

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

I
J
R
C
M



A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.

Open J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C.)].

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 1771 Cities in 148 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

<http://ijrcm.org.in/>

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	ONLINE COMMUNITY IDENTIFICATION AND CITIZENSHIP BEHAVIORS: INVESTIGATING THE EFFECT OF PERCEIVED VALUE <i>KUANG-WEN WU, MAY-CHING DING & YUAN-SHUH LII</i>	1
2.	THE IMPACT OF GLOBAL FINANCIAL CRISIS ON AUDITING PRACTICES IN THE COMMERCIAL BANKS OF JORDANIAN <i>DR. BADI SALEM ALRAWASHDEH</i>	7
3.	FINANCIAL DIAGNOSIS: A CASE STUDY OF LANKA ALUMINIUM INDUSTRIES PLC IN SRI LANKA <i>ARULVEL, K.K, BALAPUTHIRAN, S & DR. B. NIMALATHASAN</i>	10
4.	DETERMINANTS OF BASIC SCHOOL TEACHERS' LEVEL OF COMPUTER LITERACY IN GHANA <i>PAUL DELA AHIAATROGAH & ELISHA D'ARCHIMEDES ARMAH</i>	14
5.	DATA MINING IMPACTS ON HIGHER EDUCATION <i>ROY MATHEW</i>	19
6.	CHALLENGES OF INTERNAL AUDIT FUNCTION IN PUBLIC SECTOR GOVERNANCE: EMPIRICAL EVIDENCE FROM ETHIOPIA <i>AGUMAS ALAMIREW MEBRATU</i>	23
7.	AN EXAMINATION OF LEADERSHIP STYLES OF SENIOR AND MIDDLE LEVEL MANAGERS IN SELECTED ORGANISATIONS IN MUSCAT, SULTANATE OF OMAN <i>NEELUFER ASLAM & KUSUM LATA MISHRA</i>	33
8.	KNOWLEDGE AUDIT AS A SUCCESS FACTOR FOR KM IMPLEMENTATION <i>DR. C. S. RAMANI GOPAL & DR. G. PALANIAPPAN</i>	37
9.	MEASURING THE LEVEL OF CUSTOMER SATISFACTION AND CUSTOMER LOYALTY IN BANKING AND INSURANCE SECTOR IN INDIA: A COMPARATIVE STUDY <i>CHARU UPADHYAYA & DR. V. K. JAIN</i>	43
10.	A STUDY ON RETAIL SERVICE QUALITY SCALE (RSQS MODEL) APPLICATION WITH REFERENCE TO RELIANCE FRESH IN CITY OF BHAVNAGAR <i>DR. K. S. VATALIYA, KIRAN SOLANKI & MALHAR TRIVEDI</i>	49
11.	ONLINE BUYING BEHAVIOUR OF CUSTOMERS: A CASE STUDY OF NORTHERN INDIA <i>VINOD KUMAR, DR. VERSHA MEHTA & DR. ALKA SHARMA</i>	54
12.	DEALERS AND CONSUMER DURABLES (A STUDY BASED ON DEALERS PERCEPTIONS AS REGARDS SAMSUNG COLOUR TELEVISION) <i>DR. R. SAVITHRI</i>	61
13.	A STUDY ON THE INDIAN SMALL CAR MARKET AND FACTORS INFLUENCING CUSTOMERS' DECISIONS TOWARDS PURCHASE OF SMALL CARS' <i>THAMARAI SELVI N & NITHILA VINCENT</i>	65
14.	LEAN MANUFACTURING SYSTEM: AN EFFECTIVE TOOL FOR ORGANIZATIONAL MANAGEMENT <i>S. K. RAJENDRA, R. SUPRABHA & V. M. AKSHATHA</i>	70
15.	CUSTOMER SERVICE MANAGEMENT IN SELECT PUBLIC SECTOR BANKS IN RURAL VILLAGES IN SALEM DISTRICT, TAMIL NADU <i>DR. A. JAYAKUMAR & G. ANBALAGAN</i>	75
16.	REVISITED 'THE IRREGULARITY OF INDIAN STOCK MARKET: AN OCTOBER EFFECT ANALYSIS' <i>RAJESH KHURANA & DR. D. P. WARNE</i>	78
17.	ICT ENABLED DELIVERY SYSTEM AND CHALLENGES IN PUBLIC HEALTH SERVICES MANAGEMENT <i>GANESHKUMAR HIREGODDAR & DR. H. RAJASHEKAR</i>	81
18.	SOCIAL MEDIA MARKETING AND BOLLYWOOD: RECENT TRENDS AND OPPORTUNITIES <i>DEEPMALA JAIN & SONIA GOSWAMI</i>	86
19.	EFFECT OF FACEBOOK ON PURCHASING BEHAVIOR OF YOUTH <i>PREYAL DESAI, PRATIMA SHUKLA & NIKUNJ THAKKAR</i>	93
20.	RESEARCH & DEVELOPMENT IN MANAGEMENT <i>DR. PULI. SUBRMANYAM & S. ISMAIL BASHA</i>	98
21.	TREND IN EXPORT OF LEATHER PRODUCTION IN INDIA <i>DR. P. CHENNAKRISHNAN</i>	105
22.	CONCURRENCY CONTROL MECHANISM IN DBMS <i>GEETIKA</i>	109
23.	A STUDY ON OPERATIONAL CONSTRAINS INVOLVED IN STEVEDORING TECHNIQUES AT SEAPOL LOGISTICS PVT. LTD., TUTICORIN <i>DR. A. MERLIN THANGA JOY</i>	111
24.	IMPACT OF MERGER AND ACQUISITION ON THE FINANCIAL PERFORMANCE OF SELECT PUBLIC SECTOR BANKS IN INDIA <i>DR. V. MOHANRAJ</i>	119
25.	NEUROMARKETING: INNOVATIVE FOCUS ON THE FEMALE BUYING BRAIN <i>DEEPA KEDAR RELE</i>	122
26.	CONSUMER SATISFACTION IN INDIAN CELLULAR INDUSTRY USING SERVICE QUALITY MODEL- AN EMPIRICAL ASSESSMENT <i>DR. MANMATH NATH SAMANTARAY</i>	126
27.	SECURITY STANDARDS IN SERVICED APARTMENTS – WITH SPECIAL REFERENCE TO BANGALORE AND CHENNAI (SOUTH INDIA) - AN ANALYSIS <i>DR. LEENA N. FUKEY</i>	130
28.	TO DISCUSS THE EFFECT OF SUPPLIERS' INVOLVEMENT, OPERATIONAL CAPABILITIES & SOURCING PRACTICES ON SUPPLY CHAIN FLEXIBILITY <i>PARDEEP SINGH BAJWA, KANWARPREET SINGH & DOORDARSHI SINGH</i>	136
29.	INFORMATION AND COMMUNICATION TECHNOLOGY (ICT): NEW DEAL FOR INTERNATIONAL DEVELOPMENT SMEs SERVICES <i>VAHID RANGRIZ</i>	141
30.	HUMAN RESOURCE MANAGEMENT: BROADENING THE CONCEPT OF HUMAN RESOURCES <i>VISHU AGRAWAL & DISHA AGRAWAL</i>	148
	REQUEST FOR FEEDBACK	153

CHIEF PATRON

PROF. K. K. AGGARWAL

Chancellor, Lingaya's University, Delhi
Founder Vice-Chancellor, Guru Gobind Singh Indraprastha University, Delhi
Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

FOUNDER PATRON

LATE SH. RAM BHAJAN AGGARWAL

Former State Minister for Home & Tourism, Government of Haryana
Former Vice-President, Dadri Education Society, Charkhi Dadri
Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

CO-ORDINATOR

DR. MOHITA

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadhola, Yamunanagar

ADVISORS

DR. PRIYA RANJAN TRIVEDI

Chancellor, The Global Open University, Nagaland

PROF. M. S. SENAM RAJU

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

PROF. S. L. MAHANDRU

Principal (Retd.), Maharaja Agrasen College, Jagadhri

EDITOR

PROF. R. K. SHARMA

Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

CO-EDITOR

DR. MOHITA

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadhola, Yamunanagar

EDITORIAL ADVISORY BOARD

DR. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

PROF. PARVEEN KUMAR

Director, M.C.A., Meerut Institute of Engineering & Technology, Meerut, U. P.

PROF. H. R. SHARMA

Director, Chhatrapati Shivaji Institute of Technology, Durg, C.G.

PROF. MANOHAR LAL

Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi

PROF. ANIL K. SAINI

Chairperson (CRC), Guru Gobind Singh I. P. University, Delhi

PROF. R. K. CHOUDHARY

Director, Asia Pacific Institute of Information Technology, Panipat

DR. ASHWANI KUSH

Head, Computer Science, University College, Kurukshetra University, Kurukshetra

DR. BHARAT BHUSHAN

Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar

DR. VIJAYPAL SINGH DHAKA

Dean (Academics), Rajasthan Institute of Engineering & Technology, Jaipur

DR. SAMBHAVNA

Faculty, I.I.T.M., Delhi

DR. MOHINDER CHAND

Associate Professor, Kurukshetra University, Kurukshetra

DR. MOHENDER KUMAR GUPTA

Associate Professor, P.J.L.N. Government College, Faridabad

DR. SAMBHAV GARG

Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana

DR. SHIVAKUMAR DEENE

Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

DR. BHAVET

Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana

ASSOCIATE EDITORS

PROF. ABHAY BANSAL

Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida

PROF. NAWAB ALI KHAN

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

ASHISH CHOPRA

Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

TECHNICAL ADVISORS

AMITA

Faculty, Government M. S., Mohali

DR. MOHITA

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadholi, Yamunanagar

FINANCIAL ADVISORS

DICKIN GOYAL

Advocate & Tax Adviser, Panchkula

NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS

JITENDER S. CHAHAL

Advocate, Punjab & Haryana High Court, Chandigarh U.T.

CHANDER BHUSHAN SHARMA

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

SUPERINTENDENT

SURENDER KUMAR POONIA

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Management Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email address: infoijrcm@gmail.com.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR
IJRCM

Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF

(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled ' _____ ' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

NAME OF CORRESPONDING AUTHOR:

Designation:

Affiliation with full address, contact numbers & Pin Code:

Residential address with Pin Code:

Mobile Number (s):

Landline Number (s):

E-mail Address:

Alternate E-mail Address:

NOTES:

- a) The whole manuscript is required to be in **ONE MS WORD FILE** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
- b) The sender is required to mention the following in the **SUBJECT COLUMN** of the mail:
New Manuscript for Review in the area of (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)
- c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
- d) The total size of the file containing the manuscript is required to be below **500 KB**.
- e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
- f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name, designation, affiliation (s), address, mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.
6. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.
7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.
9. **MAIN TEXT:** The main text should follow the following sequence:

INTRODUCTION**REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESES****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****SCOPE FOR FURTHER RESEARCH****ACKNOWLEDGMENTS****REFERENCES****APPENDIX/ANNEXURE**

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed **5000 WORDS**.

10. **FIGURES & TABLES:** These should be simple, crystal clear, centered, separately numbered & self explained, and **titles must be above the table/figure. Sources of data should be mentioned below the table/figure.** It should be ensured that the tables/figures are referred to from the main text.
11. **EQUATIONS:** These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.
12. **REFERENCES:** The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:
 - All works cited in the text (including sources for tables and figures) should be listed alphabetically.
 - Use **(ed.)** for one editor, and **(ed.s)** for multiple editors.
 - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
 - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
 - The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
 - For titles in a language other than English, provide an English translation in parentheses.
 - The location of endnotes within the text should be indicated by superscript numbers.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:**BOOKS**

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

CHALLENGES OF INTERNAL AUDIT FUNCTION IN PUBLIC SECTOR GOVERNANCE: EMPIRICAL EVIDENCE FROM ETHIOPIA

AGUMAS ALAMIREW MEBRATU
LECTURER
DEPARTMENT OF ACCOUNTING AND FINANCE
COLLEGE OF BUSINESS AND ECONOMICS
DILLA UNIVERSITY
DILLA

ABSTRACT

A healthy constructed internal audit function can play a vital role in the governance and accountability process of public sector institutions through their assessments on the effectiveness of key organizational controls, governance and risk management processes. The purpose of this study is to examine the role of internal audit function in public sector governance and challenges that have an effect on this function empirical evidence from Amhara National Regional State public sector, Ethiopia. Structured questionnaire survey of all internal audit directors and staff from 35 public sector bureau of Amhara National Regional State, a total of 61 internal auditors was used. To analyze the data, OLS multiple regression statistical method was employed. OLS regression analysis results show that risk management role of internal audit function is positively related to compliance with professional audit standards, unrestricted access, formal mandate, top management support, and competent leadership, and negatively related to organizational independence, competent staff and sufficient funding. The finding reveals that competent staff, compliance with professional audit standards, and sufficient funding is positively related with the control function of internal audit. The regression results also suggest that governance process role of internal audit function is positively related to competent staff and compliance with professional audit standards, and negatively related to top management support, formal mandate, and unrestricted access. The study concludes that policy makers and regulators and all other parties related to internal audit function in the public sector that needs the services of internal audit to be effective and efficient should give emphasis on the value adding role of its function in the public sector through risk management, control and governance processes.

KEYWORDS

Ethiopia, Internal auditing, Role of internal audit function

INTRODUCTION

The widespread characteristics of public sector governance cry for an effective internal auditing function to meet the demanding responsibilities required by stakeholders. A healthy constructed internal audit function can play a vital role in the governance and accountability process of public sector institutions through their assessments on the effectiveness of key organizational controls, governance and risk management processes (Asare, 2009). This healthy internal audit function of risk management, control and governance process requires organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and professional audit standards (IIA, 2006). To what extent the existence of these elements are associated with the risk management, control and governance roles of internal audit function in public sector governance is rarely empirically investigated.

The paper is structured as follows. The next section reviews the literature and develops research question. The third section outlines data collection procedures and the research methods employed. The fourth section provides empirical analysis and discussion of the study; and finally, section five present conclusions.

LITERATURE REVIEW

A. ROLE OF INTERNAL AUDIT FUNCTION

The existing literature (for example, Asare, 2009, and MOFED, 2004) state that the role of internal audit function can be identified as involving three main elements, namely the evaluation and improvement of risk management, control and governance processes in the public sector. Risk management, control and governance encompass the policies and procedures established to ensure the achievement of objectives and include the appropriate assessment of risk, the reliability of internal and external reporting and accountability processes, compliance with applicable laws and regulations, and compliance with the behavioral and ethical standards set for public organizations and employees. Others argue oversight, insight, and foresight as an essential element of a strong public sector governance structure (IIA's, 2006). This study however, covers risk management, control and governance process role of internal audit function in the public sector. There fore, the following section presents these roles of internal audit function.

A1. ROLE OF INTERNAL AUDITING FUNCTION-RISK MANAGEMENT

As Asare (2009) state that the demand for proper risk management strategies in the public sector emanates from the complexity and dynamism of the operating environment, ever-increasing needs of society coupled with general unpredictability pattern and dwindling of resources for national development. The author further note the internal auditor's role in risk management involves assessing and monitoring the risks that the organization faces, recommending the controls required to mitigate those risks, and evaluating the trade-offs necessary for the organization to accomplish its strategic and operational objectives.

The institute (IIA, 2010) state that internal audit activity must evaluate risk exposures relating to the organization's governance, operations, and information systems regarding the: reliability and integrity of financial and operational information, effectiveness and efficiency of operations and programs, safeguarding of assets; and compliance with laws, regulations, policies, procedures, and contracts. In the context of governance, the key activity of internal auditing with respect to risk is to monitor all the subsidiary steps of identifying risk, assessing the potential effect of the risk on the organization, determining a strategy to address the risk, and then monitoring the environment for new risks as well as monitoring the existing risk strategy and attendant controls (Hermanson, et al. 2003).

Hass, Abdolmohammadi, and Burnaby (2006) on their American literature review of internal auditing note that internal auditors must not only be able to assess risks in their large organizations, but they must also be able to complete complex risk analyses in their own internal audit function (IAF). The authors in addition included, accomplishing this, internal auditors need to possess increasing levels of critical thinking, analysis, decision making, and logic.

A2. ROLE OF INTERNAL AUDIT FUNCTION_ CONTROL

Asare (2009) note that the internal auditing as a control measure does not only minimize the opportunities for corruption through the verification of procurement processes but also ensures effective physical monitoring of capital items procured and actual utilization to avoid fraud and abuse. In addition to these, internal audit has played an active role in implementing effective governance and controls while being asked to assess the effectiveness of management's control practices. In the context of governance, the key activities of internal auditing with respect to control is that to ensure controls in place to address key organizational risks (Hermanson, et al. 2003).

Standard 2130 of IIA (2010), state that the internal audit activity must assist the organization in maintaining effective controls by evaluating their effectiveness and efficiency and by promoting continuous improvement. Similar to this, an internal audit function typically evaluates the system of internal control of the whole management process of planning, organizing and directing to determine whether reasonable assurance exists so that objectives and goals of the company will be achieved (Haron, Ibrahim, Jeyaraman and Chye, 2009). To achieve these roles internal auditors must incorporate knowledge of controls gained from consulting engagements into evaluation of the organization's control processes (IIA c1, 2010).

A3. ROLE OF INTERNAL AUDIT FUNCTION_ GOVERNANCE PROCESS

The institute of internal auditor's professional guidelines (IIA, 2006) state that the public sector governance encompasses the policies and procedures used to direct an organization's activities to provide reasonable assurance that objectives are met and those operations are carried out in an ethical and accountable manner. The institute in addition state public sector governance relates to the means by which goals are established and accomplished.

Internal audit can help to improve governance processes by focusing on how values are established to ensure effective and efficient control and management of public sector entities. Such a value system requires an open government that is transparent in its dealings with a high sense of ethical behavior and fairness (Asare, 2009). Similarly, standard 2130 (IIA, 2010) state that internal audit activity should assess and make appropriate recommendations for improving the governance process to accomplish the following objectives: promoting appropriate ethics and values within the organization, ensuring effective organizational performance management and accountability, and effectively coordinating the activities of and communicating information among the Board, external and internal auditors and management. The above-stated functions of internal audit considered as dependent variables of the study. The following section presents challenges (independent variables of the study) that have an effect in these functions.

B. CHALLENGES ASSOCIATED WITH THE ROLE OF INTERNAL AUDIT FUNCTION

To achieve the risk management, control and governance functions as stated under (IIA, 2006) all government audit functions require the existence of organizational independence, formal mandate, unrestricted access to information, sufficient funding, competent leadership, competent staff, management support, and professional audit standards. This study considered these elements as challenges which determine the existence of effective internal audit function in public sector governance. As a result, the following section reviews previous literatures related to these elements which considered as independent variables of the study.

ORGANIZATIONAL INDEPENDENCE: MOFED (2004), Ethiopian Government Auditing Standards (hereafter EGAS, 2006), and IIA (2006) state that organizational independence allows the audit function to conduct work without interference by the entity under audit. EGAS (2006), especially emphasis that in all matters related to their audit work, audit offices and individual auditors must have independence from the legislature, executive and the management of the audited entities. However, in Ethiopian case, to what extent these implications really applicable in the sector require empirical investigation.

Just as independence is a major issue for external auditors, independence is also an important issue for internal auditors. However, because the company they are auditing directly employs them, it is impossible for internal auditors to be independent in the same manner as external auditors (Hock and Burch, 2011). The authors additionally affirm that a crucial issue of organization independence is for the chief audit executives (CAE) to have a reporting line in the organization that will allow the internal audit activities (IAA) to fulfill its tasks.

Van Gansberghe (2005) affirm that, the agreement and active involvement of the head of internal audit, senior managers, audit staff, accounting officers and senior operational management must be secured in a climate that fosters independent, but valued, evaluation of the effectiveness of risk management, control, and governance processes. To foster independence, Wobschall (2011) on his internal Audit Quality Assessment Framework paper similarly state that internal auditors sufficiently maintain independence and objectivity by not auditing operational areas for which they have previously had executive or management responsibility within the last year and not undertaking subsequent audits of a system, which they have previously been involved in consultancy on systems design.

MANAGEMENT SUPPORT: Mihret and Yismaw's (2007) Ethiopian higher education case study result shows that management support to IA is considered as one of the determinants of IA's attributes. They also indicate that audit findings and recommendations would not serve much purpose unless management is committed to implement. The institute in relation to support state that the legitimacy of the audit function and its mission should be understood and supported by a broad range of elected and appointed government officials, as well as the media and involved citizens (IIA, 2006).

MOFED (2004) state that heads of internal audit should co-ordinate internal audit plans and activities with the management, other internal auditors, external auditors, and other review agencies to ensure the most effective audit coverage is achieved and duplication of the effort is minimized. In line with this thought, Van Gansberghe (2005) noted that the IA function should work closely together with operational managers to improve the organization's evaluation of risks and determining its risk appetite, to improve its systems, regulations, procedures and the ethical environment.

FORMAL MANDATE/EXISTENCE OF AUDIT CHARTER: The interpretation of attribute standard 1000 states that the internal audit charter is a formal document that defines the internal audit activity's purpose, authority and responsibility. In line with this notion, Commonwealth of Australia (2007) in its better practice guide states that the charter should define the scope of internal audit, that is, the programmes, activities, processes, systems and organizations that are subject to internal audit review. In addition it states that the charter should also specify the requirement for an internal audit strategic business plan and annual work plan. In a similar manner, Hock and Burch (2011) stated that the internal audit charter provides the Internal Audit Activity (IAA) with a formal mandate to do its work.

UNRESTRICTED ACCESS TO INFORMATION: Audits should be conducted with complete and unrestricted access to employees, property, and records (IIA, 2006). In relation to this, encyclopedia of business indicates that internal auditors have unrestricted access to whatever they might need to make an objective assessment. It includes unrestricted access to plans, forecasts, people, data, products, facilities, and records necessary to perform their independent evaluations. (<http://www.referenceforbusiness.com/index.html>.)

SUFFICIENT FUNDING: The audit function must have sufficient funding relative to the size of its audit responsibilities. This important element should not be left under the control of the organization under audit, because the budget affects the audit function's capacity to carry out its duties (IIA, 2006).

COMPETENT LEADERSHIP: The head of the audit function must be able to effectively recruit, retain, and manage highly skilled staff. Moreover, the chief audit executive should be an articulate public spokesperson for the audit function (IIA, 2006). The Ministry of Finance and Economic Development of Ethiopia defines the minimum level of skill, knowledge and experience required of the internal auditor and the Head of the Internal Audit. It also states the Head of Internal Audit should be qualified and have a wide experience of management.

COMPETENT STAFF: EGAS (2006) states that the audit staff who have line responsibility for ensuring the quality of audits should supervise and review audit activities and the audit report by using the auditing standards. In line with this notion, the audit function needs a professional staff that collectively has the necessary qualifications and competence to conduct the full range of audits required by its mandate. Auditors must comply with minimum continuing education requirements established by their relevant professional organizations and standards (IIA, 2006).

PROFESSIONAL AUDIT STANDARDS: The IIA states that professional audit standards support the implementation of the previous (above) elements and provide a framework to promote quality audit work that is systematic, objective, and based on evidence (IIA, 2006). Internal auditing is conducted in diverse legal and cultural environments; within organizations that vary in purpose, size, complexity, and structure; and by persons within or outside the organization. While differences may affect the practice of internal auditing in each environment, conformance with The IIA's International Standards for the professional Practice of Internal Auditing (Standards) is essential in meeting the responsibilities of internal auditors and the internal audit activity (IIA, 2010).

NEED /IMPORTANCE OF THE STUDY

The previous studies focus on the effectiveness of internal audit or internal audit function in different settings. For example, Arena and Azzone (2009), Dessalegn and Getachew (2008), Dessalegn and Aderajew (2007), Goodwin-Stewart et al. (2006), etc. in Italian companies, Ethiopian public enterprises, Ethiopian higher education case study and Australian companies respectively focus on the effectiveness of internal audit or internal audit function in different settings. Their studies did not widely investigate empirically to what extent risk management, control & governance process role of internal audit function associated with organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and professional audit standards. The need of this study is therefore; to fill this gap through empirical examination of the degree of association between the role of internal audit function and its' challenges.

STATEMENT OF THE PROBLEM

The widespread characteristics of public sector governance cry for an effective internal auditing function to meet the demanding responsibilities required by stakeholders. Internal audit can help to improve governance processes by focusing on how values are established to ensure effective and efficient control and management of public sector entities. Such a value system requires an open government that is transparent in its dealings with a high sense of ethical behavior and fairness. The complexity of the public sector operating environment requires that the internal audit structural design, approach, practice and scope be reformed to ensure open, accountable and prudent decision-making within all public sector organizations (Asare, 2009).

As stated under The Institute of Internal Auditor (IIA,2006), to protect the public interest, every government requires independent audit activities providing a range of assurance and advisory services from financial attestation to performance and operational efficiency, whether using internal and external audit services, or through use of a form that combines the two. The institute furthermore stated that the absence of good governance structures and lack of adherence to basic governance principles increases the risk of public corruption, which is defined as the misuse of entrusted power for private gain.

The nature of the internal audit functions according to the International Standards for the Professional Practice of Internal Auditing (Standards) (ISPPA, 2010), expressed as internal audit activity must evaluate and contribute to the improvement of governance, risk management, and control processes using a systematic and disciplined approach. In line with this, the nature of work of the internal audit functions (according to Standard 2100): *"...is to evaluate and improve the effectiveness of the following three processes:*

Risk management processes — identification and evaluation of potential risks that might affect the achievement of objectives of an organization and determination of adequate corrective actions.

Control processes — policies, procedures, and activities which ensure that risks are kept within the limits defined by management in the risk management process.

Governance processes — procedures which allow stakeholders to evaluate risk and control processes defined by management."

The internal audit function as a result contribute both by evaluating the systems' functioning and reliability (assurance services) and supporting the design of these systems by providing specific recommendations (consulting services).

The risk management, control and governance processes are sometimes recognizing as the three central part of internal auditing function in the public sector. To achieve these functions as stated under (IIA, 2006) all government audit functions require organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and Professional audit standards. To what extent the existence of these elements associated with the risk management, control and governance roles of internal audit function in public sector governance is rarely empirically investigated.

In the face of the role of internal audit function in the public sector governance, there is inadequate prior empirical studies which examined the degree of association between organizational independence, a formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and Professional audit standards with the risk management, control and governance roles of internal audit function in public sector governance. Prior studies focus on the effectiveness of internal audit or internal audit function in different settings. For example Arena and Azzone (2009), based on questionnaire survey of 153 Italian companies found that internal audit team characteristics, internal audit process and activities and the organizational links influence internal audit effectiveness. Dessalegn and Aderajew (2007), on their case study of Ethiopian higher education public-sector organizations conclude that management support to internal audit (IA) and IA quality as the major determinants of internal audit effectiveness. On the other study, Dessalegn and Getachew (2008), on their Ethiopian state-owned enterprise case study, identify factors that determine the value adding attributes of internal audit. They conclude that organizational goals and strategies and the level of risk exposure of organizations could be the potential factors that shape the dominant focus of internal audit as either assurance or consulting.

On their literature review, Dessalegn et al (2009), conclude that internal audit effectiveness is influenced by the dynamics prevailing in IA settings. They also argued that as IA is aimed to assist organizations to achieve objectives, a positive association between internal audit's level of compliance with the standards for professional practice of internal auditors and with organizational performance could serve as an additional approach to assess IA effectiveness. Goodwin-Stewart et al. (2006), on their study of the use of internal audit by Australian companies, suggest that firms with an integrated risk management framework are more likely to use internal audit. In addition, this study results indicate that, while size appears to be the determinant driver, there is a strong association between internal audit and the level of commitment to risk management. However, their study finds only a weak support for an association between the use of internal audit and strong corporate governance.

Office of thrift(March,2003), on interagency policy statement on the internal audit function and its outsourcing paper state that ideally, the internal audit function's only role should be to independently and objectively evaluate and report on the effectiveness of an institution's risk management, control, and governance processes. This paper also added, the internal audit function should be competently supervised and staffed by people with sufficient expertise and resources to identify the risks inherent in the institution's operations and assess whether internal controls are effective. The manager of internal audit should oversee the staff assigned to perform the internal audit work and should establish policies and procedures to guide the audit staff. The recent studies of Soh et al. (2011), on their semi-structured interview study of the internal audit function's perceptions of internal audit roles, effectiveness and evaluation shows that the internal audit function (IAF) is not responsible for risk identification of risk profiling, with unanimous agreement that this is the management's responsibility. Rather, the IAF's role is to provide an independent review of risk processes and ensure that risk mitigating controls are in place. Their study also highlight the emphasis placed on having the right people with the appropriate skills (particularly accounting and IT) in the IAF and especially in the role of the chief audit executives (CAE).Further more, their study confirmed that perceptions of IAF effectiveness are related to the level of expertise within the function and the support, status and position of IAF.

Although most scholars agree that the role of internal audit function in the public sector governance is compulsory, still there is an inadequate empirical prior study on this issue in developing nations in Ethiopian case in general and in Amhara National Regional State case in particular. Hence, the intent of this study is to examine empirically the role of internal audit function in public sector governance and challenges that have an effect on this function in the case of Amhara National Regional State.

OBJECTIVE OF THE STUDY

The general objective of this study is to examine the role of internal audit function in public sector governance and challenges that have an effect on this function the case of Amhara National Regional State public sector. Specifically it was intended to determine the magnitude of relationship between challenges and the role of internal audit function in the public sector governance and to identify the prevailing challenges of internal auditing function.

RESEARCH QUESTION

Overall it can be seen from the literature that there is a dearth of empirical prior studies which examine to what extent risk management, control & governance process roles of the internal audit function related to organizational independence, formal mandate, unrestricted access to information, sufficient funding, competent leadership, competent staff, management support, and professional audit standards in developing nations in Ethiopia case in general and in Amhara National Regional State in particular. Hence, to fill this gap, the current study attempts to answer the following research question.

RQ: To what extent better risk management, control and governance process role of internal audit function relates to better existence of organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and Compliance with Professional audit standards in the organization?

FUNCTIONAL RELATIONSHIP AND SPECIFICATION OF THE MODEL

Extent literatures suggest a number of challenges which might be important in determining the role of internal audit function in the public sector. Thus, let us outline the functional relationship.

$$\text{Model1: } RM = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) + \epsilon$$

$$\text{Model2: } CT = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) + \epsilon$$

$$\text{Model3: } GC = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) + \epsilon$$

Where;

RM = Risk management role of internal audit function measured by total items scored

β_0 =intercept of the regression line

β_1 to β_8 =slope coefficient of the regression line

Id = existence of organizational independence measured by total items scored

ST= existence of top management support measured by total items scored

MD = existence of formal mandate/audit charter measured by total items scored

AS = existence of unrestricted access measured by total items scored

F= existence of sufficient funding measured by total items scored

L= existence of competent leadership measured by total items scored

SF = existence of competent staff measured by total items score

C= existence of compliance with professional audit standards measured by total items score

ϵ = is the error term associated with the i^{th} observation.

CT = control function role of internal audit measured by total items scored

GC =Governance process role of internal audit function measured by total items scored

RESEARCH METHODOLOGY

A. RESEARCH PHILOSOPHY, APPROACH, DESIGN

This study was based on positivistic knowledge claims, quantitative methods, deductive approach and analytical survey strategy of inquiry in the perspective of getting a general picture of the role of internal audit function and its' challenges.

The selection of these methodologies is appropriate because of their inter linkage among them as Creswell (2003) stated as:

A quantitative approach is one in which the investigatory primarily uses positivistic claims for developing knowledge (i.e. cause and effect thinking, reduction to specific variables and hypotheses and questions, uses of measurement and observation, and the theories), employs strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data.

B. THE DATA AND MEASUREMENT

This study empirically analyzes how the challenges (independent variables) predict the role of internal audit function (dependent variables) in public sector governance by distributing structured closed-ended questionnaires to the internal audit directors and staffs of the selected Amhara National Regional State public sectors and support the questionnaire results by open-ended interview. Both dependent and independent variables measured at five - point likert-type scales with response options ranging from strongly disagree(SDA,1) to strongly agree(SA,5)(see Appendix1) . The questionnaire has cover pages which contains the general information about respondents and instructions. The collected data are analyzed by using OLS multiple regressions statistical analysis method by means of SPSS (version16) and stata (version 11) application software.

To ensure internal validity of the data, the questionnaire was pretested at two stages. The first stage, it was subjected to review by advisors and other colleagues, and in the second stage, to insure clarity and understandability of items to actual respondents, the questionnaire was pilot tested with internal auditors of regional Bureau of Finance and Economic Development (BOFED). The questionnaire was revised based on the comments and suggestions received at each stage before the actual data collection obtained.

To assist the external validity of data, there are commonalities in policies, procedures and organizational contexts of most public sector entities in Ethiopia and the same internal audit manual is used by all public bodies in Ethiopia (MOFED, 2004). Global Audit Information Network (IIA, 2009), Premier Benchmarking program framework of questionnaire type was adopted and revised as appropriate to the study. This broad domain of attributes ensures high –construct validity of measurement items identified in the questionnaire.

C.THE SAMPLE

According to regional Bureau of Finance and Economic Development (BOFED) 2003E.C, Amhara National Regional State (ANRS) has 42 government budgetary public sectors at regional level. Due to the new organizational arrangement i.e. BPR (business re-engineering process) , two or more similar function offices categorized under one office and thereby using single pool internal audit system . In addition, other offices at the time of data collection not yet employ internal auditors and others employ recently but not fully know the organization. For that reason, from 42 offices 35 offices are available at the time of data collection and become appropriate participants of the study. Hence, to get large number of participant, this study covers all internal audit directors and staffs of 35 offices at regional level.

A total of 69 questionnaires distributed, of which 61 usable (88.41 % response rate) were received. Majority of internal auditors were first degree graduates 45(73.8%) followed by college diploma, second degree and certified internal auditors (CIA), 14(23.0%), 1(1.60%) and 1(1.60%) respectively. Most of them are Accounting graduates followed by management. Work experience of internal auditor's ranges from 1 to 35 years and the mean work experiences are 12.81years.

EMPIRICAL RESULTS AND DISCUSSION

A.TEST OF ASSUMPTIONS

A1.NORMALITY OF DISTRIBUTION TEST

This study used Kolmogorov-Smirnov and Shapiro-Wilk (K-S) normality test analysis. As Greasley (2008) states the insignificance values of K-S normality test shows normally distribution of error terms. Results of K-S normality test were presented in table 1 below. Table 1 shows risk management D(61)=.073, P>.05 ,control function D(61)=.067,p>.05 and governance process D(61)=.080,P>.05 ,all are show evidence of normally distributed.

TABLE 1: K-S TESTS OF NORMALITY

Variables	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Risk management	.073	61	.200*	.977	61	.318
Control function	.067	61	.200*	.978	61	.333
Governance process	.080	61	.200*	.968	61	.110

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Source: Author's own computation

A2. LINEARITY TEST

As Baum (2006) pointed out, the best method to test linearity of hypotheses is using Walde test by linear combination method of stata syntax command. Wald test hypothesis the coefficients for independence, support, mandate, access, fund, leader, staff, and compliance are simultaneously equal to zero. All three null hypotheses are rejects because the current study combined sums of estimated coefficient are -.2117037, .481589, and -.190609 for model1, model 2 and model 3 presented in tables 2A, 2B and 2C respectively rather than zero. There fore, according to Baum (2006), linearity assumption is maintained that is the coefficient of each or combination of predictor variables differ from zero.

H0: independence + support + mandate + access + fund + leader + staff + compliance= 0.

Model1: $RM = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) = 0$

TABLE 2 A

Risk management	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]
(1)	-.2117037	.0296012	-7.15	0.000	-.2711029 -.1523045

H0: independence + support + mandate + access + fund + leader + staff + compliance = 0.

Model2: $CT = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) = 0$

TABLE 2 B

Control	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
(1)	.481589	.0726901	6.63	0.000	.3357256 .6274523

H0: independence + support + mandate + access + fund + leader + staff + compliance = 0

Model3: $GC = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) = 0$

TABLE 2 C

Governance	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
(1)	-.190609	.0755199	-2.52	0.015	-.3421507 -.0390672

Source: Author's own computation

A3. TEST OF MULTICOLINEARITY

Correlation analysis was applied to determine the interrelationships among independent variables and to examine the possibility of collinearity or multicollinearity. Since all independent variables were measured using approximately interval scales, with the response rang strongly disagree (SDA, 1) to strongly agree (SA, 5), Pearson product moment pair-wise correlation was used. Multicollinearity is a serious problem when the pair-wise correlation coefficients between two regressors are high, say excess of .80 (Gujarati, 2004, pp. 359). The current study, the highest correlation result is .5612 that is the correlation between competent leadership and competent staff. This indicates that problem of multicollinearity is not the threat. The following table presented this result.

TABLE 3: PEARSON PRODUCT MOMENT PAIR-WISE CORRELATION

	Independence	Support	Mandate	Access	Fund	Leader	Staff	Compliance	Risk	Control	Governance
Independence	1.0000										
Support	0.4717**	1.0000									
Mandate	0.3586**	0.2740*	1.0000								
Access	0.4519**	0.4157**	0.1996	1.0000							
Fund	0.0807	0.3126*	0.1850	-0.0448	1.0000						
Leader	0.3705**	0.3238*	0.5212**	0.2149	0.3133*	1.0000					
Staff	0.4659**	0.2804*	0.4856**	0.2741*	0.1167	0.5612**	1.0000				
Compliance	0.5402**	0.2799*	0.3854**	0.3266*	0.1669	0.2278	0.2565*	1.0000			
Risk	0.4043**	-0.1306	-0.0597	0.1177	-0.4520**	-0.2643*	-0.5614**	0.1869	1.0000		
Control	0.4312**	0.4892**	0.3237*	0.3306**	0.3936**	0.3400*	0.4686**	0.4708**	-0.4214*	1.0000	
Governance	0.0325	-0.4971*	-0.2724*	-0.2735*	-0.0176	-0.1080	-0.0188	0.3844*	0.1106	-0.3663*	1.0000

Source: Author's own computation

Note: **Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

A4. TEST OF AUTOCORRELATION

The most celebrated test for detecting serial correlation and more formal procedure for examining the correlations between the error terms is Durbin-Watson d test (Gujarati, 2004, pp.467 and Malhotra, 2006, pp.588). The current study , computed Durbin-Watson d test is 1.843. The lower bound (dL) and upper bound (dU) from Durbin-Watson d statistic: Significance point of dL and dU at 0.05 level of significance, n =61 table shows 1.298 and 1.894 respectively. This indicates that $dL < d < dU$, that is $1.298 < 1.843 < 1.894$. In this situation Gujarati (2004) suggests no positive autocorrelation. Therefore, autocorrelation problem is not the hazard of this study.

A5. TEST OF HOMOSCEDASTISTY/HETEROSCEDASTICITY

The best method of homoscedastisty/ heteroscedasticity test as Cameron and Trivedi (2009) and Gujarati (2004) recommended was Breusch-Pagan-Godfrey (BPG) Test. The results of (BPG) test indicate the assumption of equal (constant) variance of residuals is maintained implies that no problem of heteroscedasticity.

TABLE 4 A: TEST FOR HETEROSCEDASTICITY (MODEL 1)

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity
Ho: Constant variance
Variables: fitted values of risk management
chi2 (1) = 0.26
Prob > chi2 = 0.6115

TABLE 4 B: TEST FOR HETEROSCEDASTICITY (MODEL 2)

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity Ho: Constant variance	
Variables: fitted values of control	
chi2 (1)	= 0.03
Prob > chi2	= 0.8574

TABLE 4 C: TEST FOR HETEROSCEDASTICITY (MODEL 3)

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity Ho: Constant variance	
Variables: fitted values of governance	
chi2 (1)	= 0.01
Prob > chi2	= 0.9238

Source: Author's own computation

B. Research question/model test

RQ1: To what extent better risk management, control and governance process role of internal audit function relates to better existence of organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and Compliance with Professional audit standards in the organization?

Model1: $RM = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) + \epsilon$

The extent of association of risk management role of internal audit function with organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and Compliance with Professional audit standards in the organization was measured by using OLS multiple regressions. The following table presented OLS regression results.

TABLE 5: OLS RESULT OF RISK MANAGEMENT (MODEL 1)

Risk	Coefficient	t	P**
Independence	-.4132392	-15.19	0.000
Support	.1048558	4.33	0.000
Mandate	.1176807	4.36	0.000
Access	.1224209	6.22	0.000
Fund	-.2566005	-14.89	0.000
Leader	.0930857	4.18	0.000
Staff	-.3294688	-14.34	0.000
Compliance	.3495616	14.07	0.000
Constant	4.102363	39.88	0.000

Note: - ** significant at the 0.05 level (2-tailed).
 Number of obs = 61, F (8, 52) = 109.13, sig. F = 0.0000;
 R-squared = 0.9438 ; Adj. R-squared = 0.935; Durbin-Watson=1.843
 Root MSE = .08862

Source: Author's own computation

Table 5 show the model is significant ($F=109.127$; $Sig.F=.000$) and explained 94.38 percent of the variation in risk management. The table also demonstrates risk management role of internal audit function is significantly related with organizational independence ($\beta=-.413$, $p=.000$), compliance with professional audit standards ($\beta=.350$, $p=.000$), competent staff ($\beta=-.329$, $p=.000$), sufficient funding ($\beta=-.257$, $p=.000$), unrestricted access ($\beta=.122$, $p=.000$), formal mandate ($\beta=.118$, $p=.000$), top management support ($\beta=.105$; $p=.000$) and competent leadership ($\beta=.093$, $p=.000$) in their order of relationship.

Model2: $CT = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) + \epsilon$

OLS regression analysis was utilized to test this model. The following table presented the OLS regression results.

TABLE 6: OLS RESULT OF CONTROL FUNCTION (MODEL 2)

Control	Coefficient	T	P
Independence	-.0050268	-0.08	0.940
Support	.1120112	1.89	0.065
Mandate	-.0220967	-0.33	0.740
Access	.036271	0.75	0.456
Fund	.1015646	2.40	0.020**
Leader	-.027403	-0.50	0.619
Staff	.1467025	2.60	0.012**
Compliance	.1395662	2.29	0.026**
Constant	1.093269	4.33	0.000**

Note: - ** significant at the 0.05 level (2-tailed).
 Number of obs = 61; F (8, 52) = 6.47; Sig. F = 0.0000;
 R-squared = 0.4990; Adj. R-squared = 0.4219; Root MSE = .21761

Source: Author's own computation

Table 6 shows, the model is significant ($F=6.47$, $Sig.F=.000$) and explained 49.9 percent of the variation in controlling function of internal audit in the public sector. The result proposes, not surprisingly, the control function of internal audit is significantly related with competent staff ($\beta=.147$, $p=.012$), compliance with professional audit standards ($\beta=.140$, $p=.026$), and sufficient funding ($\beta=.102$, $p=.020$) in their order of relationship.

Model3: $GC = \beta_0 + \beta_1 (Id) + \beta_2 (ST) + \beta_3 (MD) + \beta_4 (AS) + \beta_5 (F) + \beta_6 (L) + \beta_7 (SF) + \beta_8 (C) + \epsilon$

Table 7 summarizes the results of OLS regression analysis of this model

TABLE 7: OLS RESULT OF GOVERNANCE PROCESS (MODEL 3)

Governance	Coefficient	t	P
Independence	.0922073	1.33	0.190
Support	-.4394102	-7.12	0.000**
Mandate	-.4108293	-5.96	0.000**
Access	-.1675093	-3.34	0.002**
Fund	.0470163	1.07	0.290
Leader	.0492953	0.87	0.390
Staff	.1194188	2.04	0.047**
Compliance	.5192021	8.19	0.000**
Constant	3.045318	11.60	0.000**

Note: - *^{*} significant at the 0.05 level (2-tailed).
 Number of obs = 61; F(8, 52) = 21.35; Sig.F = .0000;
 R-squared = 0.7666; Adj. R-squared = 0.7307;
 Root MSE = .22609

Source: Author's own computation

The OLS regressions in Table 7 results show the model is significant ($F=21.35$; $Sig.F=.0000$) and explained 76.66 percent variation of governance process role of internal audit function. The results also show that governance process role of internal audit function is significantly related with compliance with professional audit standards (beta=.519, $p=.000$), top management support (beta=_.439, $p=.000$), formal mandate (beta=_.411, $p=.000$), unrestricted access (beta=_.167, $p=.002$), and competent staff (beta=_.119, $p=.047$) in their order of relationship.

C. DISCUSSION

This study has attempted to examine the role of internal audit function in public sector governance and challenges that have an effect on this function the case of Amhara National Regional State public sector. Data were collected by distributing structured questionnaires measured at five-point likert-type scale and analyzed using multiple OLS regression statistical method.

Given inadequate empirical research on this issue, this study designed empirical model for measuring the role of internal audit function of risk management, control and governance process in the public sector. One of the major findings here is that the theoretical aspects of internal audit function in public sector and its' challenges suggested in IIA (2006) and Asare (2009) were empirically tested by developing OLS multiple regression models.

The model here explains 94.38% of variation of risk management role, 49.90% of variation of control function and 76.66% of variation of governance processes. This shows that the combined effect of organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and Compliance with professional audit standards explains 94.38% of the role internal audit function on risk management in the public sector, and the remaining portion of 5.62% explained by other factors which were not mentioned in this study represented as error term (e). The joint effect of competent staff, compliance with professional audit standards; and sufficient funding explain 49.90% of control function of internal audit in the public sector, and the remaining 50.10% explained by other factors which were not mentioned in this study represented as error term (e). The combined effect of competent staff, compliance with professional audit standards, top management support, formal mandate and unrestricted access explains 76.66% governance process role of internal audit function in the public sector and remaining 23.34% explained by other factors which were not mentioned in this study represented as error term (e).

C1. ROLE OF INTERNAL AUDIT FUNCTION- RISK MANAGEMENT

One of the objectives of this study is to examine and analyze challenges that affect the risk management role of internal audit function. The regression result confirms that risk management role of internal audit function is positively related with the existence of compliance with professional audit standards, unrestricted access, formal mandate, top management support, and competent leadership. This provides evidence for the relationships predicted in the first model.

The implication here is that the better internal auditors' compliance with professional audit standards in their day to day activities, the better improvements risk management performance in the sector. As stated under IIA (2010) as internal auditors compliance with professional audit standards in their activities, they can evaluate risk exposures relating to the organization's governance, operations, and information systems regarding the: reliability and integrity of financial and operational information, effectiveness and efficiency of operations and programs, safeguarding of assets; and compliance with laws, regulations, policies, procedures, and contracts.

Unrestricted access is positively related with risk management role of internal audit function. This result reveals that the existence of unrestricted accesses to information (internal auditors get free access to information) of plans, forecasts, people, data, products, facilities, and records; as Hass, et al (2006) noted internal auditors not only be able to assess risks in their large organizations, but they also be able to complete complex risk analyses in their risk management function. Formal mandate is positively related with risk management role of internal audit function. This implies the existence of formal mandate in the organization improves risk management role of internal audit function. Dessalegn (2010), on his "Factors Associated with the Attributes of Internal Audit Departments" study supports this result. His study suggests internal audit charter (or similar organizational policy) is important to strength internal audit.

The other result of the study advocates top management support is positively related with risk management role of internal audit function. Previous study findings support this result. For example, top management support is crucial to the operation and success of internal audit function (Cohen, et al., 2010 and Soh et. al, 2011), management support to IA is considered as one of the determinants of IA's attributes (Dessalegn, et al., 2007), and the degree of collaboration of internal auditors with managers in addressing problems and threats is a key point (Arena et al., 2006). Furthermore, the study shows, competent leadership positively related with risk management role of internal audit function. This result is consistent with Arena et.al (2006), study of internal audit in Italian organization. Their study concludes that the leadership of internal auditors emerged as a very important element for the effectiveness and acceptance of the internal audit activities. In addition, they suggest that leadership of internal auditors is necessary to demonstrate that internal audit is actually useful for the whole company and the auditors can improve process and activities.

The regression results indicate that the lower existence of organizational independence, competent staff, and sufficient funding results internal auditor's activities faces a big challenge for the risk management role of internal audit function in the sector. This result supported by Ahmad, Othman and Jusoff (2009) on their study of "The effectiveness of internal audit in Malaysian public sector". They concluded that internal audit function in the public sector in Malaysian is curtailed (*shortened*) by understaffing and negative perception accorded to internal audit led to inaction by management on recommended remedies which only serve to nullify the positive contribution internal audit potentially hold to elevate (*make higher*) the service delivery quality of the public sector.

C2. THE ROLE OF INTERNAL AUDIT FUNCTION - CONTROL

Another objective of this study is to examine and analyze the control function of internal audit and challenges that have an effect on this function. The regression result indicates that control function of internal audit is positively significantly related with the existence of competent staff, compliance with professional audit standards; and availability of funding. The results confirm the researcher's expectations in the second model. This reveals that the better existence of competent staff, compliance with professional audit standards; and availability of funding, the better control function of internal audit in the public sector. Even if these variables are statistically significant, it predicts only 49.90 % of control function of internal audit in the public sector as compared to other variables.

C3. THE ROLE OF INTERNAL AUDIT FUNCTION- GOVERNANCE PROCESS

One more objective of this study is to examine and analyze challenges that have an effect on the governance process role of internal audit function in the public sector. The result of the study proposes that governance process of internal audit function is positively related with the existence of competent staff and compliance with professional audit standards. This result confirms expectations in the third model. This indicates that with the better existence of competent staff and compliance with professional audit standards in the public sector, the better improvements in the governance process role of internal audit function. Theoretically the IIA (2006) supports this result. Through the better existence of competent staff and compliance with professional audit standard; internal auditors can provide independent, objective assessments on the appropriateness of the organization's governance structure and the operating effectiveness of specific governance activities. In addition, they act as catalysts for change, advising or advocating improvements to enhance the organization's governance structure and practices (IIA, 2006).

The findings suggest that the governance role of internal audit function faces a big challenge when there is lower existence of formal mandate, top management support, and unrestricted access. As stated under IIA (2006) with the lower existence of top management support, formal mandate and unrestricted access, internal auditors cannot ensure a government's credibility, establish equitable provision of services, and assure appropriate behavior of government officials whilst reducing the risk of public corruption.

CONCLUSION

A healthy constructed internal audit function can play a vital role in the governance and accountability process of public sector institutions through their assessments on the effectiveness of key organizational risk management, controls, and governance processes. This study has examined the extent of relationship between the role of internal audit function and its' challenges. Structured questionnaire survey of all internal audit directors and staff from 35 public sector bureau of Amhara National Regional State was used. To analyze the data, OLS multiple regression statistical analysis method was employed.

With the fulfillment of assumptions expected, OLS multiple regression analysis results show that the risk management role of internal audit function is better improved, when there is better existence of compliance with professional audit standards, unrestricted access, formal mandate, top management support, and competent leadership. The regression results indicate that the lower existence of organizational independence, competent staff, and sufficient funding results internal auditor's activities faces the big challenge for the risk management role of internal audit function in the sector. The findings suggest that the control function of internal audit becomes better with the better existence of competent staff, compliance with professional audit standards, and sufficient funding in the public sector. The results also reveal that the higher the extent of compliance with professional audit standards, and existence of competent staff highly improve the governance process role of internal audit function. The findings suggest that the activities of internal auditors for governance role of internal audit function faces a big challenge when there is lack of formal mandate, lack of top management support, and lack of unrestricted access.

The study concludes that policy makers and regulators and all other parties related to internal audit function in the public sector that needs the services of internal audit to be effective and efficient should give emphasis on the value adding role of its function in the public sector through risk management, control and governance processes.

The results of the study are expected to contribute insights for empirical model to examine the role of internal audit function and its' challenges in public sector governance. Potential limitations intrinsic in the sampling technique employed should be granted. That is, selections of only internal audit director and staff as a respondents rather than including management groups. Nonetheless, this will have little influence on the validity of the results. Since most of executive manager's professions were not accounting and related professions rather take the position by nomination, and in that case have lack of understanding the auditing terms itself. So their exclusion has little impact on the validity of the results. For the reason that internal auditing function in the public sector has a multifaceted role in the public sector like insight, oversight and foresight role, further research could be done to examine which challenges mentioned in this study highly affects these role is potential avenue.

ACKNOWLEDGEMENT

I would like to send my thankfulness to several people who contributed in numerous ways to the successful completion of this study. First of all, I thank my immediate advisor, Dr Sewale Abate, lecturer in department of Accounting and Finance, College of Business and Economics, Bahir Dar University. His guidance and valuable constructive critiques, comments, and suggestions as well as the amount of time he allotted to me have been influential in accomplishing objectives of this study starting from initial to the end. Secondly, I thank my co-advisor, Dr Dessalegn Getie, lecturer in the School of Accounting, Economics and Finance, University of New England, Australia. His assistance and encouragement all through the period of my study is prized. My genuine gratitude to the Faculty of Business and Economics (FBE) at Dilla University and Ethiopian Ministry of Education for their financial support.

REFERENCES

- Ahmad, H N., Othman R., Othman, R. and Jusoff, K. (2009), "The effectiveness of Internal Audit in Malaysian Public Sector," *Journal of Modern Accounting and Auditing*, vol.5, No.9, serial No. 52
- Ali, H. and Birley, S. (1998), "Integrating deductive and inductive approaches in a study of new Ventures and customer perceived risk," <<https://dspace.lib.cranfield.ac.uk/retrieve/629/SWP3990.pdf/>>. Accessed 25 January 2012
- Al-Twajry, A.A.M., Brieley, J.A. and Gwilliam, D.R. (2003), "The development of internal audit in Saudi Arabia: An Institutional theory perspective" *critical Perspectives on Accounting* vol.14. No.5, pp. 507-531.
- Angela Wood for Trocaire (2005), "Demystifying 'Good Governance': an overview of World Bank Governance Reforms and Conditions," <<http://www.trocaire.org/sites/trocaire/files/pdfs/policy/demystifyinggoodgovernance.pdf/>>. Accessed 6 August 2011
- Aqil Burney S.M. (2008), "Inductive & Deductive research approach," University of Karachi, <http://www.drburney.net/INDUCTIVE%20&%20DEDUCTIVE%20RESEARCH%20APPROACH%2006032008.pdf/> Accessed 6 August 2011
- Arena, M., Arnaboldi, M. and Azzone, G. (2006), "Internal Audit in Italian Organizations-A multiple case study," *Managerial Auditing Journal*, vol.21, No.3, pp.275-292
- Asare, T. (2009), "Internal Auditing in the Public Sector: Promoting Good Governance and Performance Improvement," *International Journal on Governmental Financial Management*, vol. IX, No.1.
- Caldwell, J. G. (2010), "Sample Survey Design for Evaluation (The Design of Analytical Surveys)," <<http://www.foundationwebsite.org/>>. Accessed 5 December 2011
- Cameron.C.A. and Trivedi.P.K.(2009), "Micro econometrics using stata," a stata press publication, college station, Texas. <http://cameron.econ.ucdavis.edu/stata/trpanel.pdf/>. Accessed 5 January 2012
- Christopher F.Baum (2006), "An introduction to modern econometrics using stata," stata press
- Cohen, A. and Sayag, G. (2010), "The effectiveness of internal auditing: An empirical examination of its determinants in Israeli organization," *Australian Accounting Review*, vol.1, No 1.
- Commonwealth of Australia (2007), "Public Sector Internal Audit, Better Practice Guide, Australian National Audit Office," <http://www.finance.gov.au/comcover/docs/Better_Practice_Guide.pdf/> Accessed 5 August 2011
- Dayal, R. (2006), "Ethiopian Governments auditing standards," <http://www.ofag.gov.et/audstandards.pdf/>. Accessed 5 December 2011
- Diamond, J. (2002), "The Role of Internal Audit in Government Financial Management," *An International Perspective*, IMF Working Paper WP/02/94, May 2002
- Eisenhardt, K. M. (1988), "Agency- and Institutional-Theory Explanations, "The Case of Retail Sales Compensation, the *Academy of Management Journal*, vol. 31, No. 3, pp.488-511.

16. Federal Government of Ethiopia Ministry of Finance and Economic Development (2010), "Public finance management assessment-Amhara regional government, LINPICO (France)," <http://ec.europa.eu/europeaid/what/economic-support/public-finance/documents/ethiopia_amhara_pefa_en.pdf>. Accessed 2 March 2011
17. Field, A. (2009), "Discovering statistics using SPSS," 3rd edition, SAGE Publications India Pvt Ltd <http://www.betterworldbooks.com/discovering-statistics-using-spss-3rd-edition-id-1847879071.aspx>
18. Goodwin, J. 2001, "Two Factors Affecting Internal Audit Independence and Objectivity: Evidence from Singapore," *International Journal of Auditing*, 5: 107–25.
19. Goodwin, J. 2004, "A Comparison of Internal Audit in the Private and Public Sector," *Managerial Auditing Journal*, vol.19: pp, 640–50.
20. Goodwin-Stewart, G. and Kent, P. (2006), "The use of internal audit by Australian companies," *Managerial Auditing Journal*, vol.21, No.1, pp, 81-101
21. Greasley, P. (2008), "Quantitative Data Analysis using SPSS: An introduction for Health and Social Science," Open University press, 1st edition
22. Gujarati, D. N. (2004), "Basic Econometrics" 4th edition, The McGraw-Hill companies
23. Hass, S., Abdolmohammadi, M. J. and Burnaby, P. (2006), "The Americas literature review on internal auditing," *Managerial Auditing Review*, vol.21, No.8, pp.835-844.
24. Hermanson, D. R., Rittenberg, L. E. (2003), "Internal audit and organizational governance," The Institute of Internal Auditors Research Foundation
25. HM treasury (2011), "Government Internal Audit Standards," Crown copyright 2011. www.hm-treasury.gov.uk/d/internalaudit_gias_0211.pdf> Accessed 5 July 2010
26. Hock, B. and Burch, C. (2011), "The Internal Audit Activity's Role In Governance, Risk and Control," Third Edition CIA Preparatory Program, HOCK international, LLC. < <http://www.referenceforbusiness.com/index.html>., "Encyclopedia of Business," 2nd ed. » Inc-Int » Internal Auditing) />. Accessed 25 December 2011
27. Institute of Chartered Accountants in England and Wales (2005), "Agency theory and the role of Audit," *The Audit Quality Forum*
28. Institute of Internal Auditors (2006), "The Role of Auditing in Public Sector Governance," Available at: <<http://www.theiia.org/guidance/>>. Accessed 5 July 2010
29. Institute of Internal Auditors (2008), "Standards and Guidance" Available at: <<http://www.theiia.org/guidance/>>. Accessed 5 July 2010.
30. Lawrence B. Sawyer (1981), "The practice of Modern Internal Auditing," 2nd revised and enlarged edition, Florida the IIA
31. Lemma Argaw (1997), "Internal auditing in Ethiopia: Past, present, and future," *Ethiopian Journal of Accountancy and Finance*, vol.1 No. 1
32. Mihret D.G., James, K. and Mula, J. M. (2010), "Antecedents and organizational performance implications of internal audit effectiveness," Some propositions and research agenda
33. Mihret, D.G. (2010), "Factors Associated with attributes of internal audit departments: A canonical analysis," *African Journal of Accounting, Economics, Finance and Banking Research*, vol.6, No.6
34. Mihret, D.G. and Woldeyohannis, G.Z. (2008), "Value –Added Role of Internal Audit," an Ethiopian case study, *Managerial Auditing Journal*, vol.23, No.6, pp.567-595
35. Mihret, D.G., and Yismaw, A.W. (2007), "Internal audit effectiveness," an Ethiopian public sector case study, *Managerial Auditing Journal*, 22(5).
36. Ministry of Finance and Economic Development (2004), "Internal audit standards and code of ethics for internal auditors and internal audit procedural manual"
37. Naresh K.Malhotra (2006), *Marketing Research an Applied orientation*, 5th ed. Georgia institute of Technology, Pearson Prentice Hall
38. Office of Thrift Supervision, (March 17, 2003), "Interagency policy statement on the internal audit function and its outsourcing," *thrift bulletin 81*, section: 355 <<http://files.ots.treas.gov/84260.pdf>>. Accessed 15 November 2012
39. Pallant, J. (2001), "SPSS Survival Manual, A step by step guide to data analysis using SPSS for windows (version 10&11)," Open University press, 1st edition McGraw-<hill.co.uk/openup/chapters/0335208908.pdf>. Accessed 10 October 2011
40. Ramamoorti, S. (2003), "Internal auditing: history, evolution, and prospects," The institute of internal auditor's research foundation.
41. Rameesh, K. (2003), "Best Practices for Internal Audit in Government Departments," Center for Good Governance, Collected Working papers, vol.2.
42. Ruud, T.F (2003), "The internal audit function: an integral part of organizational governance," the institute of internal auditor's research foundation
43. The Institute of Internal Auditors (2009), "Global Audit Information Network," the IIA's premier Benchmarking program <http://www.iiap.org/www/uploads/publication/4th%20network.pdf>> Accessed 25 August 2011
44. The Institute of Internal Auditors Research Foundation (IIARF, 2009), "Internal Audit Capability Model (IA-CM) for the Public Sector," www.theiia.org/download.cfm?file=31976>. Accessed 25 August 2011
45. Van Gansberghe, C. N. (2005), "Internal Audit: Finding its Place in Public Finance Management," World Bank Institute. www.gsdcrc.org/go/display/document/legacyid/1463> Accessed 20 September 2011
46. Warga, T. (2006), "Challenges Facing Public sector Internal Auditing," www.theiia.org/download.cfm?file=1626>. Accessed 25 December 2011
47. Wobschall, C. (2011), "Internal Audit Quality Assessment Framework", HM Treasury
48. Wolderuphael W.Giorgis (1997), "Internal auditing as a profession," *Ethiopian Journal of Accountancy and Finance*, vol.1 No.1
49. www.worldbank.org/wbi/governance/about.html>. Accessed 4 June 2011

APPENDIX

APPENDIX 1 - ITEMS IN THE QUESTIONNAIRE

PART ONE

The following questionnaire measures the existence of organizational independence, formal mandate, unrestricted access, sufficient funding, competent leadership, competent staff, management support, and Professional audit standards in your organization to perform effective internal audit function. The researcher kindly requests you to fill your agreement or disagreement by putting (numbers) at the end of each statement based on the following scale value (1=strongly disagree, 2=Disagree, 3=Neutral/undecided/, 4=Agree and 5=strongly agree).

A. ORGANIZATIONAL INDEPENDENCE

1. Internal audit is free from intervention in performing its duties.
2. Internal auditors freely include any audit findings in their audit report.
3. Internal auditors can audit operational areas for which they have previously had executive or management responsibility within the last year.
4. The internal audit function has strategic position to contribute to organizational strategy performance.
5. Internal auditor undertakes subsequent audits of a system, which they have previously been involved in consultancy on systems design.
6. The current structure of internal audit promotes objectivity, consistency and business understanding.
7. The current reporting line of internal audit functions in your organization promotes internal audit to discharge its role in good governance.

B. TOP MANAGEMENT SUPPORT

8. Management is sufficiently aware of the needs of internal audit.
9. Management does provide enough support and encouragement for training and developing the IA staff.
10. Management perceive internal audit as value adding function.
11. Management always implements internal audit's recommendations.
12. Management staffs are highly understood and appreciate the role of internal audit function.

C. FORMAL MANDATE/EXISTENCE OF AUDIT CHARTER/

13. Internal audit department has a formal Internal Audit Charter /policy/.
 14. The Internal audit charter /policy/ is clearly and easily understood by staff members.
 15. The Internal audit charter/policy/ requires some clarity.
 16. Internal audit activities, power and duties, and reporting lines of internal audit are clearly defined in the internal audit charter/policy/.
 17. Currently the formal internal audit charter/policy/ is in the process of formulating.
- D. UNRESTRICTED ACCESS**
18. Internal auditors allowed unrestricted access of plans and forecasts of the organization to perform their independent evaluations to judge the audit work.
 19. Internal auditors allowed unrestricted access of people, data, products, facilities, and records of the organization to perform their independent evaluations to judge the audit work.
- E. SUFFICIENT FUNDING**
20. Internal audit department in your organization has sufficient budget relative to the size of its audit responsibilities.
- F. COMPETENT LEADERSHIP**
21. Internal audit department in your organization has policies for hiring of internal audit staff
 22. Internal audit departments in your organization has policies for training of internal audit staff
 23. The head of the internal audit in your organization effectively develops annual audit plans based on risk.
 24. The head of the internal audit in your organization effectively develop and implement appropriate framework to measure internal audit performance.
- G. COMPETENT STAFF**
25. The internal audit department has sufficient number of staff who is responsible to undertake auditing activities.
 26. The internal audit department has qualified and competent internal audit staff.
 27. Internal auditors undertake continuous professional development activities.
- H. COMPLIANCE WITH PROFESSIONAL AUDIT STANDARDS**
28. The purpose of internal audit is in line with "standards for the professional practice" formulated by the Institute of Internal Auditors.
 29. The purpose of internal audit is in line with internal audit manual formulated by Ministry of Finance and Economic Development Bureau.
 30. The authority of internal audit is in line with "standards for the professional practice" formulated by the Institute of Internal Auditors.
 31. The authority of internal audit is in line with internal audit manual formulated by Ministry of Finance and Economic Development Bureau.
- PART TWO**
- The following questionnaire measures the role of internal audit function in your organization regarding to risk management, control activities and governance processes. The researcher kindly requests you to fill your agreement or disagreement by putting (numbers) at the end of each statement based on the following scale value (1= strongly disagree, 2=Disagree, 3=Neutral/undecided/, 4=Agree and 5=strongly agree).
- A. RISK MANAGEMENT ROLE**
1. Internal auditing should be fully responsible for and lead the risk management program.
 2. Along with management, internal auditing should share in the responsibility and oversight of the risk management program.
 3. Internal auditing should only support risk management efforts as requested or needed.
 4. Internal auditing should be completely separate from and not involved with the organization's risk management program.
- B. CONTROL FUNCTION OF INTERNAL AUDIT**
5. Internal audit has the authority to review any aspect of the entity's operations.
 6. Internal audit systematically assessing control environment.
 7. Internal audit evaluates the effectiveness of management's monitoring processes.
 8. The frequency and scope of supervision and monitoring activities of internal audit are appropriate to the size and nature of the entity.
 9. Internal audit assist management in preparing a report on the effectiveness of internal control.
 10. Internal audit assist management in designing a comprehensive assessment, including testing of controls across the organization.
 11. Internal audit identifies significant control deficiencies and communicate to the higher officials.
- C. CONTRIBUTION FOR GOVERNANCE PROCESS**
12. The current reporting line of internal audit functions in your organization promotes internal audit to discharge its role in good governance.
 13. The IA department contributes to the organization above and beyond its costs.
 14. The information provided by IA is vital to organizational operations.
 15. The existence of internal audit function in the organization is highly strength and supports the organization to bring about good governance.
 16. Internal auditors are highly involved in promoting the effectiveness of the governance structure of the organization.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Computer Application and Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail infoijrcm@gmail.com for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals

