Original Research Article

Evaluating the Effectiveness of Internal Control System in Government Offices: Evidence from Arsi Zone Public Offices, Arsi, Ethiopia

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Abstract

An effective internal control system is the priority to detect assets misuse, ensuring efficiency of operation adherence to rules and regulation. The objective of this study was to evaluate the effectiveness of internal control systems in the case of Arsi zone large public offices. To conduct the research, two primary data were used; the interview and Questionnaire. The copies of questionnaire were distributed to selected Worde's internal auditors, accountants and the top management of the office selected using purposive sampling. Out of 115 Questionnaire, 90 were fully responded to and used in the analysis and about 85.56% of respondents are agreed that the internal control system is poor. The result of the study showed that the internal control system of the public government office in the Arsi zone is weak concerning each component of an internal control system. The major finding behind the ineffectiveness of internal control system that requires government attention as per the study is a low level of employee awareness as to the mission and vision of their organization and inadequately risk assessment practices this paper Recommend that there is should be a framework on how the public offices at different levels can identify possible risks and strategies to control the risks occurrences and the control system's effectiveness should be evaluated against clearly established criteria and should be monitored continuously. This is the responsibility of Top management and internal auditors the current study focused on a single zone experience and used descriptive analysis and ordered log it model and a similar study in wider scope is suggested.

Keywords: Internal Control, Government offices, Control activity, Assets, and Top management.

INTRODUCTION

The review and evaluation of internal control systems is always a major task to government, management, and auditors due to professional, legal, and economic concerns. For example, the second standard of fieldwork in Generally Accepted Auditing Standards, Statement of Auditing Standard (SAS) No.1 and SAS No. 55 requires the auditor to evaluate the client's internal control by stipulating that "There is to be a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted".

Internal control serves as the first line of defense in safeguarding assets and preventing and detecting errors and fraud. (Bologna & Linguist 2010) stressed that sufficient internal control is critical for the prevention of economic losses resulting from embezzlement and fraud.

Managers are primarily responsible for establishing an effective internal control system for their organizations to discharge their stewardship responsibility for the use of government resources. Similarly, (Natan 2011) also argued the importance of internal control especially in public organizations where resource required serving the public interest is limited, but misused and embezzled.

Therefore, it is the responsibility of the management of an organization to ensure that an effective internal control system is put in place that will ensure the achievement of organizational established objectives. This is because the

establishment and supervision of effective internal control systems are the responsibility of management, not auditors (Changchit H. 2011, et al,). At the same time, effective internal controls systems are fundamental drivers toward earnings quality (Church & Schneider, 2018).

According to Committee of Sponsoring Organizations (COSO, 2013) the ongoing development of the public sector and the broad umbrella of the public sector from one year to another year have led to increased attention to internal control in the administrative units. The public government offices that exist at any level should properly protect public money and other assets from theft and loss, intentional and unintentional use of money for the unproductive base.

In Ethiopia's context, the Office of Federal Audit General (OFAG) reported to the parliament that in the last two years, many Ethiopian public offices, agencies, and other institutions are failed to use their budget properly and prepare untimely reports (the OFAG Reports, 2019/20). The recent corruption cases held by the federal anti-corruption commission and courts were also indicated the failure of internal control practiced in those organizations. Therefore the main objective of this study was to evaluate the effectiveness of internal control system practices of Governmental offices in the case of the Arsi zone.

Statement of the Problem and Rationale for the Study

The cause for corruption and misuse of resources in public organizations is mainly the failure of the internal control mechanism and other stakeholders' inability to function the channel of their internal control system effectively without any collusion. According to the Ethiopian government report to the house of people representatives (HPR,2018) on the implementation of development goals and growth and transformation plan GTP 1, executives frequently warn that corruption and rent-seeking is one of the worst threats for this plan and its implementation in order not to produce the expected effective results.

For example, the OFAG report to the parliament of the FDRE government for the budget year 2019/2020 states that the first GTP years was covered several weaknesses of internal control system maintained and execution by government agencies and offices, particularly on internal control related to the use of budget and authorization of asset acquisitions (OFAG 2019/20) and during 2013/2014 Ethiopian budget year the report revealed that only 44% of audited public enterprises and other government institutions were provided unqualified audit report.

The existing internal control system in public enterprises of Ethiopia contributed to accounting fraud according to (Tekalign L., 2018) by using survey instruments on 11 major public enterprises in Addis Ababa and using self-administered questionnaires to auditors and accountants to identify whether Frauds are represented as any violation of principles, manipulation of sales, expenses or inventories and the result argued that the respondents believe the existence of effective internal controls practices are sufficient enough to keep the possibility of accounting fraud to a reasonably low level.

The research under taken by Yared G. in 2019 on the title, the effectiveness of the internal control system in the selected private limited companies in Ethiopia, indicates that internal control in the selected PLC was not effective. Particularly the risk assessment component of internal control is not practiced in the case study of private limited companies. Though monitoring is better in the PLC, there was an adequate control environment, control activities, and inadequate flow of information and communication.

Theoretical evidence indicates that the public governmental organization especially in developing countries in which, the government is the dominant provider of public goods and services concludes that the importance of an effective internal control system is unquestionable in the sector. Similarly (Natan 2011) also argued there is must be an effect of an internal control system in the sector of public organizations where resource required to serve the public interest is limited, but highly misused and embezzled.

There is no reliable and recent comprehensive study on the effective internal control system of government offices, none of the privies researchers focuses on evaluating the effectiveness ICS of public sector organizations in the area of protecting the limited public properties and the exits privies studies on the issues of internal control system were all focused on the public offices exist at the federal level and no evidence from privies study focusing on regional offices, zone level offices and Woredas level offices exist at low level but very important for the existence of federal-level offices.

Therefore, the motivation for this study is to investigate additional literature by evaluating the effectiveness of internal control systems in government offices existing at zone level in the case of the Arsi zone due to the researcher's familiarity with the case study area and its convenience to collect data easily.

Objectives of the Study

This stud has both general objectives and specific objectives of the study.

General objective of the Study

The general objective of this study was to evaluate the effectiveness of internal control system practices of Governmental offices in the case of the Arsi zone.

Specific objectives of the Study

Considering the overall objective of the study and research problems the researcher has specifically the following detailed objectives, these are:

1. To identify the existence of effective internal control activities to safeguard the public limited assets
2. To identify the effectiveness of control environment including top management message on the importance of internal control system.
3. To identify the existence or adequacy of risk assessment practices in the offices.
4. To examine the presence of a good system of information and communication aiding to control over public resources.
5. To identify the effectiveness of monitoring activities carried out for every operation.

The Research Hypothesis

The recent related literature reviews provide basic principles representing the fundamental concepts of effective internal control in five components of the framework.

These components are mainly presented and functioning effectively for any internal control system to achieve organizational objectives (COSO 2013).

➢ **HO1:** proper overall control activities have positive and significant effect on the effectiveness of the internal control system.

➢ **HO2:** Effective overall Control environment has positive and significant effect on the effectiveness of internal control system.

➢ **HO3:** adequate overall risk assessment practices have positive and significant effect on the effectiveness of the internal control system.

➢ **HO4:** the overall effective information and communication have positive and significant effect on the effectiveness of a public office's internal control system.

➢ **HO5:** adequate overall monitoring on a day to day activities has positive and significant effect on the effectiveness of the internal control system.

Types and Sources of Data

For sake of obtaining abundant data which enables the successful accomplishment of this study, the two types of primary data, the questionnaire, and the interview were used.

The layouts of the questionnaire were kept very easy, simple, and prepared based on the objectives of the research. The questionnaires were designed to have a modified 5 – point Likert scale measurement of (1932) with response options of Strongly Agree (SA), Agree (A), neutral (N), Disagree (D), and Strongly Disagree (SD) weighted as 5,4, 3, 2 and 1 respectively adopted by (sever,1997)

This requires the respondents to indicate a degree of their agreement or disagreement with each of a series of statements related to internal control system activities. The modified 5 point Liker t scale measurement questionnaire considers the 5's section of effective internal control measurement variables as indicated by (COSO 2013).

Sampling Techniques and Sample Size

According to research scholars, the sample shouldn't be too large to be economical and shouldn't be too small to keep the validity of findings (Dawson, 2002). Accordingly, this study used two sampling stages. The first one is to sample out the selected public offices that exist in the Arsi zone and secondly the sampled Woredas of a case study which selected through convenience non-probability sampling and finally the number of respondents within the selected offices of case study Woredas were selected purposively.

Due to the difficulty of covering all the total existing government offices in the Arsi zone, five public sectors were purposively selected summarized in table 3.1

1.		**4.**	Healthy office
2.	Agriculture offices	**5.**	Water and energy offices
3.	Road authority office		

The above five government offices in the case study area are selected purposively as a representative of other untouched offices that exists in the case study area because they are allocated a large amount of budget every year since they are considered as poverty reduction sectors and have a greater impact on the countries overall social, political and economic issues. And also there are high capital flows that can be exposed to corruption and embezzlement unless there is an effective internal control system in the organization and also these sector offices are the major focus of growth and transformation plan core of implementation in our country today in GTP1 and 2 that expected to bring the country among the middle-income countries by 2025.

to select the sample Woredas exist in this zone, the information from the zone management office was used which shows the zone management offices administrates the twenty-five (25) Woredas of the zone into four (4) administrative clusters including the administrative center of the zone Asella town.

From each selected clustered Woredas sampled Woredas were selected using convenient sampling. These sampled woredas are: Gololcha, Amigna, Chole, sire,Hitosa, DigelunaTijo, Tiyyo, Dodota, Aseko,Guna, Limuna Bilbilo, Diksis, Enkelo wabe, Seru, Shirka, Ziway Dugda and Robe Woredas. Are selected as follows.

Table-3.2: Lists of Woredas with its Administration cluster

No.	Cluster	Name of Woredas in the cluster	Woredas selected (convenient sampling)	Proportion In percent%
1	East	Amigna woreda Bale Gasgar woreda Chole woreda Sire woreda Sude woreda Gololcha woreda	Gololcha woreda Amigna woreda Chole woreda Sire woreda	0.67
2	West	Dodota woreda Aseko woreda Digeluna Tijo woreda Hitosa woreda Munessa woreda Tiyo woreda LudeHitosa woreda	Hetosa woreda DigelunaTijo woreda Tiyyo woreda Dodota woreda Aseko woreda	0.72
3	Northcentral	Assella town administration Enkelowabe woreda Guna woreda Diksis woreda Limuna Bilbilo woreda	Guna woreda LimunaBilbilo Diksis woreda Enkelowabe woreda	0.8
4	South	Robe woreda Seru woreda Tena woreda Ziway Dugda woreda Sherka woreda	Seru woreda Ziway Dugda Robe woreda Shirka woreda	0.8
5	Total	25 Woredas	17 Woredas	0.68

The Selection of Staff Respondents

According to Kothari, (2004) the samples selected from the population is not equally important for the case study or the variables of researcher consideration in the study, so that, in such case, the use of purposive sampling is more essential to obtain a typical and knowledgeable representative of the researcher case study.

Thus, accordingly, the participants are grouped into three categories. Namely i.e. Woredas level internal auditors a sample of 10 were purposively selected, a sample of 55 office administrative directorates, and a total sample size of 50 accountants were selected. Additionally, the detailed interview with the 5 higher administrative directors of the selected public offices that exist at the zone level was used to elaborate the patterns that evolved from the data collecting via questionnaires, so that the validity of the findings was enhanced.

Table-3.3:

No.	Types of the sample item	Sample sizes
1	General directorate's of the offices	55
2	Internal auditors	10
3	Accountants	50
	The total sample size of respondents	115

Source; Researcher's Computation (2020)

Measurement for independent variables in the study of the study

The types of instruments used to collect data were interviews and questionnaires. The five COSO internal control frameworks are used to measure the internal control effectiveness of government offices in the case study areas which is the international standard for internal control effectiveness and developed by the cooperation of international organizations.

Table-3.4 Details of variables

Variable	Symbol	Types of Variable	Working definition	Measurement
Internal Control system	ICS	Dependent variable		Efficient and effective operations, reliability of financial reporting, compliance with rules and regulations
Control Environment	CE	Independent variable	The control environment includes the attitudes, awareness, and actions of management and those charged with governance concerning the entity's internal control and its importance in the entity.	Management philosophy & operational style, Integrity & ethical values, A commitment to competence, Participation of board of directors or audit committee, Organizational structure, Assignment of authority & responsibilities, Human resource policies, and practices.
The risk assessment	RA	Independent variable	An entity's risk assessment process is its Process for identifying and responding to business risks and the results thereof.	Changes in the operating environment, New personnel, Rapid growth, New lines, product & activities, Corporate restructuring, Foreign operation, Accounting pronouncements.
Information & communication	IC	Independent variable	An information system consists of infrastructure (physical and hardware components), software, people, procedures, and data. Infrastructure and The software will be absent, or have less significance, in systems that are exclusively or primarily manual. Many information systems make extensive use of information technology (IT).	Information needs, information Control, management communication, upstream communication, communication with outside parties, database contents, introducing new systems, and data input process and output, storage, and backup.
Control activities	CA	Independent variable	Control activities are the policies and procedures that help ensure that management directives are carried out, for example, that necessary actions are taken to address risks that threaten the achievement of the entity's objectives.	Performance review, Information processing, Physical control, Segregation of duties, Authorization procedures, Independent check, Adequate documentation, Job rotation, compulsory leave.
Monitoring	Mo	Independent variable	Important management responsibility is to establish and maintain internal control on an ongoing basis.	On-going supervision, internal audit

Summarized: by the researcher from COSO 2013 methods of ICS effectiveness measurements.

Methods used for Data Analysis and Interpretation

Both quantitative and qualitative data analysis method was used. Based on the nature of the data collected through questionnaires, interview the following procedures and statistical tools were employed. These are descriptive techniques and inferential statistical tools using the ordered logit model assumption. Because those statistical techniques for analysis were used and proved reliable results by other privies researchers, (Naomi, 2008, Shang Grant, and Eder, 2013; Nadir, 2010, kumara, 2014 Tsedi.2015) to identify factors that influence internal audit effectiveness in the banking industry and effectiveness of internal control in a public university.

For any analysis progress and the outcome variable results were developed and analyzed by using statistical analysis software called (STATA version 12) was employed for both descriptive and econometrics analysis.

Descriptive Method of Data Analysis

The respondent's results were collected on the level of their agreement for each independent variable and were analyzed using descriptive statistical tools like table, frequency, mean, standard deviation, minimum and maximum as well as a bar graph. Then the respondents' grand mean (average mean was compared with the estimated mean.

For purposes of this analysis, the research questions, strongly agree valued as 5, agree was coded 4, neutral coded as 3 while disagreeing as 2, and strongly disagree as 1. The expected mean for the effective internal control component was 3 the mean was calculated as $1 + 2 + 3 + 4 + 5 = \frac{15}{5} = 3$ however the analysis was made based on how the mean response of the respondents is close to this expected value or (deviate from the expected mean). So based on this, any mean value of 3 shows the internal control system is good/adequate, any mean value of above 3 shows an effective/excellent internal control mechanism, while any mean value of less than 3 shows an ineffective/poor internal control system.

Inferential (Econometric) Analysis using ordered logit model

Beyond the descriptive analysis, the econometric model which is the ordered logit model was used to test the relationship between dependent and independent variables to conclude and also to test the hypothesis. The General Objective of the study was to evaluate the effectiveness of internal control system which has one Dependent variable (ICS).

Operational definition of the dependent variable for the internal control systems effectiveness of government offices according to the ordered logit model was assumed to be as, 1 poor (ineffective), 2 good (adequate), and 3 excellent (effective)

Since the type of dependent variable is non-continuous, ordered and with limited values, the ordered logit model was used. This study was used to investigate and evaluate the applications of the 5(five) COSO variables of the control environment, control activities, monitoring, risk assessments, effective information, and communication effectiveness to determine the effectiveness of the internal control mechanism of the case study area.

Y_i^* = is the dependent variable the internal control effectiveness

Y_i = (1, 2, 3) for (Poor, Good, and Excellent)

The Interval decision rule was that:

$$Y_i = 1 \quad \text{if} \quad y_i^* \leq u1$$
$$Y_i = 2 \quad \text{if} \quad u1 < y_i^* \leq u2$$
$$Y_i = 3 \quad \text{if} \quad u2 < y_i^* \leq u3$$

According to the assumption of the ordered logit and probit models, we will assume y_i^* is a function of observed and unobserved variables

$$Y_i^* = \beta0 + x_{1i}\beta1 + x_{2i}\beta2 \ldots. X_{ki}\beta_k + \varepsilon_i$$
$$Y_i^* = x_i\beta + \varepsilon_i$$
$$y_i = \Phi0 + \Phi1x1 + \Phi2x2 + \Phi3x3 + \Phi4x4 + \Phi5x5 + e_i$$

And from the model specification for example to calculate the probability of Pr (y_i=1)

First Pr ($y_i=1$) = Pr ($y_i^* \leq u1$) = Pr ($x_i\beta + \varepsilon_i \leq u1$) = Pr ($\varepsilon_i \leq u1 - x_i\beta$)
= Φ [u1 - $x_i\beta$] = 1 - Φ [$x_i\beta$ – u1]

Where: Y_i = the effectiveness of internal control system =1, poor 2, good 3, excellent

X1-X5 = indicates the five COSO internal control frameworks.

$\Phi0$ = is a constant, representing the effectiveness of ICS when every independent variable is zero.

Φ(1-5) = is the coefficient, in which every marginal change in variables on internal control effectiveness affects correspondingly and ε_i =the error term.

Data Analysis and Interpretation
The Response Rate

Table4.1. Response Rate for primary data

Data source	Method of data collection	Sample size	Response obtained	Response rate
Internal auditors	Questionnaire	10	10	100%
Accountants	Questionnaire	50	30	60%
Administrative managers	Questionnaire	50	45	90%
The administrator of the Offices Selected	Interviews	5	5	100%
Total		115	90	78.3%

As indicated in the above table, the respondents from the sample of internal auditors responded 100%, the accountant's staff respondents responded 60% and the administrative staff is about 90% returned and 100% of the selected public office's heads are interviewed in full.

From this, it can be concluded that the primary data collected constitute more than the average sample size. This shows that the sample collected claimed to be representative of the population and approaching reliability.

Respondents Profile
Accordingly, the respondents were asked to respond to their gender category, working place, status, year of experience, level of education, and field of qualification. The information processed by STATA was summarized as follows.

Table-4.2: Gender Categories of the Respondents

	Gender	Frequency	Percentage %
Valid	Male	61	67.78%
	Female	29	32.22%
	Total	90	100%

Source; survey result and researcher own computation 2020

As indicated in the above table the gender proportion of female respondents is 32.2% while the male respondents were 67.8%. Both categories of gender participated in the survey. This enables the researcher that there is no bias in the survey instrument related to the gender of the respondents.
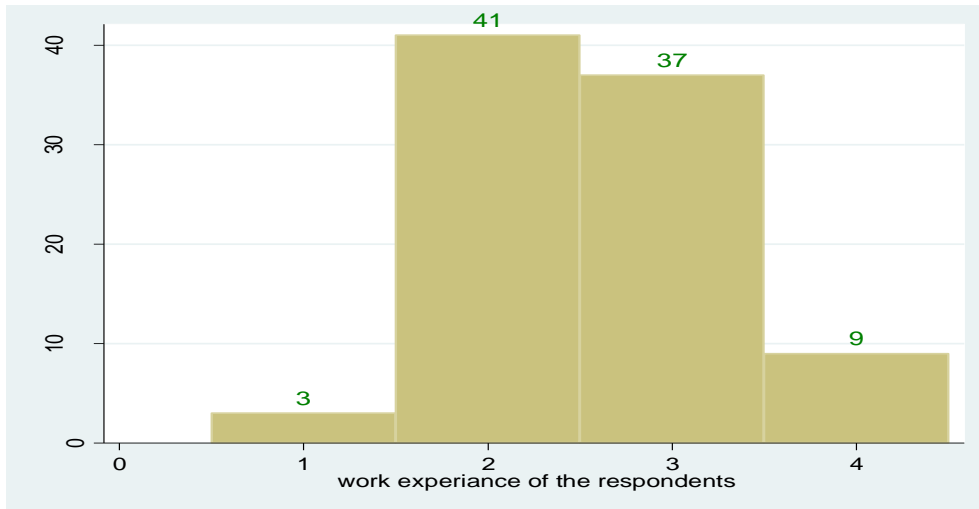
Table 4.3 Workplace of the respondents

Sampled offices	Frequency	Percentage
Education office	**21**	**23.3%**
Agriculture office	**17**	**19%**
Healthy office	**20**	**22.2%**
Water and energy office	**19**	**21.1%**
Rural road authority office	**13**	**14.4%**
Total	**90**	**100%**

Source; survey results and researcher own computation 2020

The sample respondents are composed of five purposively selected large public offices the number of sample respondents who properly field and returned the Questioner and interviews are 21 or 23.3% are from the office of education,17 or 19% was from offices of agriculture 20 (22.2%) was from offices of healthy, about 19 respondents or 21.1% of the respondents were from water and energy offices and as well about 13 (14.4) respondents who properly participated in the project was from rural road and authority offices in the case study area. This proportion shows as the respondents are composed of all the five selected case study public offices and it is not biased in concluding doe to the

respondents are from all selected case study area almost by the nearest percentages so that the information drawn from these respondents are unbiased and touched the current experience of these offices.

Table-4.4: the working experience respondents

As indicated above 3 of the respondents have worked between 0 and 5 years, 41respondents and the majority of respondents are worked between 6 and 10 years, 37 between 11 and 15 years, and 9 of them have worked from 16 years and above. An interesting revelation from the chart was that 51.1% of the respondents had worked for 11 years and above and therefore the respondents had a reasonable experience in the subject matter.

Table-4.5: respondent's level of education

	Level of education	Frequency	Percent
Valid	Diploma	17	19 %
	Degree and above	73	81 %

Source; survey result and researcher own computation 2020

As summarized in the above table, the majority (81%) of the respondents were qualified in degree and above which is favorable. This is an indication that the respondents are also at adequate education level to understand the concept of the internal control system.

Table 4.6 respondents field of profession

Valid	Respondents field of qualification	Frequency	Percentage
	Management.	*17*	*19%*
	Accounting and Finance.	*64*	*71%*
	Other	*9*	*10%*
	Total	90	100%

The survey made to assess the areas of qualification of the respondents presented in table 4.6 indicated that 71% of the respondents were qualified in accounting and19 % were qualified in management. This means the respondents had at least had theoretical education on the concept of internal control.

Examining Effectiveness of Elements of Internal Control system

Recalling the statement of (COSO 2013); an effective internal control has five components; control environment, control activities, risk assessment, information and communication, and monitoring. The effective functioning of components of internal control provides a reasonable assurance regarding the achievement of stated objectives to ensure high levels of organizational performance.

In general, for descriptive analysis, the respondents are also asked to show the level of their overall agreement on the overall internal control system effectiveness.

Tab eics Effectiveness of Internal Control System	Freq.	Percent	Cum.
Poor	77	85.56	24.44
Good	12	0.133	65.56
Excellent	10	0.1111	00.00
Total	90	100.00	

According to the above table using primary data and STATA output out of 90 respondents who responded on the overall effectiveness of internal control system exist in the offices they were working in was concluded as agreed 85.56% or about 77 respondents are agreed that the internal control system is poor and only very few of the respondents (0.133) are agreed that the internal control system was good and but showed there is exist a room for improvements.

The ordered log it model and Hypothesis Testing

An ordered log it model was used to estimate relationships between an ordinal dependent variable and a set of independent variables. An ordinal variable is a variable that is categorical and ordered, for instance, "poor", "good", and "excellent", which can indicate the respondent's perception of the current internal control system effectiveness of the government offices they are working in. The internal control system was evaluated as (poor, good, excellent) coded as 1, 2, and 3 respectively.

Internal Control System	Codes For alternatives	Frequency	Percentage
Poor	1	77	85.56%
Good	2	12	0.133%
Excellent	3	10	0.1111%
Total		90	100%

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Ordered logistic regression                  Number of obs    =  90
                                             LR chi2 (5)      = 4.55

Prob> chi2     =   0.0345
Log likelihood = -94.649827                  Pseudo R2        =0.0234


-----------------------------------------------------------------------
eics |    Coef.    Std. Err.      z     P>|z|     [95% Conf.  Interval]
-------------+---------------------------------------------------------
Oaca |  -.0950434   .1397698   -0.68   0.024    -.3693137    .1785741
Oace |  -.000013    .001300    -0.01   0.627    -.3586506    .2162846
Oara |   .808048    1.26257     0.62   0.0124   -.1922762    .3698859
Oaicc|   .627530    1.25506     0.50   0.048    -.221007     .3716230
Oama |   .2255706   .1503804    1.50   0.000    -.0689615    .520518
-------------+---------------------------------------------------------
  /cut1 |   -.483735   1.017322             -2.477649    1.510179
  /cut2 |   1.360333   1.029117             -.6566995    3.377366
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To achieve the objective of the study and to test the related hypotheses the ordered logit model was used and determined based on the outcome model coefficients and sign of the coefficients which shows their relationship and also by the level of significance (p-value) attained by each of the independent variables.

Firstly, the result of the ordered logit as shown in the above table indicates that the overall control activities results by ordered logit was = 0.0953, with p-value = .024. The result showed that the effective overall control activities have a

significant effect on the effectiveness of the internal control system in the case of public offices as revealed by the model and this is due to significance in determining the outcome that the p-value (0.024) is less than significance level>0.05. But, the effective control activity has no positive relationship with the internal control system.

The result clearly shows that the effect overall control activities have no positive significant effect on the effectiveness of the internal control system.

Accordingly, HO1 which stated that the effective control activities have a positive significant effect on the effectiveness of the internal control system was not accepted at the 0.05 significance level.

On the other hand, the result of the ordered logit, as shown above, indicates that the overall sign of the Control environment is negative. The result showed that the effectiveness of the Control environment has no significant effects on the effectiveness of the internal control system in public offices as revealed by ordered logit model outcome -0.00013 and the p-value (0.627) is also greater than significance level >0.05. The result clearly shows that the effectiveness of the control environment has no positive significant effect in determining the effectiveness of internal control systems in case study public offices.

Accordingly, HO2 which stated that the effectiveness of the Control environment has a positive significant effect on the effectiveness of the internal control system in public offices was not accepted at the 0.05 significance level.

Thirdly, the result of the analysis supports the existence of effective risk assessment result has a positive significant effect and have a strong relationship with internal control system than the other elements as revealed by (ordered logit outcome = 0.8088, p-value = .0124.

This result also showed that overall risk assessment practice is different from zero, has a positive significant effect, and also there is a strong relationship between the effectiveness of risk assessment practices and effectiveness of internal control system as revealed by the model. Also, the overall risk assessment practices have appositive significance in determining the effectiveness of the internal control system as the p-value (0.0124) is less than the significance level>0.05. This result clearly shows that effective risk assessment practices, as one of determining factors for the effectiveness of internal controls system components.

Accordingly, HO3 which stated that effective risk assessment practices have a positive significant effect on the effectiveness of the internal control system as a whole in the public offices was accepted at the 0.05 significance level.
This result is consistent, to a considerable, extent, with that of the finding of (Merga 2011) who asserts that effective risk assessment practice has a significant effect on hotels revenue which enable the organization to use a different mechanism that motivate their employee for better revenue growth by providing them the different incentive and reward system.

Additionally, the result of the ordered logit model outcome as shown in the above table also support the Existence of a positive significant effect of effective information and communication on the effectiveness of internal control system in public offices of case study as revealed by (model Outcome = 0.627, p-value = .048). This result also clearly showed that effective information and communication have a positive effect and also has a strong relationship with the internal control system effectiveness.

Additionally, information and communication is the significant independent variable in determining the outcome as the p-value (0.048) is less than the significance level >0.05. This revealed that the existence of overall effective information and communication system, as one of the components of the internal control, has positively significant on internal control system effectiveness.

Accordingly, HO4 which stated that effective Information and communication have a positive significant effect on the effectiveness of the internal control system was accepted at the 0.05 significance level. The result of this study is consistent with that of (Yared 2010) which indicated that the existence of effective information and communication systems enables the organization to collect more revenue internally and externally from indirect stakeholders.

The overall effectiveness of Monitoring activity on the effectiveness of internal control system has positive with the internal control system as revealed by the model with a coefficient of .225. Moreover, monitoring activity is significant in determining the outcome as revealed by the p-value (0.000) which is less than significance level>0.05. This suggests that the overall monitoring activity, as one of the internal controls system components, has a positive significant effect on the effectiveness of the internal control system.

Thus, HO5 which stated that the overall effective Monitoring activities have a positive significant effect on the effectiveness of internal control system in case study public offices is accepted at 0.05 significant levels.

This result is consistent, to a considerable extent, with that of (Tseda L. 2012) which indicate that the effectiveness of monitoring has an appositive significant imperative effect on the employees and enable them to sit up to their responsibilities properly and reduce their age-old delay in assessment, collection, and diversion of resource of the organization.

In general speaking; from the ordered logit model outcome, the study concluded that not all internal control components have a positive significant effect on the effectiveness of internal control systems in public offices.

Summary of the findings

Internal Control is a policy, methods, and practices employed for the attainment of organizational objectives. These objectives are ensuring operational efficiency, safeguarding assets, and adherence to rules and regulations. The study aimed to assess whether there is an effective internal control system exists in the case of the Arsi zone government's 0ffices for protecting the limited public properties and to identify areas of insufficiency. To achieve these objectives the survey approach, interview and Questioner were used and the result is internal controls in the case of Arsi zone public office were not effective to protect the limited public properties. Particularly the risk assessment is found to be only theoretical and new to the offices and there is no supportive information that the risk assessment practice exists there.

The detailed findings and areas of deficiencies in internal control systems in the case of Arsi zone public offices are summarized as follows.

- The control activities in Arsi zone public offices have also several deficiencies like lack of effective procurement and disposal of assets in the offices, Lack of clear available punishments for any violation of internal control activities such as thefts and fraud committed by employees in some of the public offices. There are no effective internal control activities are exist to save guard the public limited assets from theft and misuse in many public offices.
- The control environment of the internal control system is inadequate to be judged as effective, particularly; all employees in charge of the case study public offices program are not aware of the guidelines of the office's program. In addition, the top management message on the importance of internal control is not understandable by all employees and following it in practice.
- The risk assessment is the weakest of all elements of internal control system practice in the offices. Risk assessment is considered to be new for the offices; the managements were not adequately identified risk and developed clear procedures to control risks. But according to statistical output, the effective risk assessment result has a positive significant effect on the effectiveness of the internal control system.
- Information necessary in the offices is not adequately communicated to all stakeholders, the office managers have no effective communication with the society they are serving in day-to-day activities and other stakeholders. The office management has no proper mechanism to correct for any feedback from the public timely without any hesitation in the case of Arsi zone government offices
- Monitoring is believed to help in the achievement of objectives; though in the offices the monitoring was not continuous. The monitoring was also not effective because it lacked covering evaluation of the effectiveness of internal control didn't consider audit findings and recommendations and did not take adequate actions and measurements according to the interviewers' agreements.

The Conclusion and Recommendations

This paper evaluates the effectiveness of internal control systems in public sector offices in the case of Arsi zone has observed the implicit existence of ineffective internal control system procedures for safeguarding assets of the organizations.

The paper believes that more effort should be directed at increasing awareness of all employees about the importance of internal control activities for the protection of public property from misuse and theft and updating their knowledge than engaging in the interminable search for error-proof internal control procedures. From the result of this study, it is impossible to conclude the internal control systems in the public offices are economical, efficient, and effective. Both the respondents to the questionnaire and an interview claim that the system is not good enough to protect the public limited properties from misuse and thefts at a high level. Based on the finding the following are specific areas that need due emphasis to improve the internal control system effectiveness in the public government offices.

The top management message to all employees on the importance of internal control in the offices as a major component of the control environment of the system. So that all stakeholders have to understand the policies, directives, and programs of its respective public offices.

Internal control is the responsibility of management, employees, and other stakeholders. Hence there should be a clear line of responsibility and structure of reporting to discharge any risk of collusion and fraud. There should be an effective

and integrated system of procurement of assets and asset purchase and sale also must be approved duly by the authorized person in the offices.

There is should be a framework on how the public offices at different levels can identify possible risks and strategies to control the risks occurrences. Good information flow and line of communication risk of failure in an internal control system are caused by information gaps. Thus necessary information should be communicated to all stakeholders. The control system's effectiveness should be evaluated against clearly established criteria and should be monitored continuously. This is the responsibility of management and internal auditors.

Suggestions for further studies
The following suggestions are made for further studies:
a) A similar study with a wider scope is advocated.
b) A study to identify the drivers of the effectiveness of internal control systems in public sector offices/offices is recommended.

REFERENCES

1. AICPA Statement on Auditing Standards (2002). SAS 55, Consideration of the Internal Control Structure in a Financial Statement Audit.
2. Arens, A. A., Elder, R. J., and Beasley, M. S. (2007). Auditing and Assurance Services (14thed). Upper Saddle River, NJ: Prentice-Hall.
3. Alam ford (2015). Design of an effective internal control auditing, Kenya public offices.
4. Abu-Musa, Ahmad A. (2010). Investigating adequacy of Security Controls in Saudi Banking sector An empirical study, Journal of Accounting – Business and Management, vol, 17, No, 1, pp.1-41.
5. Abu-Musa, Ahmad A. (2012). Investigating the Security Controls of CAIS in an Emerging Economy. An empirical study on the Egyptian Banking industry, The Journal of Managerial Auditing, vol, 19, no.2, pp.272-302.
6. AICPA Statement on Auditing Standards (2002). SAS 55, Consideration of the Internal Control Structure in a Financial Statement Audit.
7. Alam, M. S. (1995). "A Theory of Limits on Corruption and Some Applications." Cyclops, vol 48: pp 419-435.
8. An exploratory study, International Journal of Islamic and Middle Eastern Finance and Management, Vol. 5 Isis: 4, pp.340 – 352.
9. APB (1995), Accounting and Internal Control Systems SAS 300, Auditing Practices Board Statements of Auditing Standards, London.
10. Asiimwe, D., &Nakanyike, B. M. (2007). Decentralizations and transformation of Governance in Uganda.
11. Atkinson, P., Delmont, S. and Hamersley, M. (1994) Qualitative research traditions: a British response to Jacob, Review of Educational Research, 58, 2, pp. 231-250.
12. Auditing Practices Board (2009), ISA 240, the auditor's" responsibilities relating to fraud in an audit of financial statements, London, Financial Reporting Council, Auditing, Vol. 19, No. 2, pp. 272 -302.
13. Beneish, M. Billings, M. and Holder, L (2008), Internal control weaknesses and information uncertainty, The Accounting Review, vol, 83, No, 3, pp.665-703.
14. Babble, E. (1990). Survey research methods (2nded.). Belmont, CA: Wadsworth Publishing Company.
15. Balzan, L. and Baldachin, P.J. (2007) Benchmarking in Maltese internal audit units, Benchmarking: An International Journal, vol, 14, No, 6, pp.750-767.
16. Basel Committee on Banking Supervision (1999) OECD Principles of Corporate Governance, available from www.bis.org/publ/bcbs56.pdf on 1 January 2009.
17. Bologna, G, and Lindquist, R. (1995): Fraud Auditing and Forensic Accounting, JohnWiley&Sons.New Jersey.
18. Bradford (1997), "Design of an effective internal control" auditing, USA.
19. Committee of Sponsoring Organizations of the Tread way Commission (COSO), (1992), Fraudulent Financial Reporting", New York, NY: COSO.
20. COSO (1992). Internal Control-Integrated Framework, Committee of Sponsoring Organizations of the Tread way Commission, USA.www.coso.org/documents/wacffa-n-pmitchell.pdf. (Retrieved 21/06/2011).
21. COSO (2013). Internal Control-integrated Framework, Committee of Sponsoring Organizations of the Tread way Commission, Coopers, and Lybrand, New York
22. Chambers, A.U (1979). The structure of internal audit New York Romney Inc
23. Christine. P, Catherine. Sh, Aimee. Sh (2011). The Causes and Consequences of Internal Control Problems in Nonprofit Organizations, The Accounting Review Vol. 86, No. 1 pp. 325-357.
24. Coffin, B (2003). Trends in Corporate Fraud, Risk Management, vol 50 (5) pp9.
25. Committee of Sponsoring Organizations of the Tread way Commission (1992). Internal Control-Integrated Framework; Volume 2, frameworks, Volume 4, Evaluation of internal control. New York, NY: COSO.
26. Cooper, B. J., Leung, P. & Wong, G. (2006). The Asia Pacific literature review on internal auditing, Managerial Auditing Journal, Vol. 21, No. 8, pp.800–34.

27. Creswell, John W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods
28. Cunningham, L. A. (2004). The Appeal and Limits of Internal Controls to Fight Fraud, Terrorism, Other Ills.
29. Damagum, Y.M (2003). Effective Internal Control for Fraud Detection. The Certified National Accountant, The Journal of the Association of National Accountants of Nigeria Vol. II, No2, April, June 2003.
30. Davies, J. (2007). Alliances, Public Sector Governance, and Value for Money.
31. Decapolis, T. P. (2007). Standards for Internal Control; In New York State Government
32. Ernst & Young LLP. (2002). Preparing for Internal Control Reporting: A Guide for Management Assessment under Section 404 of the Sarbanes-Oxley Act.
33. Furrugia, S. (2002). A dangerous occupation Violence in public libraries, New Library World, Vol. 103 No. 9, pp. 309-20.
34. Graham, L. (2015). Internal control audit and compliance. 1st ed. Hoboken, New Jersey: Wiley, pp.4-5, 9.
35. Greener, D. and Martello, D. (2015). An introduction to Business Research Methods. 2nd ed. Book boon.com, p.47.
36. Hamid, K.T. (2005). The Role of Honesty and Integrity in Ensuring the Effectiveness of Internal Control System in the Nigerian Banking Industry. In: Dan ago, K.I. and Hamid, K.T. (ends): Commitment
37. International Organization of Supreme Audit Institutions (INTOSAI), (2004). Guidelines for Internal Control Standards for the Public Sector. Retrieved on http://www.intosai.org
38. International Federation of Accountants (IFAC), (2012). Evaluating and improving the effectiveness of internal controls in organizations, New York the US, International Journal of Public Sector Management. Vol. 22 No. 6, pp. 478-498
39. International Organization of Supreme Audit Institutions (INTOSAI), (2004). Guidelines for Internal Control Standards for the Public Sector. Retrieved on http://www.intosai.org
40. Jones, M.J. (2008). Dialogues de Scaccario (c.1179): the first Western book on accounting
41. Joseph M. One-man, Ransomed Kilo, Victoria A. and Oberg (2012), Effectiveness of Internal Control Systems of Listed Firms in Ghana, Research in Accounting in Emerging Economies, Volume 12, pp.31-49.
42. Janfa, B.I. (2002). Internal Control and Fraud Preventive: Accountant's Perspective, the National Accountant: The Journal of the Association of National Accountants of Nigeria Vol. 10 No 4 October –December 2002.
43. Kaplan, R.S. (1992). Measures that Drive Performance, Harvard Business Review, 71 – 79. The Accounting Review, Vol. 83 No. 3, pp. 665-703.
44. King Committee on Corporate Governance (2002). Executive Summary of the King Report.
45. Lu, H., G. Richardson, and S. Santeria. (2011). Direct and indirect effects of internal control weaknesses on accrual quality: Evidence from a unique Canadian regulatory setting. Contemporary Accounting Research vol, 28, No.2: 675-707.
46. Luzon H., G. Richardson, and S. Santeria (2011). Direct and indirect effects of internal control weaknesses on accrual quality: Evidence from a unique Canadian regulatory setting. Contemporary Accounting Research vol, 28, No.2: 675-707.
47. Mahdi Salami, Mahmud Mosaic Shiri and Fatemeh Ehsanpour (2013). Effectiveness of Internal Control in the Banking Sector: Evidence from Bank Mellat, Iran.
48. Messier, W. F. (1997), Auditing. A Systematic Approach, Mc Graw-Hill editions.
49. MOFED (2014). internal audit standards and code of ethics an audit manual Financial Regulations (No. 17/1997), Addis Ababa Ethiopia.
50. Moses. B, (2020). The Effectiveness of Internal Control Systems in Achieving Value For Money Kamala, Uganda.
51. MOFED (1997). internal audit standards and code of ethics an audit manual Financial Regulations (No. 17/1997), Addis Ababa Ethiopia.
52. Mwakimasinde, M. O. Odhiambo, A. & Byaruhanga, J. (2014). Effects of Internal Control Systems on Financial Performance of Sugarcane out-grower companies In Kenya. Journal of Business and Management, 16(12), 62-73.
53. Moses. B, (2020). The Effectiveness of Internal Control Systems in Achieving Value For Money Kamuli, Uganda.
54. OFAG (2020). Audit report of government institutions Addis Ababa, Ethiopia.
55. OFAG (2019/20). Audit report of government institutions. Addis Ababa, Ethiopia.
56. Pickett, K. (2005). The essential handbook of internal auditing. Chic ester: John Wiley & Sons. pp. 8, 335, 337
57. Palfi, C. and Muresan, M. (2009). Survey on weaknesses of banks internal control systems, Journal of International Finance and Economics, Vol. 9, No. 1, pp. 106-116.
58. Robertson, J. C., and F. G. Davis (1988). Auditing. Business Publications, Inc.
59. Ronald J. Huefher (2011). Evaluation of internal control weaknesses in local government, The CPA Journal, New York State Society.
60. Ronald J. Huefher (2011). Evaluation of internal control weaknesses in local government, The CPA Journal, New York State Society.
61. Sanderson Ian, (2001). Performance management, evaluation, and learning in modern Local Government. Vol. 79 No. 2, (297–313).
62. Sarbanes-Oxley Act of 2002 (SOX). Effective internal control, USA conference, USA.
63. Sartini Wardiwiyono, (2012). Internal control system for Islamic micro financing in Indonesia

64. Spira, L. and Goyt hope, C. (2008). Reporting on internal control in the UK and the US. 1st ed. Edinburgh: Institute of Chartered Accountants of Scotland, p.5.
65. The United Kingdom Auditing practices committee and Institute of Internal Auditors-UK (1979). The purpose of internal control' England and south Wales.
66. William C., Walter G. (1996). Modern auditing 6th ed. New York: J. Wiley &Sons.