54	4	1	5	2.70	1.283
Executive periodically evaluate skills and expertise of members	56	4	1	5	2.68	.974
Completion of tasks by committee overseeing internal control	56	4	1	5	3.00	1.112
Board evaluates performance of CEO/governor	56	4	1	5	3.25	1.365
Organisation structure is appropriate for the size and complexity	56	4	1	5	3.00	1.452
specific lines of authority and responsibility are compliant with laws and regulations	56	4	1	5	3.14	1.394
management understand importance of internal control and division of responsibility	56	4	1	5	2.96	1.307
Regular employee evaluation is done and shared with employee	56	4	1	5	2.82	1.114
County government continuously provide mentoring and training opportunities to attract develop and retain sufficient and competent personnel	56	4	1	5	3.11	.985
County government checks credentials, references, and past work experience of new hires	54	4	1	5	3.00	1.229
county periodically trains employees on internal control, segregation of duties, safeguarding assets	56	4	1	5	2.93	1.319
Controls and documentation are in place indicating employee understand their duties	56	4	1	5	3.11	.947
Disciplinary and corrective actions are documented and available for employee review	56	4	1	5	3.64	1.242
Valid N (listwise)	52					

Source: Field Data (2017)

revenue fund. The components of internal controls namely control environment, control procedures, risk assessment, information & communication and monitoring were investigated for their impact on effective management of devolved revenue fund. Results from other jurisdictions are mixed and thus findings from Kenya would provide interesting insights for researcher's scholars and practitioners.

METHODOLOGY

Survey research design was used in the undertaking this research. According to Young (1990) this is a comprehensive study of social unit, e.g. an individual, a group, social institution, district or a community. The target population of the study was 131 heads of department, accounting revenue

Table 3. Descriptive Statistics for Risk Assessment

	N	Minimum	Maximum	Mean	Std. Deviation
county clearly specifies objectives to enable identification and assessment of risk	50	1	5	3.08	1.027
management allocates sufficient resources needed to attain desired operational and financial performance	52	1	5	3.08	1.082
There exist entity wide financial reporting controls	56	1	5	3.36	1.182
Risk identification considers internal and external factors and impact on achievement of objectives	56	1	5	3.11	.985
County government adequately manages risks and has internal controls to mitigate identified risks	54	1	5	3.19	1.065
there is performance indicators for key objectives and monitors status on regular basis	54	1	5	3.30	.983
County government periodically assess risk of fraud and its impact on operations	56	1	5	3.36	1.271
assessment of operating location risk of fraud is done regularly	56	1	5	3.29	1.289
Fraud risk related to opportunities for unauthorised acquisition, use and disposal of assets	54	1	5	3.26	1.334
risks related to Changes in government are identified and addressed	56	1	5	2.68	.974
Most significant risks affecting county government have been identified	50	1	5	3.16	1.167
Most significant risk above have controls designed and implemented	46	1	5	2.91	1.071
Valid N (listwise)	36				

Source: Field Data (2017)

Table 4. Descriptive Statistics for Control Activities

	N	Minimum	Maximum	Mean rank	Std. Deviation
Management determines relevant business process that require control activities	56	1	4	2.82	.897
county government considers control activities at various level	56	2	5	3.21	.909
Segregation of duties and associated control activities are in place	56	1	5	3.04	.990
there is control activities designed and implemented to restrict technology access rights	56	1	5	2.96	1.061
Control activities for acquisition, development, and maintenance of technology infrastructure	56	1	5	2.82	1.011
There is regular backup of files and testing to ensure functionality	54	1	5	2.96	1.181
there are policies and procedures for proper segregation of duties	56	1	5	2.89	1.303
management perform periodic review of policies and procedures for relevance	54	1	5	2.96	1.081
county government maintains policies and procedures that facilitate recording and accounting of transactions in compliance with laws	56	1	5	2.82	1.323
Valid N (listwise)	54				

Source: Field Data (2017)

Table 5. Descriptive Statistics for Information Communication

	N	Minimum	Maximum	Mean rank	Std. Deviation
Grant program rule and regulation are reviewed with relevant members	56	1	5	2.89	1.275
County government maintains and follow procedure for record filing, retention, and disposal of accounting record	56	1	5	3.11	1.155
Accounting system provide for separate grant identification and allocations	54	1	5	3.07	1.286
Communication exist between management and executive board for clarity of roles and objectives	56	1	5	2.82	1.350
Code of conduct and other policies prohibit override of internal control by management	56	1	5	3.25	1.031
Management develops, approves, and implements policy updates and communicates to staff.	56	2	5	3.18	.936
There is a whistleblower policy for people to report suspected impropriety and fraud, errors in reporting etc	56	1	5	2.89	1.303
County government has processes to communicate relevant and timely information to external parties	54	1	5	3.44	.965
County government has processes to communicate results of reports provided by independent auditor	56	1	5	2.96	1.307
Valid N (listwise)	54				

Source: Field Data (2017)

officers and auditors of Kakamega County Government (KCG, 2016) spread out in across sub- county devolved units. The study preferred using the aforementioned officers because they play a key role in implementing internal control in their devolved units. The study sampled 97 accounting officers and auditors across all the subcounties to participate in the study by filling in a questionnaire. The officers included revenue officers who handle county revenues in the field from the various fees, fines and commissions collected from clients. The researcher used a questionnaire, a formalized set of questions for obtaining information from respondents with the overriding objective of translating the researcher's information needs into a set. The instrument was adapted from COSO framework with 50 items covering sixteen principles governing internal control for any organization. The variables were tested for reliability by computing the Cronbach alpha statistical tests where reliability coefficients above 0.70, was considered acceptable. The data was cleaned, edited, coded and analyzed descriptively and inferentially using SPSS 21. Descriptive statistics such as the mean and standard deviation as well as frequencies and percentages were used. Inferential statistics such as correlation and regression analysis were also applied to forecast effective management of county revenue fund.

Study Findings

The study findings are presented according to the five research objectives listed below:

- To establish the effect of control activities on effective management devolved revenue funds in the County Government of Kakamega.
- To determine the effect of control environment on effective management of devolved revenue funds in the county Government of Kakamega.
- To assess the effect of risk assessment on the effective management of devolved revenue fund in the County Government of Kakamega.
- To examine effect of information and communication on effective management of devolved revenue fund in the county government of Kakamega.
- To determine effect of monitoring activities on effective management of devolved revenue fund in the county government of Kakamega.

Control environment and Effective Management of devolved revenue fund

Descriptive statistics (Table2) indicate that the highest mean rank was 3.64 and standard deviation of 1.242. The statement associated with the highest mean rank was disciplinary and corrective action are documented and available for review. This means there is above average awareness of sanctions for fraud and dishonesty by county staff. Conversely the statement indicating lowest mean rank of 2.63 where greatest need for improvement applies is standards are communicated and reinforced at all levels. The standard deviation of was 0.917. Closely following the biggest weakness was that executive does not do well in periodically evaluating skills and expertise of members and processes and evaluating performance against expected standards. Therefore while documentation of action and disciplinary procedures against risks exist, standards are not communicated and reinforced at all levels while oversight role by management is weak.

Risk Assessment and Effective Management of Devolved funds

According to Table 3 the lowest mean rank and standard deviation was 2.68 and 0.974 respectively. The greatest need for improvement was "risks related to changes in government are identified and addressed". The response indicated weaknesses or least effectiveness by 56 accountants and auditors who participated in this study. However there were strength or effectiveness in county government 'periodically assess risk of fraud and its impact on operations and that there exist entity wide financially reporting controls with a mean rank of 3.36 each. Hence controls exist throughout the system but identification and assessment of risk is low or weak in the county government. There is further weakness in designing controls and implementation

Control activities and Effective management of county revenue fund

The lowest mean rank for control activities is 2.82 and a standard deviation of 1.011 presented in Table 4. Control activities were weakest in technology infrastructure acquisition, development and maintenance. On this score respondents had a low opinion or felt dissatisfied with existing control activities. In addition, respondents also indicated that the county government does not maintain policies and procedures that facilitate recording and accounting of transactions in compliance with laws. However the county government performed well on this factors with a high rank of 3.21 and standard deviation of 0.909 for "county government considers control activities at various levels".

Information Communication and Management of county funds

Description statistics for information communication in Table 5 shows that the greatest weakness on this score for internal control in Kakamega county government was on 'communication on clarity of roles and objectives between management and executive board'. The mean rank was low as 2.82 and standard deviator of 1.35. A whistle blower policy was also noted to be unavailable to report on suspected impropriety and fraud or errors in reporting. This is a serious risk that should be assessed and controlled in a timely and effective manner. The county government however did well when it came to communication with external parties but not with internal personnel.

Monitoring Activities and Effective Management of County Revenue fund

Table 6 shows that monitoring activities was weakest as described by failure of county government to monitoring sub units to ensure national funds are used for purpose intended. The mean rank was 2.75 and standard reveals of 1.311 followed by management failing to ensure compliance with period of availability requirements The mean rank is 2.82 and stand by deviation of 1.237. These areas must be given sufficient attention to reduce risk and enhance effectiveness of county fund management. County government performance is only seen to be good when it comes to visiting the sub units for compliance. This may imply that enforcement of rules and regulations is weak even as visitations to subunits happen.

Table 6. Descriptive Statistics for Monitoring Activities

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
There is periodical evaluation of processes like cash management, budget results, funds use, procurement	56	1	5	2.93	1.204
Management ensures compliance with period of availability requirements	56	1	5	2.82	1.237
Management periodically visit other decentralised units to determine whether policies and procedures are followed	56	1	5	3.18	1.177
County government periodically evaluate internal controls, test for compliance and communicate result to managers	56	1	5	3.07	1.173
County government monitors sub -units to ensure national funds are used for purpose intended	56	1	5	2.75	1.311
Valid N (listwise)	56				

Source: Field Data (2017)

Table 7. Correlation Statistics

		Sum of value for environment	Sum of values for Risk assessment	Sum of values for control activities	Sum of values for information communication	Sum of values for Monitoring activities
Effectiveness of existing internal controls for managing devolved funds in the county	Pearson Correlation	.679**	.478**	.392**	.481**	.439**
	Sig. (2-tailed)	.000	.003	.004	.000	.001
	N	50	46	52	52	54

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

Source: Field Data (2017)

Table 8. Regression Statistics

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
1 (Constant)	.853	.535		1.595	.121	-.240	1.946			
Control activities	.084	.023	.979	3.642	.001	.037	.131	.679	.554	.462
Risk assessment control activities	.011	.015	.136	.713	.481	-.020	.041	.478	.129	.090
Information communication	-.019	.041	-.154	-4.555	.652	-.103	.066	.392	-.083	-.058
Monitoring activities	-.095	.064	-.832	-1.494	.146	-.226	.035	.481	-.263	-.190
	.105	.088	.566	1.200	.239	-.074	.284	.439	.214	.152

a. Dependent Variable: level of satisfaction with effectiveness of existing internal controls for managing devolved funds in the county

Source: Field Data (2017)

Table 9. Model Summary Table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.719 ^a	.517	.437	.692	.517	6.432	5	30	.000

a. Predictors: (Constant), Sum of values for Monitoring activities, Sum of values for Risk assessment, Sum of value for Control activities, Sum of values for control activities, Sum of values for information communication

b. Dependent Variable: level of satisfaction with effectiveness of existing internal controls for managing devolved funds in the county

Table 10. ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.388	5	3.078	6.432	.000 ^b
	Residual	14.353	30	.478		
	Total	29.741	35			

a. Dependent Variable: level of satisfaction with effectiveness of existing internal controls for managing devolved funds in the county

b. Predictors: (Constant), Sum of values for Monitoring activities, Sum of values for Risk assessment, Sum of value for Control activities, Sum of values for control activities, Sum of values for information communication

Source: Field Data (2017)

Correlation Statistics

A correlation coefficients Table 7 show that the relationship between control environment and effective management of devolved funds was positive and strongest at 0.679 and significant (0.0005). This is consistent with findings by Murathleen, (2011) in his study of public and private firms in the district of Jaffna in Sri Lanka and supported also by John and Morris (2011) and Allen and Tommasi (2011). This was followed by information and communication at 0.481

(p=0.000) which again was in agreement with Sawyer (2003) then risk assessment $r=0.478$ (p=0.003), Monitoring with a coefficient of 0.439 and lastly control activities with a coefficient of 0.392. All these coefficients were positive and statistically significant at the 0.05 level of significance as reported by Cohen 2002, Murathleen, (2011) and Kawira (2013). The strength of relationships was from moderate to strong. Control environment relationship with effective management was strongest but the rest of the factors had

moderate association with effective management of devolved fund from 0.392 to 0.0481 as shown in the table below. The outcome is consistent with literature although variations would be noted in the degree of association between the variables.

Regression Analysis

A regression analysis was carried out to predict level of satisfaction with the effectiveness of existing internal controls. The analysis regressed between the components of internal control namely control of environment, risk assessment, control attachments, information communication and monitoring activities on the effectiveness of existing internal controls at the 0.5 level of significance. An ordinary multiple least square regression was used to determine the coefficients for each of the components of internal controls. This technique was supported by the near normal distribution of scores for effectiveness of existing internal controls obtained from the participants.

$$Y = 0.853 + 0.084(CE) + 0.011(RA) - 0.019(CA) - 0.095(IC) + 0.105(MA) \quad (1)$$

P-value (0.121) (0.001) (0.481) (0.652) (0.146) (0.239)

Where;

Y is effectiveness of existing internal controls
 CE is Control environment
 RA is risk assessment.
 CA is control activities
 IC is information and communication
 MA is monitoring activities

Results of regression expression equation (1) indicate that only control environment was statistically significant (p-value of 0.001) at the 0.05 level. The associated slope coefficient was 0.084. This means that only one component namely control environment significantly predicts level of satisfaction with the effectiveness of internal control. This was inconsistent with the outcome by Murathleen (2011) whose prediction results for control environment was insignificant. The other variables were insignificant which was also captured by Mrathleen (2011) especially in the case of information and communication component. Other components namely monitoring activities, control activities and risk assessment were however significant. Hence when the control environment improves by a unit then satisfaction with existing internal controls rises by 0.084 units. The control environment is described by commitment to integrity and ethical values, independence of executive board, proper structures and reporting lines, human resource development and accountability of individuals for their responsibilities. Hence these areas need to be addressed urgently in order to improve satisfaction with existing internal controls in the county government of Kakamega in future. Other factors were related positively to this scenario as well but could not be considered accurate predictors of satisfaction with the state of internal controls. The regression model was valid since the variance ratio was 6.432 and a very low P-value 0.0005. A look at the coefficient of multiple determination indicates that the variable (CE) explained 43.7 percent of changes in satisfactions levels with the effectiveness of internal controls. The ANOVA Table reveals that effect of control environment on the effectiveness of internal controls in the county government of Kakamega is

of large significance since the Cohen value is 0.51 much greater than 0.14 (Tabachnick and Fidel, 2001). Overall, the existing internal controls in the county government of Kakamega are not sufficient. Significant risks exist that could lead to loss of money or even wastage of resources since enforcement and commitment is inadequate. Whereas components of internal controls significantly relate to the effectiveness controls, only control environment appear to also predict the likelihood of improving effectiveness in the eyes of the accountants and auditors of the county government. In those areas where controls are weak signified by low mean rank provided (closer to 1), more attention is required to improve standards across the five components. Conversely effectiveness of controls is regarded as good where the mean rank presented is closer to 5 with a mean rank of 5 being excellent performance. The subsequent chapter summarizes key result of data analysis, the contribution made to the literature on internal controls and appropriate conclusions.

Conclusion and Recommendation

Conclusion

The results obtained signify that, COSO of 1992 framework remains critical to the assessment of the effectiveness of internal controls in any organization especially public entities like the county government of Kakamega. Secondly while components of internal explain about 44 percent of the variation of the effectiveness reported by the participants, control environment is the leading factor explaining up to 31 percent of the that change. The other four factors shared the remaining 13 percent of the changes in the effectiveness of the controls reported. Third control environment directs all the other component of internal control and is the single most significant predictor of the effectiveness of internal control. Therefore the county government of Kakamega needs to demonstrate a commitment of integrity and ethical issues. There is also increased need for the sub units to demonstrate independence from management and establish oversight roles, structural and reporting lines to mitigate risks of fraud and wastage arising from organizational structure and changes. The following are the results of hypothesis tests;

H₀₁ is rejected because there was a significant and positive relationship between control activities and effective management of revenue fund. The factor was however not a good predictor of effective management of county fund.

H₀₂ was also rejected since there was a positive and significant relationship between control environment and effective management of county revenue fund. This factor was also a significant prediction of effective resource management.

H₀₃ was rejected because the relationship between management was positive and fairly strong although not good as predictor of effective management

H₀₄ was again rejected because the relationship between information communication and effective management of revenue fund was positive and moderately strong but not a good predictor of the performance.

H₀₅ was rejected from the sample result. Monitoring activities had a statistically strong and positive association with effectiveness of internal control. However it was also a poor predictor of entity fund management.

Recommendations

Among the key recommendations arising from the study findings are;

Control environment is the most important factor to guide development of a robust control system. Management style and function should inspire employees to develop a culture for identifying assessing and controlling risk. Risk assessment should be carried out well and in a timely manner so that corrective action can be taken to minimize potential threat to loss of county funds. Individuals should be held accountable for the internal control responsibilities in order to increase effectiveness of internal controls. This is important to create a control environment appropriate for the entity to reduce risk of revenue loss or misuse hence enhance performance. Creating awareness through training, segregation of duties and continuously evaluating performance and training needs would further entrench the culture of controlling risk that may emerge. Risk assessments, control activities, information communication and monitoring activities should not be ignored since they also play a complimentary role in creating a control environment that is likely to minimize losses and misuse of county financial and non-financial resources. Structural risks are present in the county government and this have exposed the county funds to risk of loss. Internal controls effectiveness in the county government of Kakamega is moderate but there is a chance to improve it. Hence focusing on control environment can be an entry point to improving the effectiveness of managing devolved revenue fund.

Areas for Further Study

A similar study can be conducted to find out how will the framework (COSO, 1992) apply to other county governments and to other public organizations. How can the COSO (1992) framework are improved to increase its explanatory power from 44 percent realized in this study. Would the other components of internal control remain irrelevant at predicting effectiveness of internal control in other organization and entities?

REFERENCES

- Adams, M.B. 1994. Agency Theory and the Internal Audit, Managerial Auditing Journal, agency costs, and ownership Structure', *Journal of Financial Economics*.
- AICPA, 1996. Transferring auditors internal control evaluation knowledge to management. Expert system and applications 20: 275-291
- Allen, R. and Tommasi, D. 2001. Managing public expenditure: A reference book for transition countries (eds) OECD pp 260-280.
- Barkan, J. D., Gboyega, A, & Stevens, M. (2001). State and local governance in Nigeria.
- Barth, M., Landsman, W. and Lang, M. 2005. International accounting standards and accounting quality (working paper). *Stanford University and University of North Carolina*.
- Brewer, Paul R. 2005. International Trust. Entry in *Polling America: An Encyclopedia of Public Opinion* (Samuel J. Best and Benjamin Radcliff, editors). Westport, CT: Greenwood Press.
- Changchit, C., Holsapple, C. W. and Madden, D. L. 2001. Supporting managers' internal control evaluations: An expert system and experimental results. *Decision Support Systems*, 30, 437-449.
- Cohen, J. Krishnamoorthy, G. Wright, A. 2002. Corporate governance and audit process. Mid Year auditing conference, LA.
- Committee of sponsoring organizations, (COSO, 2004). Enterprise risk management- integrated framework executive summary. From www.coso.org/publications/ERM/
- Glance, H. I. 2008. Effectiveness of auditing for proper accountability in Nigerian local governments. *Social Science Research Network*.
- Goodwin, J. & Ahmed, K. 2006. The impact of international financial reporting standards:
- Harry, A. 2006. Effectiveness of internal control. *Local Government: Results of the 2006- 07 Audits*, 19 – 26.
- Holsapple, C. W. & Joshi, K. D. 2001. Organizational knowledge resources. *Decision Support Systems*, 31(1), 39-54.
- Hughes, J. 2007. Local government internal control to ensure efficiency and integrity.
- John J. Morris, 2011. The impact of enterprise resource planning (ERP) Systems on the *Journal of International Finance and Economics*, Vol. 9.
- Kawira, A. 2013. Strengthening internal audit effectiveness. *Indian Journal of Science and Technology*, 5(5), 2777-2778.
- Muraleethran, P. 2011. Internal control and impact on financial performance of public and private organisations, Jaffna district. (unpublished paper). Department of accounting, Faculty of management studies and commerce, University of Jaffna, Sri Lanka. Available at www.kln.ac.lk/uokr/icbi/A&F128pdf
- Office of the controller of budget, 2016. County government budget implementation review report first half 2015-2016. Republic of Kenya.
- Ogneva M, Subramanyan K. and Raghundan, 2007. Internal control weaknesses and cost of equity. Evidence from Sox section 404 disclosures. *The accounting review* 82 (5) 1255.
- Public finance management ACT, 2012. Kenya.
- Rittenberg, L.E. and Schwieger, B.J. 2005. *Auditing concepts for changing environment*. Mason South –western, Thomson corporation.
- Sawyer, L. B., Dittenhofer, M.A. and Schiener, J. H. 2003. *Sawyers internal auditing*. 5th edition USA. The institute of internal auditors.
- Sia, S.K. and Neo, B.S. 1997. Reengineering effectiveness and the redesign of organizational control: A case study of the inland revenue authority of Singapore, *Journal of management information systems*, 14.
- Tabachnick, B. G. and Fidell, L. S. 2001. *Using multivariate statistics* (4th edn). New York, Harper Collins.
- Thompson, A.A. and Strickland, A.J. 2003. *Strategic Management: Concepts and Cases*, 13th
- Verschoor, C. 1999. Corporate Performance is closely linked to a strong Ethical demand for monitoring', *Journal of Accounting and Public Policy*.
- Whittington, O. R. and Panny, K. 2001. Principles of Auditing and other Assurance Services. Irwin / McGraw – Hill. New York.
- Young, P. 1990. Progressive taxation and equal sacrifice. *American Economic Review*, 80, 253-266.