Impact of Internal Audit Unit on the Effectiveness of Internal Control System of Tertiary Educational Institutions in Adamawa State - Nigeria

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Abstract
This study assess the impact of internal audit unit on the effectiveness of internal control system of tertiary educational institutions in Adamawa State - Nigeria, with a view to finding out whether or not internal audit unit impacted positively on the effectiveness of internal control system of tertiary educational institutions. The study employs survey and research design where Primary data were collected using the questionnaire administered to internal audit units, finance and administrative staff of the departments respondents in the eight (8) sampled tertiary educational institutions in the State. Descriptive statistics and Chi-square technique were used to analyse the data obtained through the use of SPSS 15.0 version. The main findings of the study are that internal audit unit of tertiary educational institutions in Adamawa State are not effective because they lack; independence and are short of adequate staff, more so, they are not timely in their internal audit reporting. The study also discovered that, the components of internal control system are not properly put in place by the management of the institutions, especially in the area of authorization and approval, supervision, segregation of duties and personnel controls. This phenomenon has contributed to the ineffectiveness of internal control system of the institutions. The study recommends that internal audit unit should be established as a separate department/unit to serve as custodian of internal control system, sufficient and competent staff should be recruited for the unit. The management of the institutions in Adamawa state should ensure that all the components of internal control system are established and are effectively functioning.

BACKGROUND TO STUDY
Tertiary Educational Institutions are Institutions of higher learning where knowledge is imparted to its seekers and researches are undertaken in various fields of human Endeavour. The main objective of either public or private Tertiary Educational Institutions is to provide educational services and counseling to the general public at the right time.

Anyafio (2000), opines that the primary objective of Tertiary Educational Institutions is to provide educational services to desirous members of the public. It is important to appreciate the fact that for Tertiary Educational Institutions (private or public) to achieve its desired objectives effectively, the management of such tertiary educational institution must establish an effective internal audit unit which would be able to furnish the management of the institutions with necessary analyses, appraisals, and recommendations for onward decision making.

The management of tertiary educational institutions is clearly responsible for defining the roles of internal audit unit and ensuring that it has an appropriate level of authority and independence, including the right to report to the highest authority. To ensure effective internal control system in tertiary educational institutions, there has to be accountability in their cash flow. And for the organizations to have a successful accountability, a well designed internal auditing system must be put in place.

This study is concerned with internal auditing which is an internal function established by the management of a given institutions. Gupta (1999), defines internal auditing as an independent appraisal function established within an organisation to examine and evaluate its activities as a service to the management of the organisation. Internal auditing can also be seen as an internal appraisal that functions within an organization and which would review activities as a service to all levels of management (Chartered Institute of Public Finance and Accountancy (2003).
Internal Control System means all the policies and procedures adopted by a management of an establishment, institution or organization to assist in achieving management objectives of ensuring, the orderly and efficient conduct of its business. This include, adherence to management policies, safeguard of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information (Mahmud and Karma-Sahayak, 2007; Adejola, 2009).

The problem of this study was developed considering the previous studies in this area, which this study seeks to improve upon are; Tijjani (2003) who limit his study to universities as the tertiary educational institutions. while Oladoyin, Taiwo and Oladele (2006), in their study, concluded that it is the lack of proper record keeping that brought about the weakness of internal control system in the tertiary educational institutions. Dambatta(2004), views the weakness of internal Audit as a result of lack of independence. This study therefore considers Universities, Colleges and Polytechnics as tertiary educational institutions, and such it covers a wider scope than all the previous studies, features of effective internal audit unit and the whole components of internal controls system are captured in this study.

To this end, this research intends to filter the existing gap by assess the impact of Internal Audit Unit on the effectiveness of Internal Control System of Tertiary Educational Institutions in Adamawa State-Nigeria as main objective with a view to finding out:- whether or not the components of internal control system of tertiary educational institutions in Adamawa State are effective and capable of impacting positively on the effectiveness of ICS, and to find out whether or not Internal Audit Unit impacts positively on the effectiveness of internal control system of Tertiary Educational Institutions in Adamawa State.

In order to achieve the objectives of the study, research questions were raised and using the raised question, null hypotheses were developed and tested.

This study is significant and is of important to the various stakeholders of Tertiary Educational Institutions not only in Adamawa State but the Country as a whole: To the managements of tertiary institutions in Nigeria, it would help them among others to formulate and implement all their major policies and objectives by bringing systematic discipline to their process of Internal Control System and the process of good governance. Internal Auditors and employees of the Internal Audit Units would find this study useful as it would expose them to their roles, functions, duties and responsibilities. The study also expects to serve as a useful reference materials for future researchers in the area of auditing, especially Internal Auditing and Internal Control System.

The study covers the staff of three departments, that is Audit unit, Bursary/Finance and Registry Department in eight (8) Tertiary Educational Institutions comprising of Modibbo Adama University of Technology, Yola; Federal Polytechnic, Mubi; Adamawa State University, Mubi; State Polytechnic, Yola; Federal College of Education, Yola; College of Education, Hong; College of Agric, Ganye; and College of Nursing, Yola.

LITERATURE REVIEW

Various authors and scholars defined auditing in different ways; Arens and Leabbecke(1998), define Auditing as a process by which competent independent person accumulates and evaluates quantifiable information related to a specific economic entity for the purpose of determining and reporting on the degree of the correspondences between the quantifiable information and established criteria.

The Institute of Chartered Accountant in England and Wales (ICAEW, 2004), defines an audit as, The independent examination and expression of an opinion on the financial statements of an enterprise by an appointed auditor in pursuance of that appointment and in compliance with any relevant and statutory obligation.
Attwood and Stein (1986), define audit as checking somebody else`s accounting, while Meigs, et al (1982) put it as an examination or investigation by independent public accountant on a set of financial statements, accounting records and other supporting evidence both within and outside client's business.

In line with the above views, this study agrees with the definitions, but the two definitions have not included expression of opinion by the appointed Auditor and in compliance with statutory obligations after the checking and examinations conducted on the financial statements of an organisation.

Millichamp (2002), Dandago (2002), and Adeniji (2004), put the primary objectives of auditing as that of producing a report by the auditor showing his opinion on the truth and fairness of financial statements so that any person reading and using the financial statements can believe in them. They further give the subsidiary objectives of effective audit is detection of errors and frauds; prevention of errors and frauds by the deterrent and moral effort of the audit.

This study therefore agrees that, it is necessary for an effective audit to detect irregularities involving the misuse of funds, identify weaknesses in management control, and determine the reliability of the financial data and identify patterns of wastes and inefficiencies in the organization (public or private).

Internal auditing is defined by different institutions and scholars in many ways and perspectives. Internal auditing is defined by the institute of internal auditors (2008), as: an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization to accomplish its objectives by bringing a systematic discipline approach to evaluate and improve the effectiveness of management, control and governance processes.

Therefore, in any organization where there is effective functioning of internal Audit the organizational internal control system would be improved and it will leads to additional value to the organisation.

As cited in Davies (2001), the Auditing Practices Board’s auditing guidelines define internal auditing as an independent appraisal function established by the management of an organisation for the review of the internal control system as a service to the organisation. It objectively examines, evaluates and reports on the adequacy of internal control as a contribution to the efficient and effective economic resources utilization.

This study adds that if internal auditors are appointed by the management and made to operate on the management’s policies and report to the management then, it is likely for the auditors to be dependent on the management.

John (1996), defines Internal Audit as an independent appraisal functioning within an organization for the purpose of guiding the activities of the institutions as a service to all levels of management within the organization. It is a control which measures, evaluates and reports upon the effectiveness of Internal Control system, financial and otherwise, as a contribution to the efficient use of resources within an organization. The objective of Internal Auditing is to help members of the organization in the effective discharge of their responsibilities.

In view of the above, internal audit furnishes the management with analysis, appraisal, recommendations, counseling and provision of information concerning the activities of the organisation for proper decision making.
Quaden (2001), defines Internal Audit as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and government processes. Accordingly, Institute of internal auditors (2008), defines the scope of an Internal Auditor as the examination and evaluation of the adequacy and effectiveness of the organization's system of internal control and the quality of performance in carrying out assigned responsibilities. In his review of operations and records, the Internal Auditor would be immediately concerned with the system of Internal Control and the internal check which forms a constituent part of it (Meigs et al., 1989).

According to Gupta (1999), Internal Audit is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization.

Howard (1981), observes that Internal Audit involves check at regular intervals by responsible members of staff or by the Internal Audit department/Unit.

Several literatures have given different classification or types of auditing; Some of the categorizations are made according to the nature of auditing approach and while some view it in terms of objective or audit technique. Basically, Internal Audit can be divided into the following categories based on auditing technique or objective:- System base Audit, Performance or Operational Audit, Financial or Accounting Audit, Compliance Audit, Management Audit (Aren, 1998; Dandago, 2002 and Sabari, 2003).

**Features of an Effective Internal Audit**

Laker (2006), identifies the following as the essentials features of effective internal audit unit. They are: structure and resources, independence, audit approach, internal audit plan and reporting. Studies like Woolf (1992), Philip (1996), Millicham (2002), and Dandago (2002), have similar views that, effective internal audit unit features includes: ascertaining the accounting and internal control system. More so evaluating the control to determine satisfaction in principles, to determine whether or not they have been applied as prescribed throughout the period, testing transactions and balances for completeness, accuracy and validity of transactions, reviewing financial statements by conducting audit test, reviewing procedures and determination of audits opinion that would be expressed by the auditors. For the purpose of this study, the features of effective internal audit unit identified by Laker (2006), are used in testing the effectiveness of internal audit units of tertiary educational institutions in Adamawa State.

**Concept of Internal Control System**

International Organisation of Supreme Audit Institution (2001), defines Internal control as an integral process that is affected by an entity's management and personnel and is designed to address risks and to provide reasonable assurance that in pursuit of the entity’s mission, the general objectives are achieved and executed in an orderly manner ethically, economically, efficiently and effectively there by fulfilling accountability obligations; complying with applicable laws and regulations; and also it help in safeguarding resources against any loss, misuse and damage.

Dinapoli (2007), provide that, the internal control system is the integration of the activities, plans, attitudes, policies, and efforts of the people of an organization working together to provide reasonable assurance that the organization would achieve its objectives and mission. This contribution is a unique one because it does not see the senior managers as the only personnel's responsible for internal control but all the staff in the organization. Employees tend to go extra miles in seeing that they place organizational objectives above their personal objectives provided their effort is seen and appreciated as instrumental towards the survival of the organization.
COSO (1994), defines internal control system as a process, design by an entity’s management to provide reasonable assurance regarding the achievement of objectives in the following ways: effectiveness and efficiency of operations; reliability of financial reporting and; compliance with applicable laws and regulations. However, where the internal audit unit of the organization discharges its responsibilities diligently by putting into account, all the relevant laws and regulations and, when the operational processes are followed in the most orderly manner, the audit reports prepared by them the auditors would be considered or regarded as reliable.

**Role of Internal Control System in Tertiary Educational Institutions**

Internal control system is an indispensable mechanism which plays vital role in all educational institutions. For an educational institution to provide quality education, good and enabling teaching, learning and research environment, it must establish a sound internal control system. The system immensenly assists the administrators of the institutions, particularly when decisions are to be made. Internal control keeps an organization on course towards its objectives and the achievement of its mission, and it minimizes wastages along the way. It also ensures that reliable financial information is reported because, financial information is the bedrock upon which management relied on to make short/long term tactical decisions and also predict the future with relative precision. Scott (1995), observes that the quality of any decision making is entirely dependent on the nature of the information made available. It is a well known fact that, timely and reliable financial data guides management in the formulation of appropriate policies in a given organisation. Abdullahi (1997) adds that ICS is not only relevant to financial controls but it is the most effective aid to financial management.

Adejola (2009) states that, effective ICS assists organizations in many ways amongst which are preserving the data is integrity and ensuring accurate and complete data processing. Owo (2003), opines that well established ICS ensures profit maximazation and loss/cost minimization. Internal controls system assists in seeing that ethics governing the organisation are adhered to by all and sundry, this is apart from clashes of responsibilities for different cadre of officers. Walker (1999), adds that, ICS if well designed and implemented would provide reasonable assurance regarding the prevention of or prompt detection of an unauthorised acquisition, use, or disposition of University’s assets.

This study agrees with the above studies and added that, collusion among employees and fraud perpetration by the staff is as a result of ineffective internal audit unit of the organisation which will leads to weak internal control system and finally to make the internal control system not to provide absolute assurance that; all the objectives of an organisation will be achieved.

**Causes and Consequences of a Weak ICS on Tertiary Educational Institutions**

There are so many issues that make an internal control system ICS to be weak, they include, management’s attempt to overiding the established internal controls, inadequate or improper record keeping and accounting, reluctancy of senior staff to accept independent oversight, lack of good and round audit coverage, understaffing, abnormal separation of duties, and improper and untimely reconciliation of major assets and liabilities; (Rotberg, 2000; and Hawk, 2000; Olatunji, 2009). The effects of weak ICS cannot be over emphasized. It distorts the plan of the institutions, paves way to financial indispline, fraud, errors, irregularities, and misallocation of resources. Lawal (2005), contends that some tertiary educational institutions administrators use resources meant for developing the institutions into personal gains and this trend is not possible where the control system is effective. The study conducted by Norvee (2006), shows that one of the major reasons behind the collapse of giant companies in USA is as a result of weak ICS. Ahmad (2005), discovers that one of the main reasons why fraudsters normally have their ways with relative ease is as a result of the lapses in the structure of ICS of organisations. Petrovits et al (2009) contend that weak ICS foster organisational inefficiency.
Determinants of an Effective Internal Control System

Internal Audit Guidelines (2008), adds that internal audit role is primarily about providing independent assurance over the internal control system frameworks to an organization.

Another main determinant of effective internal control system is a competent and independence of an auditor. By independence here, the auditor should not relent in carrying out his duties as specified by relevant laws and pronouncements as well as the ethics of his profession. The internal auditor should only be responsible to the Chief Executive Officer and not anyone else. Being answerable to other staff, like the Bursar or the Chief Accountant, will make him loss independent. On the issue of internal auditors independence some scholars have conducted a number of studies, and the summary of their findings is that internal auditors in Nigeria, particularly in the public sector, lack the basic tenets of auditing and this is attributed to the issue of lack of guaranteed independence (Sabari, 2003; Tijjani, 2003; Dandago and Suleiman, 2005).

Adejola (2009), opines that to have effective and efficient ICS, some basic factors must be present. They include God factor, time management factor, knowledge factor, ICT factor and finally competence and integrity factor. This means that employees, whether at the management level or at the non managerial level, should go about discharging their responsibilities with the fear of God and make best and judicious use of time. They should regularly update their knowledge and exhibit the virtues of integrity and competency at all times. In the same vein, all employees of an organisation should be seen and considered as an important agents for achieving the aim of the organisation. This is because, ICS is a people effected mechanism. More importantly, the cost of instituting ICS should not exceed the benefits to be derived from it. In other words, an effective internal control system should be economical.

Components of Sound Internal Control System

According to INTOSAI (2004), internal control system is a process effected by an entity's board of directors, management and other personnel's, designed to provide reasonable assurance regarding the achievement of the set objectives and the effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations and generally the controls are of two types:

Preventive Control: This refers to the type that is designed to discourage errors, prevent irregularities from occurring; they are proactive controls that help prevent a loss. Examples: Separation of duties, proper authorization, adequate documentation and physical control over assets.

Detective Control: This control is designed to find errors or irregularities after they have occurred. Examples: reviews, variance analyses, reconciliations in investigation and audit.

Woolf (1986), Dandago (1999), and Dinapoli (2007), identifies the following components of internal controls system to be instituted in order to have sound internal control systems on which an auditor may rely upon.

Physical Control: Assets of Educational Institutions must be kept physically secured, and this is particularly important in case of valuable items like cash, stocks, cars, etc. Appropriate measures should be put in place to safeguard them; they form the most significant and or valuable assets of the Universities (Awoyemi, 1989).

Arithmetic and Accounting Control: The arithmetical side of the control ensures that transactions figures are correctly calculated and recorded from the source documents. The accounting side of the control on the other hand ensures that, the transactions are being posted into the relevant books of accounts accordingly (Arens and James, 1999).
**Personnel Control:** There is no doubt that human capital is something to be recognised with in every organization. It follows that, right people are assigned to the right jobs and other wise. (Ricchieute, 2002). Invariably, organisations should make sure that competency and integrity are not being compromised at all cost.

This shows that, the proper functioning of any organasational internal control system depends largely on the competency and integrity of its personnel.

**Authorizations and Approval Control:** This type of control requires that all the transactions relating to the organisation must be appropriately authorized and approved by officers responsible for the authorisation and approval (Dandago, 2002). This means that, clearly defined responsibilities should be assigned to the right persons and there is need for strict adherence to organasational responsibilities.

**Management Control:** This control includes the use of budget or management accounting to plan and control organasational operations and the establishment of functional internal audit unit or department. There is the need for annual budget of all the activities of the organization, which is to be compared against the actual result of operations or activities at the end of the year. Appropriate actions need to be taken by the management on the variances that are bound to be revealed by the comparison (Gupta, 1999).

**Organizational Control:** This control is saying that, there should be an organizational chart which defines responsibilities as well identifies lines of reporting; it is important for every employee to know the precise powers he/she has and to whom he/she should report. The organizational structure must be made simple and or straight forward for everybody to understand his/her responsibilities and his line of reporting easily.

**Supervision Control:** This control is to be exercise by higher-level officers in the organisation in order to put the activities of subordinates under check. At times correction is necessary if subordinates are to perform their duties. This control needs to be strengthen at all levels so that it will help to assess the extent of compliance to organasational policies, objectives and legal requirements, in order to detect and prevent errors and frauds, and determine whether or not efficiency, economy and effectiveness have been achieved (Hamid, 2004).

**Segregation of Duties Control:** Segregation of duties control ensures that no person is responsible for all aspects of a transaction. This type is fundamental to good internal control system. The involvement of more than one person in an event reduces the risk, where accidental errors or deliberate misappropriation, and financial indiscipline are to occur: Functions normally segregated are those of authorization, approval, custody and recording (Owo, 2003). This shows that, different people are assigned different responsibilities or position to single handedly initiate, process and record a transaction.

Internal control system is indeed an indispensable mechanism for all organizations irrespective of their operational capacity or magnitude. One of the fundamental function of ICS, if properly designed and implemented, is decrease the danger of risk associated with the business entity. In other words, it is an effective tool for risk management. COSO (1994) and AICPA (2005), opines that, for an ICS to really assist the management, it must possess these basic components among others. They include: control environment; risk assessment; control activities; information and communication, and monitoring activities. Internal control should not be considered as separate, specialized systems within an organization. Rather, internal control should be recognized as an integral part of each system that management uses to guide its operations (INTOSAI, 2001).

This study therefore, agrees with the above view which states that, if the components/control mentioned earlier are well design and implemented, then there will be an effective internal control system in the organisation. To this end this study would use these controls as the bases
for testing the effectiveness of internal control systems of tertiary educational institutions in Adamawa State to see whether or not internal control system is effective and how internal audit unit impacted positively on the effectiveness of internal control system of the institutions.

An empirical fact shows that Internal Control Systems of some Tertiary Educational Institutions are not effective as a result of insufficient Audit Staff that are capable and trained to face the enormous challenges in the financial procedures and processes of internal control system of the Universities (Brewer and List, 2004 and Tijjani, 2003).

The study above is only concerned with insufficient audit staff as factor that lead to ineffectiveness of internal control system and the study is limited to the Universities alone. This trend necessitated the taking up of the current study to test the component of internal control system, of all the other institutions of higher learning like Colleges of Educations and polytechnics in Adamawa State.

Oladoyin, Taiwo, and Oladele, (2006), state that ample facts abound on the issues of improper record keeping, transparency in both the private and the public sector organizations in Nigeria. The study shows that most financial abuses are perpetrated as a result of weak Internal Control System in an organization.

Dambatta (2006), provides that, financial regulations is not being religiously observed in some of the Tertiary Educational Institutions as a result of the inability of the monitoring mechanisms to effectively work as expected due to lack of independence of auditors the reign of other principal officers of the establishment.

This study considers only the lack of independence of an auditor as a factor that lead to ineffective internal control system neglecting integrity, transparency and other features of effective internal audit.

Dambatta (2004), concludes that a properly conducted internal audit is expected to reveal errors where they exist and the strengths or weaknesses of internal control system of the organization.

Based on this conclusion, it can be submitted that, there is a significant positive relationship between internal audit and internal control system; that is if the Internal Audit Unit is effective then the Internal Control System will also be effective.

**Theoretical Frame Work**

There are many theoretical frame works like Stewardship theory, Stakeholder theory and Agency theory. From the above theories, the theory that best suits the framework of this study is the agency theory, because the theory involves the establishment of monitoring processes such as internal auditing to achieve optimality and with the establishment of effective internal audit unit, there is likelihood of achieving an effective internal control.

**RESEARCH METHODOLOGY**

Base on the nature of this study, this study takes Survey type of research design because the relative elements of the population have a common attributes which are chosen with a view to representing the entire population of the study. The population of this research is limited to only the staff of internal audit unit, staff of bursary/finance department and the staff of registry department of Government owned Tertiary Educational Institutions in Adamawa State. The study is more concern with the government Tertiary Educational Institutions because they are not there to make profit rather they are there to provide educational services. The institutions are eight (8) in number and they are grouped into two strata the Federal and the State owned tertiary educational institutions. The basis of grouping those institutions into two is because
the two operate under different jurisdictions of the federal and respectively. These groups of respondents are regarded as appropriate because of the knowledge and experience they have about the internal audit and internal control system of the institutions in the State.

For the purpose of this study, scientific sampling technique is used in selecting 200 out of 250 staff of the three operational departments of the internal audit unit, bursary/finance department and Registry department in the eight (8) Tertiary Educational Institutions as samples size of the study. The sample size of 200 staff is arrived by using a scientific sampling technique formular: 

\[ N ÷ (1 + Ne^2) \]

Going by the Asika (2008), the sample size of this study cover all the different institutions and is adequate enough to provide relevant, sufficient and meaningful information on the subject matter. Questionnaires are prepared and applied in order to obtain data relating to effectiveness of internal control components and the effect of internal audit unit on the effectiveness of internal control system of the institutions. The study used descriptive statistic and chi-square technique for data analysis.

RESULTS AND DISCUSSION

Since the reasonable numbers of one hundred and forty (140) completed questionnaires were retrieved from the respondents which represent 70% of the total questionnaires Administered. Thus, it can be said that the study has enough bases for analysis and interpretation of results of findings.

Hypothesis Testing

The hypotheses are tested based on the grouped stratum that is the federal and state levels. It also combined the two strata.

Hypothesis 1A

**Internal Audit Unit is not effective to impact positively on the ICS of Federal Owned Tertiary Educational Institutions in Adamawa State**

The research uses the results obtained to test hypothesis of the study using chi-square method, which states that Internal Audit Unit of federal owned Tertiary Educational Institutions in Adamawa State is not effective.

| Management of TEI ensures Internal Audit structure and resources | 57  | 3.89 | 1.067 | 1   | 5  |
| Management of TEI ensures independence of internal audit is maintained | 57  | 2.01 | 1.142 | 1   | 5  |
| IAU of TEI ensures clear Internal Audit approach | 57  | 3.85 | 1.075 | 1   | 5  |
| IAU of TEI ensures Internal Audit Plan | 57  | 3.99 | 1.070 | 1   | 5  |
| IAU of TEI ensures that reporting after each assignment is made | 57  | 1.85 | 1.131 | 1   | 5  |

Source: Generated by the Author using SPSS15.0, from Questionnaires Responses, 2012

Tables 2 above shows mean, standard deviation, minimum and maximum values of the
responses to questions relating to whether or not Internal Audit Units of the federal owned Tertiary Educational Institutions in Adamawa State is effective. The minimum and maximum values represent the range of options available to the respondents for them to choose one option out of the five options. From table 4.2 above, the average respondent's shows that the Management of federal owned TEI ensures proper structures and resources to the Internal Audit Units (mean 3.89 with standard 1.067 around the mean). Internal audit unit ensures internal audit approach and plan with the mean 3.85, 3.99 with standard deviation of 1.075 and 1.070 respectively. On the issue of internal audit independence and reporting after each audit assignment, management do not ensure audit independence and the internal audit unit do not report after each audit assignment conducted with mean 2.01, 1.85, with standard deviation of 1.142 and 1.131 respectively, around the mean.

Table 3: Chi-square Results on the hypothesis that states Internal Audit Unit is not effective to impact positively on the ICS of Federal Owned Tertiary Educational Institutions in Adamawa State the Effective Internal Audit Unit of Federal Owned Tertiary Educational Institutions in Adamawa State.

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<tr>
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<th>Chi-Square(a)</th>
<th>Df</th>
<th>Asymp. Sig.</th>
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<tr>
<td>Mgt of TEI ensures Internal Audit structure and resources</td>
<td>135.214</td>
<td>4</td>
<td>0.027</td>
</tr>
<tr>
<td>Mgt of TEI ensures independence of internal audit Function is maintained</td>
<td>115.786</td>
<td>4</td>
<td>0.050</td>
</tr>
<tr>
<td>IAU of TEI ensures clear Internal Audit approach</td>
<td>137.786</td>
<td>4</td>
<td>0.032</td>
</tr>
<tr>
<td>IAU of TEI ensures Internal Audit Plan</td>
<td>142.786</td>
<td>4</td>
<td>0.023</td>
</tr>
<tr>
<td>IAU of TEI ensures reporting after each assignment made</td>
<td>115.786</td>
<td>4</td>
<td>0.058</td>
</tr>
</tbody>
</table>

0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.0.

Source: Generated by the Author using SPSS15.0, from Questionnaire Responses, 2012.

Table 3 above presents the chi-square values and results of the respective statements at 4 degree of freedom. The study found out that, the Management of TEI in Adamawa State do not ensures Internal Audit independence and the internal audit unit is not reporting after each audit assignment conducted (p-value=0.050 and 0.058 with 4 degree level of freedom) respectively. The structure and resources, internal audit approach and internal audit plan are ensured in the institutions with p-values of 0.027, 0.032, and 0.023 with 4 degree level of freedom respectively.

The hypothesis tested shows that the null hypothesis which states that internal audit unit of the Federal owned tertiary educational institutions in Adamawa State is not effective is accepted.

**Hypothesis 1B**

**Internal Audit Unit is not effective to impact passively on the ICS of State Owned Tertiary Educational Institutions in Adamawa State**

The research uses the results obtained from the analysis to test hypothesis one of the study using chi-square method, which states that Internal Audit Unit of State the Owned Tertiary Educational Institutions in Adamawa State is not effective.

Table 4: Summary of the Responses on the hypothesis that states Internal Audit Unit is not effective to impact positively on the ICS of Federal Owned Tertiary Educational Institutions in Adamawa State Effectiveness of Internal Audit Unit of State owned Tertiary Educational Institutions in Adamawa State.
Table 4 above shows mean, standard deviation, minimum and maximum values of the responses to questions relating to whether or not Internal Audit Unit of State owned Tertiary Educational Institutions in Adamawa State is effective. The minimum and maximum values represent the range of options available to the respondents for them to choose one option out of the five options. From Table 4.3 above, the average response shows that the Management of State owned TEI do not ensure proper structures and resources to the Internal Audit Units (mean 2.34 with standard deviation 1.062 around the mean). Internal audit unit do not ensure internal audit approach (mean 1.85 with standard deviation of 1.131). Internal audit unit ensures internal audit plan (mean 3.99 with standard deviation of 1.070). On the issue of audit independence and reporting after each audit assignment, management do not ensure audit independence and the internal audit unit do not report after each audit assignment (mean 2.01 and 1.85 with standard deviation of 1.070 and 1.131 around the mean respectively.

Table 5 Chi-square Results on the hypothesis that states Internal Audit Unit is not effective to impact positively on the ICS of Federal Owned Tertiary Educational Institutions in Adamawa State.

The table 5 above presents the chi-square values and results of the respective statements at 4 degree of freedom. The results shows that the Management of State owned TEI in Adamawa State do not ensure internal audit unit independence and adequate Internal Audit structure and resources are not ensured to the internal audit units of the institutions (p-value=0.065 and 0.050 with 4 degree level of freedom) respectively. The internal audit unit of State owned TEI ensures internal Audit plan in carrying their audit work (p-value 0.023 with 4 degree level of freedom).
The internal Audit unit of State owned TEI do not ensures clear Internal Audit approach and reporting after each audit assignment is not ensured (p-value 0.023 and 0.076 with 4 degree level of freedom) respectively. The hypothesis tested shows that the null hypothesis which states that internal audit unit of State Owned tertiary educational institutions in Adamawa State is not effective is accepted.

The results show that internal audit unit of tertiary educational institutions in Adamawa State is not effective both the ineffectiveness of the units varies between the state and the federal. State owned internal audit unit of TEIs are highly ineffective than federally owned tertiary educational institutions because internal Audit unit of Federal owned TEIs in Adamawa State ensured three (3) out of the five (5) features tested on the effectiveness of internal audit unit while only one (1) out of five (5) features tested are ensured by the State owned TEI.

**Hypothesis 2A**

**Internal Control System components of federal owned Tertiary Educational Institutions in Adamawa State is not effective.**

The research uses the results obtained from the analysis to test hypothesis four of the study, using chi-square method, which states that components of Internal control system of Tertiary Educational Institutions in Adamawa State is not effective.

| Table 6: Summary of the Responses on the effectiveness of components of Internal Control Systems of Tertiary Educational Institutions in Adamawa State. |
|---------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| N | Mean | Std. Deviation | Minimum | Maximum |
| TEI ensures physical control | 57 | 1.85 | 1.080 | 1 | 5 |
| personnel control | 57 | 1.85 | 1.080 | 1 | 5 |
| TEI ensures Arithmetic and Accounting Control | 57 | 3.98 | 1.121 | 1 | 5 |
| TEI ensures Authorization and approval controls | 57 | 1.85 | 1.080 | 1 | 5 |
| TEI ensures management control | 57 | 3.00 | 0.987 | 1 | 5 |
| TEI ensures organizational control | 57 | 3.99 | 1.119 | 1 | 5 |
| supervision Control is ensured in TEI | 57 | 1.85 | 1.080 | 1 | 5 |
| Segregation of duties control is ensured in TEI | 57 | 1.85 | 1.080 | 1 | 5 |

Source: Generated by the Author using SPSS15.0, from Questionnaire Responses, 2012.

Table 6 above shows that, the following components; physical and personnel control, Authorization and approval control, supervision control, segregation of duties control are not ensured by the TEIs because their mean are between 1 to 2 with deviations of 1.080 around the mean) respectively. On the management control, the responses show that the respondents are undecided (mean=3.00 with standard deviation of 0.0987). The result of respondents also show that organizational control, Arithmetic and Accounting Control are put in place (3.98, 3.99 with standard deviation of 1.21 and 1.119) respectively.
Table 7: Chi-square Responses on the effectiveness of components of Internal Control Systems of Tertiary Educational Institutions in Adamawa State.

<table>
<thead>
<tr>
<th>Component</th>
<th>Chi-Square(a)</th>
<th>Df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEI ensures physical and personnel control</td>
<td>98.786</td>
<td>4</td>
<td>0.060</td>
</tr>
<tr>
<td>TEI ensures Arithmetic and Accounting Control</td>
<td>105.786</td>
<td>4</td>
<td>0.020</td>
</tr>
<tr>
<td>TEI ensures Authorization and approval controls</td>
<td>105.786</td>
<td>4</td>
<td>0.051</td>
</tr>
<tr>
<td>TEI ensures management control</td>
<td>109.786</td>
<td>4</td>
<td>0.050</td>
</tr>
<tr>
<td>TEI ensures organizational control</td>
<td>112.786</td>
<td>4</td>
<td>0.025</td>
</tr>
<tr>
<td>Supervision Control is ensured in TEI</td>
<td>95.786</td>
<td>4</td>
<td>0.065</td>
</tr>
<tr>
<td>Segregation of duties control is ensured in TEI</td>
<td>105.786</td>
<td>4</td>
<td>0.060</td>
</tr>
</tbody>
</table>

Source: Generated by the Author using SPSS15.0, from Questionnaire Responses, 2012.

Table 7: above shows the results of chi-square test on whether or not internal control system components of Tertiary Education Institutions in Adamawa State are effective. The table 4.21 above also presents the chi-square values and results of the respective statements at 4 degree level of freedom. The study found out that the management of federal owned IEIs ensures both Arithmetic control, Accounting Control and organizational control (p=value 0.020 and 0.025 with 4 degree level of freedom) respectively. While for the other controls, the respondents also agreed that, the management do not ensure them (p=value0.060, 0.51, 0.050, 0.065 and 0.060 at 4 degree level of freedom).

Hypothesis 2A
Components of Internal Control Systems of State owned Tertiary Educational Institutions in Adamawa State is not effective.

The research uses the results obtained from the analysis to test hypothesis four of the study, using chi-square method, which states that components of Internal control system of Tertiary Educational Institutions in Adamawa State is not effective.

Table 8: Summary of the Responses on the effectiveness of components of Internal Control Systems of Tertiary Educational Institutions in Adamawa State.

<table>
<thead>
<tr>
<th>Component</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEI ensures physical and personnel control</td>
<td>87</td>
<td>2.01</td>
<td>1.070</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TEI ensures Arithmetic and Accounting Control</td>
<td>87</td>
<td>4.15</td>
<td>1.131</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TEI ensures Authorization and approval controls</td>
<td>87</td>
<td>2.01</td>
<td>1.070</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TEI ensures management control</td>
<td>97</td>
<td>3.11</td>
<td>.887</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TEI ensures organizational control</td>
<td>87</td>
<td>3.99</td>
<td>1.070</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Supervision Control is ensured in TEI</td>
<td>87</td>
<td>2.01</td>
<td>1.070</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Segregation of duties control is ensured in TEI</td>
<td>87</td>
<td>1.85</td>
<td>1.131</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Generated by the Author using SPSS15.0, from Questionnaire Responses, 2012.
Table 8: above show that, the following components; physical and personnel control, Authorization and approval controls, supervision control and segregation of duties control are not sound and effective (mean is between 1.85 and 2.01 with deviations of 1.070, 1.070, 1.070 and 1.131 around the mean). On the part of the management control, the responses shows that the respondents are undecided with a mean=3.11 and deviation 0.0887). The result of respondents also show that organizational control, Arithmetic and Accounting Control are sound (mean 3.99 and 4.15 with standard deviation of 1.131 and 1.070) respectively.

Table 9: Chi-square Responses on the effectiveness of components of Internal Control Systems of Tertiary Educational Institutions in Adamawa State.

Table 9: above shows the results of chi-square test on whether or not internal control system components of Tertiary Education Institution in Adamawa State are effective to ensure sound internal control systems. The table 4.23 above also presents the chi-square values and results of the respective statements at 4 degree of freedom. The study found out that, only arithmetical and accounting control and organasational control which the respondents agreed that the management ensures it effectively (p=values 0.025 and 0.032). The respondents also agreed that, the management does not ensure effectiveness of other remaining components (p=value 0.060, 0.051, 0.50, 0.071 and 0.067) respectively.

The result show that three out of seven components of internal control system are put in place in federal owned TEIs compared to two out of seven components of internal control system put in place in the state owned TEIs in the state.

Hypothesis 2B

Components of Internal Control System of Tertiary Educational Institutions in Adamawa State are not being put in place.

The research uses the results obtained from the analysis to test hypothesis four of the study, using chi-square method, which states that components of Internal control system of Tertiary Educational Institutions in Adamawa State are not effective.

Table 10: Summary of the Responses on the effectiveness of components of Internal Control Systems of Tertiary Educational Institutions in Adamawa State.

Table10: Summary of the Responses on the effectiveness of components of Internal Control Systems of Tertiary Educational Institutions in Adamawa State.

Source: Generated by the Author using SPSS15.0, from Questionnaire Responses, 2012.
The results of the respondents show that, the following components physical and personnel control, Authorization and approval controls, supervision Control, Segregation of duties control are not sound and effective because their mean are between 1and2 with deviations of 1.070, 1.070, 1.070 and 1.131 around the mean). On the management control, the responses shows that the respondents are undecided with a mean=3.11 and deviation 0.0887). The results of respondents also show that organizational control, Arithmetic and Accounting Control are sound.

Table 11: Chi-square Responses on the effectiveness of components of Internal Control Systems of Tertiary Educational Institutions in Adamawa State.

<table>
<thead>
<tr>
<th>TEI ensures physical and personnel control</th>
<th>TEI ensures Arithmetic and Accounting Control</th>
<th>TEI ensures Authorization and approval controls</th>
<th>TEI ensures management control</th>
<th>TEI ensures organizational control</th>
<th>supervision Control is ensured in TEI</th>
<th>Segregation of duties control is ensured in TEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square(a)</td>
<td>115.786</td>
<td>115.786</td>
<td>115.786</td>
<td>119.786</td>
<td>115.786</td>
<td>115.786</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>0.060</td>
<td>0.025</td>
<td>0.051</td>
<td>0.050</td>
<td>0.032</td>
<td>0.071</td>
</tr>
</tbody>
</table>

Table 11: above show the results of chi-square test on whether or not internal control system components of Tertiary Education Institution in Adamawa State are effective to ensure sound internal control systems. The table 4.13 above also presents the chi-square values and results of the respective statements at 4 degree of freedom. The study finds out that, only two components which the respondents agree that the management ensures its effectiveness. In this case their null hypotheses are rejected.

CONCLUSION/FINDINGS

In conclusion of this study, the research posits that if effective Internal Audit Unit is effective then it would have a positive impact on the effectiveness of Internal Control System of TEIs in Adamawa State. But the internal audit units of TEIs in Adamawa State are not effective and IAU of State owned TEIs are highly ineffective than that of Federal-owned Tertiary Educational Institutions in Adamawa State.

Based on the analysis of responses generated from the questionnaires administered to the study area, the researcher arrives at the following findings:

1. The internal audit units of tertiary educational institutions in Adamawa State are ineffective because they lack independence, insufficient internal audit staff but IAU of States owned TEIs are more ineffective than IAU of Federal owned TEIs in Adamawa State.
2. That is, most of the internal audit work like record keeping, checking, authorization and approvals are done by a single person and the unit does not ensure timely internal audit reporting after each audit assignment.
3. The components of internal control system of tertiary educational institutions in Adamawa State-Nigeria are not properly put in place especially in the area of authorization, approval, and supervision, segregation of duties and personnel control.

Recommendations

On the basis of the findings of the study, the study made the following recommendations:

1. The management of TEIs in Adamawa State should ensure that all the features of effective internal audit unit like audit structure and resources, internal audit approach and audit plan are properly put in place, sound and effective.
2. Internal audit unit of TEIs in Adamawa State should recruit additional internal audit staff.
to make them sufficient in discharging their duties and the internal audit staff that lack internal audit training should be trained or sacked, if not trainable. The unit should also ensure timely internal audit reporting after each audit assignment.

3. The management of tertiary educational institutions in Adamawa State-Nigeria should ensure that the components of internal control system are properly put in place especially in the area of authorization, approval, and supervision, segregation of duties and personnel control.

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