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EFFECT OF INTERNAL CONTROL SYSTEMS ON FINANCIAL PERFORMANCE OF HIGHER EDUCATION INSTITUTIONS IN PUNTLAND

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Abstract

The current corporate trends have made it imperative for most of the large organizations to uphold effective internal control systems. Whereas institutions of higher learning in Puntland state of Somalia have implemented systems of internal control, it is not clear whether they help them to achieve the various financial goals. The main objective of this study was to establish the effects of internal control systems on the financial performance of Higher Learning Institution in Puntland. Internal controls were looked at from the perspective of Information and communication systems, Internal Audit and Monitoring and Financial performance as dimension. The research was conducted using quantitative survey design. A sample size of 30 respondents was used for the study. Data was collected using Questionnaires. Correlation and regression analysis were employed to generate the findings. The study found that management of the institution is committed to the control systems, actively participates in monitoring and supervision of the activities of the Universities, communications systems are in place. The internal audit department is efficient, is staffed, conduct regular audit activities and produce regular audit reports. It was further revealed that there is a clear separation of roles, weaknesses in the system are addressed, and monitoring has helped in assessing the quality of performance of the institution over time. However, the study also found out that there is lack of *inadequate security measures to safeguard the assets of the Universities, fees charged to students are not appropriate to cover costs. It was however, revealed that all revenues and expenditures are properly classified, and that assets of the University have generally increased. The Study therefore concludes that internal control systems do function although with delays and that there is a significant relationship between internal control systems and financial performance in an Institution of higher learning.*

Keywords: Information communication systems, internal auditor, monitoring, financial performance

INTRODUCTION

Institutions of Higher Learning in Puntland has been in existence from the date Puntland Regional State was formed in 1998. Most of the Higher Learning Institutions are originally formed by foresighted and committed individuals and also they have enjoyed continued support from the international donors. The commitments and the efforts of its founders and their continued involvement in the affairs of the Institutions has ensured continuity and faster rise, growth and prosperity to the extent of becoming members of internationally and regionally prominent and association.

Jeremiah Munene (2013) conducted a study and found out that some of the challenges experienced in regard to internal controls include; struggles with liquidity problems, financial reports are not made timely, accountability for financial resources is wanting, frauds and misuse of institutional resources have been unearthed and a number of decisions made have not yielded the expected results.

However despite all the above efforts, the Institutions of Higher Learning still struggles with liquidity problems, accountability for the University financial resources is still wanting, misuse of institutional resources have been unearthed and a number of decisions made have not yielded the expected results.

Whereas institutions of higher learning in Puntland state of Somalia have implemented systems of internal control, it is not clear whether they help them to achieve the various financial goals. These goals include cost efficiency, cash flow management, fees collections, effectiveness and efficiency of operations and asset maintenance and income management. This research has therefore attempted investigate the persistent poor financial performance from the perspective of internal controls which has hitherto been ignored.

Research Objectives

The main purpose of this research is to establish the effects of internal control systems on the financial performance of Higher Learning Institution in Puntland

In particular this research has focused on the following specific objectives:

i. To find out the effects of information and communication system on financial performance of Higher Education Institutions in Puntland State of Somalia.
ii. To identify the effect of internal auditor on the financial performance of Higher Education Institutions in Puntland State of Somalia.
iii. To establish the effect of monitoring activities on financial performance of Higher Education Institutions in Puntland State of Somalia.

LITERATURE REVIEW

Theoretical Literature Review

Internal controls are policies and procedures put in place to ensure the continued reliability of accounting systems. Accuracy and reliability are paramount in the accounting world. Without accurate accounting records, managers cannot make fully informed financial decisions, and financial reports can contain errors. Internal control procedures in accounting can be broken into seven categories, each designed to prevent fraud and identify errors before they become problems.

The Agency Theory

According to the agency theory, a firm consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those resources (Jensen and Meckling, 1976). The theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals" ability to monitor whether or not their interests are being properly served by agents. As such, the theory describes firms as necessary structures to maintain contracts, and through firms, it is possible to exercise control which minimizes opportunistic behavior of agents (Jensen 11 and Meckling, 1976). According to the theory, in order to harmonize the interests of the agent and the principal, a comprehensive contract is written to address the interest of both the agent and the principal. The agent-principal relationship is strengthened more by the principal employing an expert and systems (auditors and control systems) to monitor the agent (Jussi and Petri, 2004).

Further the theory recognizes that any incomplete information about the relationship, interests or work performance of the agent described could be adverse and a moral hazard.

Moral hazard and adverse selection impact on the output of the agent in two ways; not possessing the requisite knowledge about what should be done and not doing exactly what the agent is appointed to do. The agency theory therefore works on the assumption that principals and agents act rationally and use contracting to maximize their wealth (Jensen and Meckling, 1976). This theory is applicable to this study simply because internal control is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Payne, 2003; Abdel-Khalik, 1993). Internal control enhances the provision of additional information to the principal (shareholder) about the behavior of the agent (management) reduces information asymmetry and lowers investor risk and low revenue.

Attribution Theory

Attribution theory is a social psychology theory that explores how people interpret events and behaviors and how they ascribe causes to the events and behaviors. According to Schroth and Shah (2000), studies using attribution theory examine the use of information in the social environment to explain events and behaviors. Reffett (2007) asserts that when evaluators believe comparable persons would have acted differently in a given circumstance, they (evaluators) tend to attribute responsibility for an outcome to the person. On the other hand, when evaluators believe comparable persons would have acted similarly, the evaluators tend to attribute responsibility for the outcome to the situation. According to Wilks and Zimbelman (2004), the first case refers to internal or dispositional attributions while the second one refers to external or situational attributions.

Earlier literature shows that people are inclined to attribute others behavior to dispositional tendencies and to attribute their own behavior to situational circumstances (Wilks and Zimbelman, 2004; Schroth and Shah, 2000). Often, this is when the observed behavior is negative. Consequently, evaluators are expected to infer the failure to detect internal control on revenue generation as a dispositional tendency on the auditor's part which concludes that auditors are negligent. Bonner et al. (1998) found that auditors are more likely to be sued when they fail to detect common misappropriations that would result to decreased revenues, and the evaluators believe that the fraud could have been detected by other auditors. The auditor‟s accountability for detecting fraud is extended by Reffett‟s (2007) study which predicted that auditors are more likely to be held accountable by evaluators when the auditors fail to detect fraud after they had identified the fraud occurrence as a fraud risk. The result of Reffett‟s study shows an increase in auditors‟ liability when an audit fails, after the auditors had identified the perpetrated fraud as a fraud risk and performed procedures to investigate the identified fraud risk. The findings support Reffett's prediction.

Attribution theory thus advocates for auditors to report on the effectiveness of firms" internal control. Auditors are therefore expected to gain a better understanding of the internal controls in place, assess the design and implementation of the internal controls, and test the operating effectiveness of the internal controls. This is deemed necessary for the auditors" reliance and possibly scaling back of other substantive audit procedures for the required revenue generation. According to Bonner et al. (1998), evaluators can use the audit processes as a basis to determine negligence if auditors fail to detect internal control related fraud that may occur. The attribution theory suggests that when fraud occurs, identified parties should be held accountable and auditors, being the "public watch dogs" are most likely to be held accountable if evaluators determine substandard audit services were provided (Reffett, 2007).

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 that 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 and Gavrilova (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 there-fore 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 modelling internal control systems have not been implemented by firms due to the lack of realism, difficulty of modelling behavioural systems, lack of cost effectiveness, and lack of understanding by practitioners.

Internal Controls systems and financial performance

According to Hayes *et al*., 2005 internal control comprises five components; the control environment, the entity's risk assessment process, the information and communication systems, control activities and the monitoring of controls.

The additional components of the internal control systems will be held steady. Gupta (2001) drawing from Statements of Standard Auditing Practices No. 6 (SAP 6) define Internal control as "the plan of organization and all the methods and procedures adopted by the management of an entity to assist in achieving management objectives of ensuring as far as practicable, the orderly and competent perform of its production, including observance to organization policy, the protection of assets, prevention and detection of fraud and error, the accuracy incompleteness of accounting records and the timely preparation of reliable financial information". It is so value note from the above that; suitably instituted systems of internal control will ensure; completeness of all transactions undertaken by an entity, that the entity's assets are protected from stealing and misuse, that transactions in the financial statements are stated at the suitable amounts, that all assets in the company's financial statements do exist, that all the assets presented in the company's financial statements are recoverable and that the entity's transactions are presented in the appropriate manner according to the applicable reporting framework (ACCA- Audit and Assurance Services)Internal control is the term usually used to explain how management assures that an organization does gather its financial and other objectives. Internal control systems not only give to managerial effectiveness but are also significant duties of corporate boards of directors. (Verschoor; 1999).Hitt, Hoskisson, Johnson, and Moesel (1996) argued that there are two types of major internal controls associated with the management of big firm, mainly diversify firms, which have an significant outcome on firm improvement, these are; strategic controls and monetary controls. Intentional controls involve the use of long-term and strategically relevant criteria for the evaluation of business-level managers' actions and performance. Strategic controls emphasize largely subjective and sometimes intuitive criteria for evaluation (Gupta, 1987). The use of strategic controls requires that corporate managers have a deep understanding of business-level operations and markets. Such controls also require a rich information exchange between corporate and divisional managers (Hoskisson, Hitt, & Ireland, 1994).On the other hand, financial controls entail objective criteria such as return on investment (ROI) in the evaluation of business-level managers' performance. They are similar to what Ouchi (1980) and Eisenhardt (1985) referred to as outcome controls. Thus, top-level managers set up financial targets for each business and determine the business-level managers' performance against those targets. Such an approach can be difficult when the degree of inter reliance among business units is high. Thus, emphasis on financial controls requires each separation's performance to be mainly independent.

As a firm grows especially through acquisition, it also grows in complexity and the number of units that corporate executives must oversee and manage (thereby increasing their spans of control). Clearly, each acquisition increases corporate managers' need for information processing, sometimes dramatically so. These changes make it difficult for corporate managers to use strategic controls. To reduce information-processing demands, they may change their emphasis from strategic to financial controls (Michael A. Hitt, et al).

The three major categories of management objectives comprise; effective operations, financial reporting and compliance (Hayes et al., 2005). Effective operations are about safeguarding the assets of the organization. The physical assets like cash, nonphysical assets like receivables, important documents and records of the company can be stolen, misused or accidentally destroyed unless they are protected by adequate controls. The goal of financial control requires accurate information for internal decision because management has a legal and professional responsibility to ensure that information is prepared fairly in accordance with applicable accounting standards. Organizations are equally required to comply with many laws and regulations including company laws, tax laws and environment protection laws.

Review of Empirical Studies

Mawanda (2008) conducted a research on effects of internal control systems on financial performance in institution of higher learning Uganda. In his study he investigated and sought to establish the relationship between internal control systems and financial performance in an Institution of higher learning in Uganda. Internal controls were looked at from the perspective of Control Environment, Internal Audit and Control Activities whereas Financial performance focused on Liquidity, Accountability and Reporting as the measures of Financial performance. The Researcher set out to establish the causes of persistent poor financial performance from the perspective of internal controls. The study established a significant relationship between internal control system and financial performance. The investigation recommends competence profiling in the Internal Audit department which should be based on what the University expects the internal audit to do and what appropriate number staff would be required to do this job. The study therefore acknowledged role of internal audit department to establish internal controls which have an effect on the financial performance of organizations.

Using the analytical approach and focusing on control activities and monitoring, Barra (2010) investigated the effect of penalties and other internal controls on employees‟ propensity to be fraudulent. Data was collected from both managerial and non-managerial employees. The results showed that the presence of the control activities, separation of duties, increases the cost of committing fraud. Thus, the benefit from committing fraud has to outweigh the cost in an environment of segregated duties for an employee to commit fraud. Further, it was established that segregation of duties is a “least-cost” fraud deterrent for non-managerial employees, but for managerial employees, maximum penalties are the “least-cost” fraud disincentives. The results suggest the effectiveness of preventive controls control activities such as segregation of duties is dependent on detective controls.

Ewa and Udoayang (2012) carried out a study to establish the impact of internal control design on banks‟ ability to investigate staff fraud and staff life style and fraud detection in Nigeria. Data were collected from 13 Nigerian banks using a four point likert Scale questionnaire and analyzed using percentages and ratios. The study found that Internal control design influences staff attitude towards fraud such that a strong internal control mechanism is deterrence to staff fraud while a weak one exposes the system to fraud and creates opportunity for staff to commit fraud.

Kakucha (2009) evaluated the level of effectiveness of internal controls of enterprises operating in Nairobi. The study was quantitative and was conducted between September 2007 and June 2009 using a sample of 30 small businesses as listed in the National Social Security Fund (NSSF) Register of Kenya. Primary data was collected from the managers of the small business using interviews and examination of documents pertaining to internal controls. The study established that there are deficiencies in the systems of internal controls, with the degree of deficiencies varying from one enterprise to another. The components of internal control that were missing in most businesses surveyed were: firstly, risk analysis, and secondly lack of proper flow of information.

In addition, the study established that the sample population had limited awareness of what constituted an effective system of internal control. The study also found that there is a negative relationship between the age of an enterprise and the effectiveness of its system of internal control while a negative correlation between the resources held by an enterprise and its internal control system weaknesses exists. The recommended that these was need to enlighten the operators of small business of what constitutes an efficient and effective system of internal control through forums and seminars.

RESEARCH METHODOLOGY

Research Design

This study takes a quantitative survey research design using primary data on internal control procedures and financial performance of higher education institutions. It uses universities in Puntland State of Somalia because they represent some of the largest and most diverse learning institutions in Puntland State of Somalia and because they has been operational for a long time that is enough to provide the data required for the study.

Survey (according to Oso and Onen, 2008) "present a leaning methodology used to examine population by selecting samples to examine and discover occurrences". The same Authors explain Correlation as the determination of whether or not and to what extent an association exists between two or more variables. Survey was used for its economy, rapid data collection and capability to understand a population from a part (Oso and Onen, 2008). Correlation was used as a means of trying to examine the relationship between internal audit, internal control systems and financial performance.

Target Population

A population is the whole group that the research focuses on (Kothari, 2012). It is the total number of respondents, or the total environment of interest of the researcher (Oso& 66 Onen, 2009).

The target population of the study is all the institutions of higher learning in Puntland State of Somalia. These include Colleges and Universities. Because of their uniform way of operations, Puntland State University (PSU), East Africa University (EAU), University of Bosaso (UoB), Garowe Teachers Education Collage (GTEC) are chosen as a representative case study.

The study focused on internal control, finance and finance related departments of the University targeting particularly Finance and Accounts personnel, Deans, and Heads of Departments of the University. The total study population or the respondents were 30 from the selected higher institutions in Puntland.

Sample and Sampling Techniques

In selecting the respondents, purposive and convenience sampling was used to identify universities in this survey for achieving the study objectives. The researchers used convenience sampling because respondents that the researchers could easily reached out to be used for the study. This is because universities are some of the largest and most diverse learning institutions in Puntland State of Somalia and because they have been operational for a long time that is enough to provide the data required for the study. The data from the universities focused on the internal control procedures adopted by the universities and how they relate to the financial performance of the University.

Data Processing and Analysis

The study was target departmental heads, management committee members, accounts, internal control, internal audit and finance and accounts personnel to form Units of analysis. The collected Data was fed into computer programs (using particularly the Statistical Package for Social Scientist -SPSS) for easy analysis and explanation of results.

Correlation was used as a way of assessing the relationship between internal auditing, internal controls and financial performance. An ordinal logistic regression model was the fitted to test for the hypothesis described earlier in the study. Ordinal logistic regression is used to predict an ordinal dependent variable given one or more independent variables. It is a statistical technique that can be used with an ordered (from strongly disagree to strongly agree) dependent variable. The ordered logit model has the form:

$$\mathrm{logit}(p_1) = \log\frac{p_1}{1 - p_1} = \alpha_1 + \beta' x$$

$$\mathrm{logit}(p_1 + p_2) = \log\frac{p_1 + p_2}{1 - p_1 - p_2} = \alpha_2 + \beta' x$$

$$\mathrm{logit}(p_1 + p_2 + \cdots + p_k) = \log\frac{p_1 + p_2 + \cdots + p_k}{1 - p_1 - p_2 - \cdots - p_k} = \alpha_k + \beta' x$$

And

$$p_1 + p_2 + \cdots + p_k = 1$$

Where, 1 = strongly disagree

2= disagree

3= not sure

4= agree

5=k= strongly agree

P= the proportion of respondents in each of the above responses

X= the vector of independent variables consisting of:

- Information and Communication systems (x_1),
- Internal audit (x_2) and
- Internal monitoring (x_3), with financial performance being the dependent variable

The ordinal logistic model was used to test the hypothesis on the existence of a relationship between financial performance and the three independent variables defined as follows:

$\mathbf{H_0}$:There is no relationship between financial performance and information and communication systems

$\mathbf{H_a}$:There is relationship between financial performance and information and communication systems

$\mathbf{H_0}$:There is no relationship between financial performance and internal audit

$\mathbf{H_a}$:There is relationship between financial performance and internal audit

$\mathbf{H_0}$: There is no relationship between financial performance and internal monitoring

$\mathbf{H_a}$:There is relationship between financial performance and internal monitoring

All the variables were ordinal in nature measured with a Likert scale of 1 to 5 as indicated above.

RESULTS AND DISCUSSION

Academic Qualifications of respondents

Details about the education levels of respondents were obtained and the results are revealed in table 1 below

Table 1: Education Levels of Respondents

Qualification	Frequency	Percent
Bachelor	5	17
Masters	25	83
Total	**30**	**100**

From Table 1, it can be revealed that majority of respondents who are also the employees show that they hold master's degree in a good percentage (83%) while the remaining (17%) hold bachelor degree. This means that the respondents are adequately qualified persons academically.

Cross Tabulation Analysis

In order to get a basic picture of the interaction between the dependent variable (financial performance) and the independent variables (Information and Communication systems, internal audit and Monitoring), cross tabulation was used, in each case taking one independent variable against the dependent variable.

Cross tabulation for financial performance and the Information and Communication systems

As shown in table 2, for the case of financial performance and the Information and Communication systems, only 6% of the respondents strongly agreed with their Information and Communication systems and were neutral about their financial performance. Majority of the respondents (53%), agreed with their institution's Information and Communication systems while 47% strongly agreed. Of these, 53% also agreed to the institution's financial performance while 40% strongly agreed.

Table 2: cross tabulation for financial performance and
the Information and Communication systems

Rank for Information and Communication systems	Rank of Financial Performance			Row Total
	Neutral	Agree	Strongly Agree	
Agree	0	11	5	16
Strongly Agree	2	5	7	14
Column Total	**2**	**16**	**12**	**30**

Cross tabulation for financial performance and the Internal Audit

Table 3 shows the case for financial performance against the internal Audit. Unlike in I Information and Communication systems, there were respondents (10%) in this case disagreeing with the existence of internal audit system in their organizations. Majority of the respondents however (70%) either agreed or strongly agreed with the existence of an internal audit system. On financial performance, 7% of the respondents were neutral about it 53% agreed while 40% strongly agreed. All the respondents who were neutral about their financial performance had disagreed with their internal audit system. It appeared that majority of the respondents who agreed to the existing internal audit also agreed with institution's financial performance.

Table 3: Cross tabulation for financial performance and the Internal Audit

Rank for Internal Audit	**Rank of Financial Performance**			**Row Total**
	Neutral	Agree	Strongly Agree	
Disagree	2	1	0	3
Neutral	0	6	0	6
Agree	0	8	2	10
Strongly agree	0	1	10	11
Column Total	**2**	**16**	**12**	**30**

Cross tabulation for financial performance and the Monitoring

On financial performance and monitoring, table 4 indicates that 10% of the respondents were neutral while the rest either agreed or strongly agreed. All the respondents who were neutral on the existence of monitoring were also neutral on the financial performance of the institution. Majority of the respondents (53%) agreed with their institution's financial performance while 40% were in strong agreement. It was apparent that majority of the respondents who either agreed or strongly agreed to the existing monitoring also agreed (100%) or strongly agreed (86%) with institution's financial performance.

Table 4: Cross tabulation for financial performance and the Monitoring

Rank for Monitoring	**Rank of Financial Performance**			**Row Total**
	Neutral	Agree	Strongly Agree	
Neutral	2	1	0	3
Agree	0	13	0	13
Strongly agree	0	2	12	14
Column total	**2**	**16**	**12**	**30**

Correlation between Internal Control systems and financial performance

The correlation and the relationship between internal control systems and financial performance in higher education institution Puntland was investigated using Information and Communication system, internal audit and monitoring as dimensions for internal control systems and the financial performance as dimension.

As to find effects of Information and Communication systems on the financial performance; the researcher has employed Spearman's Rank Correlation since all the questionnaires were based on likert scale. Spearman's correlation coefficient, (ρ, also signified by r_s) measures the strength of association between two ranked variables.

Spearman's rank correlation test was done between the independent variables themselves and between the independent variables and the dependent variable. Table 5 gives the spearman's rank correlation coefficients. As shown, there was low and insignificant correlation between the independent variables (<0.2) except for internal audit and monitoring whose correlation was higher (0.69) and significant at p=0.01. Correlation also existed between the dependent and the independent variables with a correlation of 0.82 between internal audit and financial performance and 0.88 between monitoring and financial performance being significant at P=0.01.

Table 5: Spearman's rank Correlation analysis

	Internal control system	**Internal Audit**	**Internal monitoring**	**Financial performance**
Information and Communication systems	1.00000000			
Internal Audit	-0.12167247	1.00000000		
Internal Monitoring	0.01281125	0.6954868***	1.00000000	
Financial performance	0.08713394	0.8153492***	0.88184305***	1.00000000

*** (P=0.01)

Further, for the spearman's rank correlation coefficient a significance test was conducted to determine whether the correlations obtained between the dependent and the independent variables were significant. As shown in table 6, the p-values indicate that the correlations obtained were significant except for the internal control system and financial performance.

Table 6: Spearman's rank correlation rho on financial performance

	Hypothesis	Rho value (ρ)	P-value
Information and Communication systems	$H_0: \rho = 0$ $H_1: \rho \neq 0$	0.08713394	0.6471
Internal Audit	$H_0: \rho = 0$ $H_1: \rho \neq 0$	0.8153492	4.078e-08
Monitoring	$H_0: \rho = 0$ $H_1: \rho \neq 0$	0.1362316	1.212e-10

Curiosity was drawn to whether there existed significant dependence between the independent variables above and the institution's financial performance. Chi square was thus conducted to test for dependence between financial performance and the independent variables (Information and Communication systems, internal audit and monitoring). Results in table 7 indicate that there was a significant relationship at P=0.01 between financial performance and internal audit χ^2 (37.773, 6) = 1.244e-06. There was also a significant relationship at P=0.01 between financial performance and internal monitoring χ^2 (41.25, 4) = 2.386e-08. However, there was no significant dependence at P=0.05 between financial performance and information and communication χ^2 (4.4699, 2) = 0.107.

Table 7: Chi square test of independence

Financial performance			
	χ^2 Value	**Degrees of freedom (df)**	**p-value**
Information and Communication systems	4.4699	2	0.107
Internal Audit	37.773	6	1.244e-06
Monitoring	41.25	4	2.386e-08

The researcher notes that chi-square is a test of significant correlations and not a test for cause-effect relationship. Therefore, the existence or non-existence of significant relationships based on chi-square test does not necessary imply the existence or non-existence of a causal-effect relationship. An ordinary logistic regression model was fitted to further explain the relationship between financial performance and Information and Communication systems, internal audit and monitoring.

Regression Analysis

Table 8: Regression analysis

Ordinary logistic regression model					
	Value	t-value	P-value	2.5% C.I	97.5% C.I
Information & Communication Systems	10.715781	2.148145	0.03170227	1.5207050	136.79463
Internal Audit	2.746487	1.433039	0.01518467	0.7324825	13.33042
Monitoring	5.141379	1.511243	0.013072662	0.6758281	54.15259

Table 8 gives a summary of the regression coefficients generated by the model. For a one unit increase in the rank for Information and Communication systems, the odds of agreeing with the financial performance are 10.7 times greater, given that all of the other variables in the model are held constant. Similarly, for one unit increase in the rank for internal audit, the odds of agreeing with the financial performance are 2.8 times greater, given that all of the other variables in the model are held constant. Further still, for one unit increment in the rank for monitoring, the odds of agreeing with the financial performance are 5.1 times greater, given that all of the other variables in the model are held constant.

The relationship depicted between internal controls (Information and Communication systems, internal audit and monitoring) and financial performance was significant at p=0.05 level of confidence. This seems to agree with Ray and Pany (2001)'s belief that "internal control systems are policies and procedures that help ensure that management directives are carried out". Therefore, internal control systems affect financial performance. Thus, the hypothesis *(Ha): There is dependence between financial performance and information and communication systems of higher institutions of learning are related is accepted*, (*Ha*): *There is dependence between financial performance and internal auditis acceptedand (Ha):There is dependence between financial performance and internal monitoring is accepted*. Therefore, there findings are also in line with (MAWANDA, 2008) who concludes that internal control systems do function although with hiccups and that there is a significant relationship between internal control systems and financial performance in an Institution of higher learning. The results seem to re-enforce the correlations established.. This finding further confirms the explanation given under the correlation analysis.

CONCLUSIONS

It is evident from the findings that the dimensions of internal control systems (information and communication systems, internal audit, and monitoring) has a significance effect on the financial performance of Higher Education Institutions in Puntland State of Somalia.

The study found out that management of the institutions are committed to the controls of the Universities and they actively participate in monitoring and supervision of the activities of the Universities. The study also reveals that all the activities of the Institutions are initiated by the top level management. On the effectiveness of the information and communication systems. However, there was no significant dependence at P=0.05 between financial performance and information and communication.

In regards to the internal audit, the study found out that most internal audit departments are efficient, and conduct regular audit activities and produce regular audit reports. They however, agree that the few reports that are produced in the department address the weaknesses in the system. Majority of the respondents however agreed or strongly agreed with the existence of an internal audit system. Therefore, there was a significant relationship at P=0.01 between financial performance and internal audit.

The study found that, there is a clear separation of roles, supervision of activities by senior staff, weaknesses that are realized are addressed. The study also found out that there is information sharing in the Universities and also no security measures are put in place to safeguard the assets of the Universities. There was also a significant relationship at P=0.01 between financial performance and internal monitoring

The final conclusion of this study is that there is a significant positive relationship between internal control system (Information and Communication systems, internal audit and monitoring) with financial performance.

RECOMMENDATIONS

The study recommends that the institutions establish and manage knowledge/information management system within the institution so as to enable all parties within the institution to freely access and utilize the official information. This study also recommends that the institutions should adopt internal control and information systems that produce operational, financial and compliance-related information reports to make it possible to run and controls the institutions. Management must also be serious with organizing programs for staff to alert them on the understanding their roles in the control system.

Internal controls need to be adequately monitored in order to assess the quality and the effectiveness of the systems performance over time. Monitoring of customer feedback and audits should be conducted periodically by internal auditors. Internal audit staff be trained periodically in implementing and strengthening their work towards the universities. Also management should encourage all staff to report major failings and weakness promptly so as to ensure the effectiveness of the internal controls.

The study also recommends that the institutions establish a strategy for improving the generation of additional finances for the operations of the University. This could be done through writing projects, other competitive endeavours which are directly aimed at winning funds for the Universities.

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