THE IMPACT OF INTERNAL CONTROL ON REVENUE COLLECTION: THE CASE OF TANZANIA OFFICIAL SEED CERTIFICATION INSTITUTE (TOSCI) IN MOROGORO MUNICIPALITY

Abstract

The purpose of this study is to assess the impact of internal controls on revenue collection at TOSCI in Morogoro Municipality. The study applied mixed method approach that utilizes both qualitative and quantitative methods to obtain the required data. The qualitative data from documentary review and interview was subjected to content analysis through explicit rules of coding where by quantitative data from questionnaire was tabulated and converted into frequencies and percentages. The relationship between revenue collection and internal control was tested using regression analysis. It was found that internal control inefficiencies resulted into less revenue collection at TOSCI. This study definitely answers the question regarding correlation between internal controls and revenue collection at TOSCI in Morogoro Municipality.

Key Word: Impacts, Internal Control, Revenue Collection.

1.0 Introduction

The incidence of internal control weaknesses, unsatisfactory and deteriorating service delivery have the undesired effect of not only weakening the company's ability to effectively collect revenue but also encourages collusion, fraud, embezzlements, corruption, lack of transparency and accountability for revenue collection and other assets (Njiru & Bunyasi, 2016). Despite considerable investment, service delivery is unsatisfactory and degenerating. For the enhancement of the attainment of the mission and goals of the company, it is therefore necessary that these hindrances be removed.

Despite of Government efforts through CAG reports published each year insisting on the role of internal control in enhancing revenue collection, there has been insufficient control over revenue collection with reference to TOSCI. The financial report for TOSCI 2017/2018 & 2018/2019 shows that seed dealers fail to pay for amount due to internal and external factors that seem to be overridden or not insisted which led to more credit billing and insufficient revenue collection at TOSCI. Moreover, studies above have tried to deal on the internal auditing of revenue collection in various organizations leaving aside the seed industry, TOSCI in particular.

Thus, the purpose of this descriptive mixed method study was to assess the impact of internal controls on revenue collection at TOSCI in Morogoro Municipality.

2.0 Theoretical Framework
2.1 The Reliability Theory

Reliability theory simply describes the probability of a system completing its expected function during an interval of time (Gavrilov and Gavrilova 2001). It was originally a tool used to help nineteenth century maritime insurance and life insurance companies in computing profitable rates

to charge their customers. According to the reliability theory, an internal control system comprises of components that are interrelated and each for component, there needs to be a defined measure of success. As such, the state of a component is determined by whether the component is successful or not successful. The reliability of a component is defined as the probability of the component being found in the success state. In addition, the reliability of the entire internal control system is a binary combination with two possible values, success and failure.

This study considered the part of the reliability theory which relates the internal control system to component reliabilities. The tractability of reliability theory to the evaluation and design of internal control systems have appeared in the professional literature but no applications have been reported at draw upon the substantial power of the theory of reliability (Kinney, 2000). The two potential users of the reliability theory are the external auditor and organization management. Kinney (2000) states that; during the external audit, evidence is gathered to support a professional opinion. Internal control systems have a primary purpose of assessment and control of risks; that a material error was not be prevented or detected on a timely basis by the system leaving to losses. Weak internal control systems result in more substantive work and hence greater cost.

According to Gavrilov *et al.,* (2001), the determination of the weakness of any internal control system is primarily judgmental. Upon the formulation of the process and system reliability estimates, comparison with data from the organization's past performances or other firms may provide a more solid basis for judgment of the impact of an internal control system on the firm's income risk and hence provide for more rational allocation of the auditor's time and effort. Messier Jr. and Austen (2000) state that one of the primary advantages of the reliability theory is its close relationship to the auditor's needs regarding understanding the internal control system and control risk assessment.

According to Stratton (2007), recent developments have increased the value to management of objective methodologies for the evaluation of internal control systems. Firm managers are therefore required to assure the accuracy of these systems. Stratton (2007) also adds that the process of evaluation of the internal control system by both management and external auditors is judgmental in nature. However, the few attempts at modeling internal control systems have not been implemented by firms due to the lack of realism, difficulty of modeling behavioral systems, lack of cost effectiveness, and lack of understanding by practitioners.

2.2 Agency Theory

Agency theory was designed by Jensen and Meckling in 1976 and as proposed by Adam who attempts to explain and resolve disputes over priorities between principals and their agents. Principals appoint agents and delegate some decision-making authority to them. In so doing, principals place trust in their agents to act in the principals' best interests. However, as a result of information asymmetries between principals and agents and differing motives, principals may lack trust in their agents and may therefore need to put in place mechanisms, such as the audit, to reinforce this trust. Principals rely on agents to execute certain transactions, particularly financial, resulting in a difference in agreement on priorities and methods. The difference in priorities and interests between agents and principals is known as the principal-agent problem. Resolving the

differences in expectations is called reducing agency loss. Performance-based compensation is one way that is used to achieve a balance between principal and agent. Common principal-agent relationships included in agency theory include shareholders and management, financial planners and their clients, and lessees and lessors.

A simple agency model suggests that, as a result of information asymmetries and self-interest, principals lack reasons to trust their agents and will seek to resolve these concerns by putting in place mechanisms to align the interests of agents with principals and to reduce the scope for information asymmetries and opportunistic behavior. Whilst agency theory would suggest that principals do not trust their agents, it is known that there must be some trust in agents because of the volume of unaudited information that directors provide to shareholders. Agency theory is a useful economic theory of accountability, which helps to explain the development of the audit. A general description of an agency relationship states that it is a contract under which one or more principals engage another person or persons as their agent(s) to perform some service on their behalf. To enable this performance, delegation of some decision-making authority to the agent is needed. Agency theory focuses on resolving two problems occurring in the agency relationship: agency problems and the problem of risk sharing. An agency problem occurs when the interests of the principal and agent conflict and it is difficult or expensive for the principal to monitor the agent's actions. On the other hand, a problem of risk sharing occurs when the principal and agent have different attitudes towards risk.

3.0 Empirical Literature Review
There are different schools of thoughts that guide a researcher to concentrates much on this study. This aspect is focused on literary works like previous research and facts. These literary materials discussed herein to portray an assessment of the impact of internal controls in improving revenue collection at TOSCI.

3.1 Risk Management
According to Keitany (2000) the objective of internal control in risk management is to help, identify and document the organization's risks in critical business processes and the internal controls within each process to mitigate those risks. For all businesses, there are risks that exist and need to be identified and addressed in order to prevent or minimize losses Risk assessment system is divided into three steps: risk identification, risk analysis and evaluation, risk control and report. Risk identification asks the enterprise to judge and analyze risks, including its nature, types and reasons of the occurrence, etc. Risk analysis and evaluation needs quantitative analysis of digital information collected by mathematical method in order to make the risk management based on scientific basis. The result of risk analysis and risk evaluation is the probability of occurrence and size of the risk so as to provide a dependable basis for decision making. Risk control and report should consider how to control risk. The method of controlling risk usually is to transfer risk, adverse risk and disperse risk.

Pickett (2003) argued that, Organizations want to understand risk and need appreciating the importance of risk management to an organization. An organization cannot get smaller its way to magnitude. It must develop, and one of the keys to successful growth is effective risk management. Risk assessment, as defined by The IIA Standards for the Professional Practice

of Internal Auditing is a systematic process, for assessing and integrating professional judgments about probable adverse conditions or events. Risk impacts an organization's ability to compete and to maintain its financial strength and the quality of its products and services. It's the internal auditor's job to identify all auditable activities and relevant risk factors and to assess their significance.

3.2 Laws and Regulations

A compliance audit determines whether the organizational unit or function is following particular rules or directives. Such rules or directives can originate internally or externally and can include one or more of the following: organizational policies; performance plans; established procedures; required authorizations; applicable external regulations; relevant contractual provisions; and federal, state, and local laws.

The overall design of the internal controls function should be geared to the specific priorities of a country. For those countries with governance problems, the first and foremost objective should be to ensure compliance with the financial laws and regulations. For those developing and transitional economies faced with a high degree of fiscal stress, the need to ensure macroeconomic objectives will be paramount. For those countries that can ensure compliance with the law and have reached a fair degree of macroeconomic stability, more attention can be paid to ensuring efficiency and effectiveness of resource use. Adams (2004) defined financial control as the steps taken to ensure maximum safe custody of financial resources in order to avoid waste, misuse, embezzlement, misappropriation or illegal disposal of public finance". Government enforces financial control through the use of such instruments like civil service rule, financial instrument, financial memorandum, treasury accounting manual, financial regulation, etc.

3.3 Internal Audit

Internal audit is an additional safeguard for proper financial control in the public sectors. Each ministry, parastatals and local government is expected to establish an Internal Audit Unit. The internal audit unit is responsible for the audit of all financial transactions by carrying out a continuous examination of all accounting books and records maintained in the organization with a view to checking or detecting fraud and correcting errors. It is concerned with the examination of the system and procedure in place so as to ensure their conformity with the regulation, as the case may be, that the system of internal control is adequate and that it is continuously operating in accordance with government regulations. It is the job of internal auditor to ensure that all financial transactions are in accordance with the approved regulations and that adequate system of security exists in the establishment (Momoh, 2005).

Internal control systems including internal audits are intended primarily to enhance the reliability of financial performance, either directly or indirectly by increasing accountability among information providers in an organization (Jensen and Meckling, 1976). Internal control therefore has a much broader purpose such that the organization level of control problems associated with lower revenues, which explore links between disclosure of material weakness and fraud, earnings management or restatements. Internal controls provide an independent appraisal of the quality of managerial performance in carrying out assigned responsibilities for better revenue generation.

An effective internal control system unequivocally correlates with organizational success in meeting its revenue target level. Effective internal control for revenue generation involves a regular a review of the reliability and integrity of financial and operating information, a review of the controls employed to safeguard assets, an assessment of employees' compliance with management policies, procedures and applicable laws and regulations, an evaluation of the efficiency and effectiveness with which management achieves its organizational objectives.

3.4 Supervision

The well-trained supervisor who excels at managing employees can make everyone around him or her more effective and efficient. Several supervisory skills directly affect employee's development, helping them to achieve their potential while gaining skills that are valuable to the organization. If certain aspects are performed by one individual there is a chance that person can fraudulently convert the assets of the organization to own self and also manipulate the accounting records. Adequate screening of prospective employees before hiring them and management supervisory checks should minimize this risk, or detect collusion if it has indeed occurred (Havers, 2012).

Most organizations no longer set up internal control system as a regulatory requirement but also because it helps in ensuring that all management activities are appropriately carried out (Ewa & Udoayang 2012). Further, organizations are making it a point of duty to train, educate, and sensitize their employees on how to use these internal control systems since its effectiveness depends on the competency and dependability of the people using it. All these control actions ensure that any risks that may affect the company's ability to achieve its goals are appropriately avoided and should occur at all levels and in all functions of the organization. Further, there are three major classifications of internal controls; preventive, detective, and corrective. Preventive controls predict potential problems before they occur, make adjustments, and prevent an error, omission or malicious act from occurring. The detective controls are used to detect and report the occurrence of an omission, an error or a malicious act. Finally, the corrective controls help in ensuring that the impact of a threat is minimized, identify the cause of a problem as well as the correct errors arising from the problem. Corrective controls correct problems discovered by detective controls and modify the processing system to minimize future occurrence of the problem.

4.0 Research Methods and Methodology
4.1 Description of the Study Area

The study was conducted at TOSCI headquarters located at Sokoine University of Agriculture; main campus in Morogoro Municipality focusing on the impact of internal controls in improving revenue collection. The reason for its choice was that despite Government efforts through CAG and IA reports published each year insisting on the role of internal controls in improving revenue collection, there had been insufficient control over revenue collection with reference to TOSCI. Morogoro municipality is one of the six districts of Morogoro region which covers 260 square kilometers with a total population of 315,866 people; whereby male is 151,700 and female 164,166 (URT, 2012). Its geographical location coordinates are 6° 49' 20" south, 37° 40' 0" East.

4.2 Research Design
The study employed the case study design based on mixed research approach because of its flexibility for data collection and allows a researcher to retain the holistic characteristics of real-life events on investigating empirical events.

4.3 Sample Size and Sampling Technique
Purposive sampling technique was used in this study and the sample size of this study were 41 respondents.

4.4 Data Type and Collection
Both primary and secondary data were used. Primary data were collected from 41 respondents using questionnaires and interview method while secondary data were obtained through documentary review i.e., TOSCI annual report, journals and newspapers.

4.5 Data Analysis
The qualitative data from documentary review and interview was subjected to content analysis through explicit rules of coding. Furthermore, quantitative data from questionnaire was tabulated and converted into frequencies and percentages. The data obtained were processed through the Statistical Package for the Social Science (SPSS) software.

5.0 Results and Discussion
The study sought to assess the impact of internal controls on revenue collection with reference to Tanzania Official Seed Certification Institute (TOSCI).

5.1 The Analysis of Effectiveness of Internal Controls in Improving Revenue Collection
Reliability analysis test explores the regularity and uniformity of the given feedback of respondents. The more consistency among the result will be, the high reliability of the scales. It is assumed that if Cronbach's Alpha is equaled to 0.7 up to 1, the internal consistency of the result is acceptable. In this study, Cronbach's Alpha was computed for each scale and the results were used as a test of the reliability of the scales with regard to the internal consistency of the scale items. Table 1 below show the reliability statistics of the variables in this study.
Scale: Risk Management, Laws and Regulation, Supervision and Internal Audit.

Table 1 Reliability Statistics

Independent Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Risk Management	0.872	0.889	6
Laws and Regulations	0.925	0. 958	7
Supervision	0.969	0.968	7
Internal Audit	0.893	0.910	5

From this perspective, the value of Cronbach's Alpha was found as 0.872 for the risk management, 0.925 for the laws and regulation, 0.969 for the supervision and 0.893 for the internal audit which were in the acceptable range.

5.2 Multiple Linear Regression

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu$$

Whereby;

Y = Dependent Variable (Efficiency of Revenue Collection)

$B_i = \beta_0, \beta_1 \ldots \ldots \beta_4$ = Parameter to be estimated

$X_1 - X_4$ = Independent Variables/Explanatory Variables

X_1 = Risk Management

X_2 = Laws and Regulation

X_3 = Supervision

X_4 = Internal Audit

μ = Error term

Table 2 The Regression Results

	Unstandardized Coefficients		Standardized Coefficients	t	p-value	Collinearity	
	ß	Std error	Beta			Tolerance	VIF
Constant	-33.833	57.122		-0.592	0.468		
Law & regulation	0.667	0.667	1.069	1.000	0.001	0.156	6.400
supervision	1.167	1.190	1.247	0.980	0.005	0.110	9.067
Internal audit	0.167	0.289	0.373	0.577	0.005	0.429	2.333

[a] **Dependent variable:** *Efficiency of revenue collection*

Laws and Regulation; With respect to hypothesis two, the regression results as shown in Table 2 indicate a t-value of 1.000 which is below the critical t-value of 2.028094. Thus, the hypothesis that there is no relationship between laws and regulations and revenue collection is rejected and the alternative hypothesis that there is a significant relationship between laws and regulations and revenue collection is accepted.

Supervision; In response to our third hypothesis by referring to table 4.2, it indicates that the t value is 0.980 showing that it is less than the critical t value, hence the hypothesis that there is no relationship between the supervision and revenue collection is rejected and accept the hypothesis that there is relationship between supervision and revenue collection.

***Internal Audit*:** Similarly, the relationship between Internal Audit and Revenue Collection in table 4.2 shows the t value of 0.577, this t value is less than the critical value, hence the hypothesis that there is no statistically significant relationship between internal audit and efficiency of revenue collection is rejected and accept the hypothesis that there is a statistically significant relationship between internal audit and efficiency of revenue collection.

6.0 Conclusions and Recommendations

Based on the findings of the study, it was concluded that there is a direct correlation between the level of internal controls and the amount of revenue collection by TOSCI. The level of internal controls can be measured by the effectiveness of those controls. Where there is an ineffective control system in place then revenue collection also goes down as demonstrated by the amounts collected when TOSCI had not put in place any controls with the time the organization started effecting controls.

Basing on the study findings, the study recommends the following for actions: -

i. The Government should provide in – service training, seminars and workshops to workers so as to enhance their capability in revenue collection

ii. There is a need of a replication of this study after some time to find out if there are any changes that might have taken place as a result of time difference.

iii. The government should punish the irresponsible workers at Tanzania Official Seed Certification Institute in order to bring accountability of the workers.

iv. There is a need of formulating appropriate laws and regulation which promote the collection of the revenue.

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