



**EFFECT OF INTERNAL CONTROLS ON PROFITABILITY IN KENYAN  
SUPERMARKETS: A CASE OF SUPERMARKETS IN KISII TOWN, KENYA**

**<sup>1</sup>Diana Cathy Gichana**

*Jomo Kenyatta University of Agriculture and Technology*  
[dinah.cathy@yahoo.com](mailto:dinah.cathy@yahoo.com)

**<sup>2</sup>Dr. Wallace Atambo Nyakundi (Ph. D)**

*Lecturer, Jomo Kenyatta University of Agriculture and Technology*  
[atambowa@yahoo.com](mailto:atambowa@yahoo.com)

**<sup>3</sup>Dr. Vitalis Mogwambo (Ph. D)**

*Lecturer, Jomo Kenyatta University of Agriculture and Technology*  
[mogwambov@yahoo.com](mailto:mogwambov@yahoo.com)

**Abstract**

The aim of the study was to assess the effect of internal controls on profitability of supermarkets in Kenya. The specific objectives used were; to assess the effect of book keeping on profitability of supermarkets in Kisii town, to assess the effect of approving of transactions and to evaluate the influence of procurement procedures on profitability of supermarkets. From the study, it was clear that supermarkets undertake emphasis on creating the knowledge of the internal control procedures for supermarkets to be complying with the systems of control. The study established that financing of cash to procurement depend of efficiency and accurate data confine book keeping in payment. Numerous procurement procedures have helped in assess and improving the effectiveness of profitability. The supermarkets firms have formalized policies of control for all activities which allows for good and efficient control of stock out. This study concluded, that accepted the relationship between book keeping procedures on profitability by receiving of cash, accounts payment of goods, sales of stock and unlimited access to stores. The correlation and regression analysis were engaged in the study. Standard variation measured on the observed values from their mean.

*Keywords: Book Keeping, Internal Controls, Supermarkets*

## 1. Introduction

Internal control was first included in professional audit statements in the 1920s and 1930s, but most of the developments have taken place in the 1950s and later. As a result, the will study examines the period from 1949 (when the American Institute of Accountants issued its definition of internal control) to 1988, when the 1949 definition was superseded. The Internal control was evolved steadily with the progress of management science after Second World War II in control of fighting tools in the sections. It is conceptually similar in many ways to financial auditing by public accounting firms, quality assurance and banking compliance activities. While some of the audit technique underlying internal control was derived from management consulting and public accounting professions, often referred to as "the father of modern internal auditing"; and the current philosophy, theory and practice of modern internal auditing as defined by the International Professional Practices Framework (IPPF) of the IIA owes much (McAllister, 1982).

In 1999 South Africa inherent internal control limitations are in the draft public audit bill: aimed at improving public accountability evidence concerning the presence of inherent internal control limitations in the South African government sector background after the promulgation of the Public Finance Management Act (PFMA), the Southern African Institute of Government Auditors (SAIGA) assisted National Treasury, affected public entities as well as national and provincial departments with the implementation of the PFMA by presenting structured skills transfer and educational programs (STEPS).

Generally in Nigeria appear to adopt the traditional transaction based approach to audit which involves checking each of the individual payments which are made by the organizations that they audit. Similarly an effective internal auditors activity provide assurance to other stakeholders such as regulators, employees, providers of finance and the shareholders, qualified Audit staff, qualified financial analyst, to give advice management on issue of financial performance and financial accountability (Millichamp, 2008). In Kenya, Auditors' independence has been termed the building block of the auditing profession, since it forms the foundation for the public's trust in the attest function of ascertaining whether the financial statement show a fair and true position of the financial status of an organization (Caswell & Allen 2001). The Goldenberg scandal, Anglo leasing scandal in Kenya, the phantom Ken Ren sale of Fertilizer Factory, sale of grand regency hotel to foreigners, the recent scandals in the ministry of

education and the transport sector over the delay in the new ferries has heightened the debate on integrity and independence of ICS.

This increased recognition of internal auditors has resulted in the services of the internal control procedures being expanded from essentially an accounting-orientated service, to a much broader management-orientated service. Recent demands by stakeholders of organizations for greater accountability from management, be it the board of directors, audit committee, executive management or other levels of management, will likely further augment the services of Internal Audit Functions. Despite all of the above, internal auditors are in practice of internal control procedures fallen in short of expectations (IIARF 2007).

According to Kenya National Bureau of Statistics the current population of Kisii town supermarkets. That ranges from well-established retail chains to independent one store. All the supermarkets are locally owned and deal with food and non-food items. The growth of extensive supermarkets in Kisii has been attributed to such factors increased urbanization, growing middle class and its changing lifestyle and market liberation that led to increased competition in the sector. Supermarkets in Kenya deal in both food and non-food items. Supermarkets have opened branches in other East Africa countries. Most these supermarkets sell both local and international brands. The major players in the sector were concentrated in Nairobi, Mombasa, Kisumu and Nakuru (Mbugua, 2013).

## **2. Statement of the Problem**

The problem currently, the rate of theft in supermarkets was high by means of global technology. Supermarket managers struggled to look for ways of controlling theft by various internal controls, but they were unprecedented because they not focused on book keeping, approval of transactions and process of procurement procedures. From the background reviewed different countries and different organization have tried to investigate the impacts of internal controls but there was still a challenge which pushed forward for a research. Moorthy, (2011) did the study of internal controls of frauds on financial solution in Kenya, but she did not talk of internal control on profitability based on theft. It was with this respect that this study assessed on the effects of internal control procedures on profitability of supermarkets in Kisii Town.

## **3. Objectives of the Study**

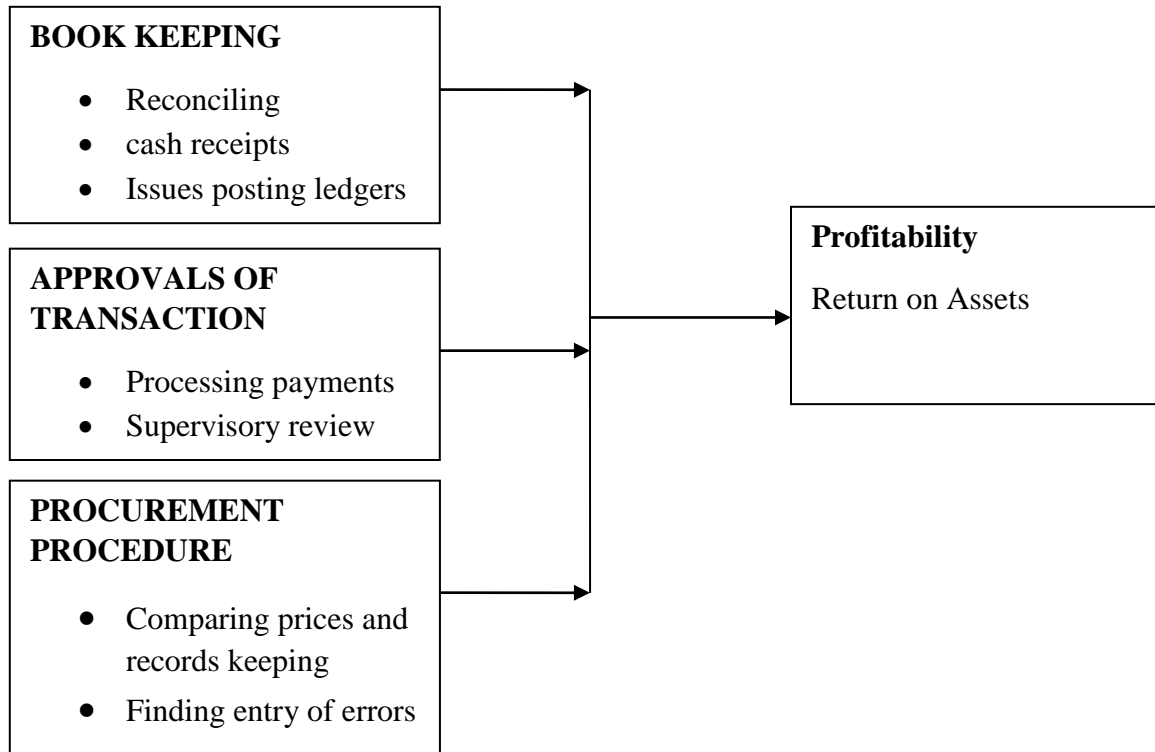
The study sought to assess the effect of internal controls on profitability in Kenya supermarkets case of Kisii town. In particular the researcher focused on the following specific objectives:

- i. To determine the effect of book keeping on profitability in supermarkets in Kisii town.

- ii. To assess the effect of approval of business transaction on profitability in supermarkets
- iii. To evaluate the influence of procurement procedures on profitability in supermarkets in Kisii town

**Independent Variables**

**Dependent Variables**



**Figure 1 Conceptual Framework**

**4. Research Methodology**

The study adopted descriptive research design in this study. The target population of the study was 255 employees of supermarkets in Kisii town including; Oshwal supermarket, Nakumatt, Uchumi, Tuskys and Kisii Matt, Naivas, and Shiviling supermarkets. Primary data was collected through structured questionnaires. Questionnaires were chosen simply because of the time limitation and partly because the researcher dealt with different respondents.

**RESULTS AND DISCUSSION OF FINDINGS**

**5. Book keeping on profitability**

This study sought to establish the relationship between internal control procedures on profitability by book keeping; receiving of cash receipts records, payment of goods records, bank deposit and list stock large vendors and unlimited access to stores. The correlation and regression analysis were employed in the study. Standard deviation measured the deviation of observed values from their mean.

Table 1 showed that the deviation of responses on extent of internal control procedures on profitability from their mean of responses which were at sig. (2-tailed) of Pearson correlation of 1 respectively. Since the deviations were more than the threshold of 0.5, it then implies that there were major deviations of the individual views from their mean responses. This showed the extent to which a distribution differs from a normal distribution.

**Table 1 Correlation Matrix of the Study**

		Correlations		
		BOOKEEPING	APPROVAL	PROCUREMENT PROCEDURE
BOOKEEPING	Pearson Correlation	1	.652**	.749**
	Sig. (2-tailed)		.000	.000
	N	75	75	75
APPROVAL	Pearson Correlation	.652**	1	.666**
	Sig. (2-tailed)	.000		.000
	N	75	75	75
PROCUREMENT PROCEDURE	Pearson Correlation	.749**	.666**	1
	Sig. (2-tailed)	.000	.000	
	N	75	75	75

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 1 showed a strong positive insignificant relationship between internal control procedure on profitability (r = 1, .652 and .749), and profitability. The relationships between internal control procedures is however very strong and significant(r = 0.01 level, p = .000). This indicated existence of multi linearity between procedures and profitability. However, confirms that the multi linearity level was not serious to introduce errors in the estimation of failure internal control coefficients. Therefore, correlation was significant at the 0.01 level 2 tailed.

### 6. Approval of Business Transaction

The study sought to find the effects of approval of business on financial performance in the supermarkets. The study adopted correlation matrix.

**Table 2: Correlation matrix for the study variables**

		Book keeping	Approval of transactions	Internal procedures	Profitability
Book keeping	Pearson Correlation	1	.681	.700	.880
	Sig. (2-tailed)		.002	.000	1
	N	75			
Approval of transactions	Pearson Correlation	.867	1		
	Sig. (2-tailed)	.195			1
	N	75	75		
Procurement procedures	Pearson Correlation	.899	.701**	1	
	Sig. (2-tailed)	.218	.000		
	N	75	75	75	
Profitability	Pearson Correlation	.885**	.711**	.555**	1
	Sig. (2-tailed)	.102	.001	.000	
	N	75	75	75	75

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 2 indicated that the variables of internal controls on profitability book keeping .867, approval of transaction .899 and procurement procedures .885, the Pearson correlations are more than 0.5 to show that the study was significant to improve profitability of supermarkets.

## 7. Procurement Procedures

The study wanted to indicate whether procurement procedures have influence on profitability and found out that that there was need for supermarkets in Kisii Town to establish procurement procedures to improve profitability by following purchases. Therefore, it there was a relationship between internal control procedures and profitability and results was shown by table 2.

## Regression Analysis

Table 3 showed a coefficient of determination of .819 which means that 81.9% of variables are causing changes in profitability of supermarkets were explained by the three independent factors (book keeping , approval of business transaction and procurement procedures). The values of .181 represented 18.1% of the variables under study are not affecting profitability according to

the study, which it was an indication of auto correlation analysis of the variables of supermarkets.

Table 3: Summary of the regression model on the effects of internal control procedures on profitability of supermarkets

**Table 3 Regression summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819 <sup>a</sup>	.779	.796	.877311

a. Predictors: (Constant), PROCUREMENT, APPROVAL, BOOKEEPING

b. Profitability

Table 3 shows that  $R = .779^a$ , which was significant at more than  $p = 0.786$  which was likely an indication that book keeping, approval and internal procedures on profitability was jointly to explain a significant portion of profitability of the supermarkets. This surprise of internal control system in terms of profitability was in cycle with the significant coefficient of determination of 0.796 translating to 79.6%.

**Table 4: ANOVA Results on the Regression Model**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	75.887	3	65.296	25.314	.000 <sup>a</sup>
	Residual	22.900	71	.804		
	Total	98.787	74			

a. Predictors: (Constant), BOOKEEPING, APPROVAL, PROCUREMENT PROCEDURE

b. b. Dependent Variable: PROFITABILITY

Table 4 showed that procurement procedure ( $F= 25.314$ ,  $Sig. = .000^a$ ) and Approval of business transaction ( $df=3$ ,  $r= 98.787$ ), both had significant positive effects on profitability of the supermarket. This means that the more internal control procedures are involved in the decisions making process, the higher to the profitability of the firms. The profitability will be significantly improved by 0.804. The internal control procedures are done on a regular basis was also significantly improve profitability by 0.804, this indicated that in the study 80.4 % of the internal control variable was significant to the study findings. The estimated variances of internal control variables are also set at less than 4, which suggest multi-linearity of ANOVA.

**Table 5: Estimated Coefficients of the Independent Variables**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.245	.701		.350	.727
BOOK KEEPING	.691	.736	.706	.808	.622
APPROVAL	-.89	.761	-.64	-.652	.683
PROCUREMENT PROCEDURES	.731	.743	.679	.101	.000

a. Independent Variable: BOOKING KEEPING, APPROVAL, PROCUREMENT PROCEDURES

b. Dependent Variables; PROFITABILITY

From the table 5, the estimated coefficient of variables was of different values. Book keeping at 0.245 and Approval of business transactions .691 which corresponded to the standard error of .736, .761 and .731 respectively to show that internal control variables procedures are significantly to .727, .622 and .683 which was positively measured at 0.00 of reliant variable of profitability.

### Discussion

From the study, it was clear that supermarkets undertake emphasis on creating the knowledge of the internal control procedures for supermarkets to be complying with the systems of control. Secondly, than approval of transaction would be in place, also the agreement was but just a tool for controlling money which did not matter how much, but can do better than supervision mechanisms which was ranked the last.



Measures of profitability give up clearly fall within the category of output measures and, as such, serve as good indicators of the results and efficiency of the type of internal control procedures of goods. What they cannot fully control was how successful the overall internal control procedure was at delivering higher levels of voluntary control, whether through deterrence, or by reducing the opportunities for non-control procedures. Control procedures that place more emphasis on upstream activities such as working with to re-engineer their processes and those of the procurement procedures to build in advanced rulings on complex control issues over time, reduce imposition yield by reducing the incidence of error which did not arise from a deliberate decision on the part of the control procedures.

## **8. Summary of the findings**

The study sought to establish the effects of internal control procedures on profitability in Kisii town supermarkets. The objectives were to assess the effects of internal control procedures on profitability in Kisii town supermarkets on the profitability, to determine the effects of book keeping procedures on profitability in supermarkets in Kisii town, to assess the effects of approval of business transaction on profitability in supermarkets and to evaluate the influence of procurement procedures on profitability in supermarkets in Kisii town.

### **Book keeping**

The study sought to establish the relationship between book keeping procedures on profitability in receiving of cash and keeping of payment records and bank deposit, list stock vendors and unlimited access to stores. The correlation and regression analysis were employed in the study to show the relationship indicated that approval of transactions was significant with profitability. Standard deviation was employed to measure deviation of observed recordings of accounting records values from their mean.

Table 1 showed that book keeping has a deviation on the extent of internal controls on profitability which put at sig. (2-tailed) of Pearson correlation of 1 respectively. Book keeping was in divergence to more than the entry of 0.6, it then concluded that there were main deviations of the book keeping. This showed the extent book keeping applied a distribution which was different from normal distribution of the supermarkets.

Book keeping were flawed to employees in selected financial records. Procedures exist to prevent the interception or alteration by unauthorized persons of billings before posting. Internal audit implementation in book keeping was conducted occasionally.

### **Approval of transactions**

Findings from table 2 pointed out that the variables of approval of transactions in internal control procedures compared to their correlations of profitability factors book keeping .867, approval of transaction, .899 and procurement procedures.885, Pearson correlations indicated that the variables were up to more than 0.5 which explain that the study is more significant in provision of profitability. The study also found that approval of transactions necessitate for internal control on profitability supermarkets in Kisii town to establish book keeping, approval and procurement procedures to enhance supermarket performance. Therefore, it there was existing relationship between internal control procedures and profitability.

### **Procurement procedures**

The study established that financing of cash to procurement depend of efficiency and accurate data confine book keeping in payment. Numerous procurement procedures have helped in assess and improving the effectiveness of profitability. The supermarkets firms have formalized policies of control for all activities which allows for good and efficient control of stock out. There were formalized control policies and procedures for all major internal operations of the entity and policies.

## **9 Conclusion**

### **Book keeping on profitability**

This study concluded that the accepted relationship between book keeping procedures on profitability by receiving of cash, accounts payment of goods, sales of stock and unlimited access to stores. The correlation and regression analysis were engaged in the study. Standard variation measured on the observed values from their mean.

The study revealed that supervisors accounting records review on the ICP when the need aroused. ICP play a number of roles in supporting book keeping on profitability by ensuring all payments were, correctly entered and confirm to the relevant officers have signed all documents before processing to prevent misuse of stocks. Timely bank reconciliation, customer records reconciliation and report accurately on revenue collections are undertaken. There was existence of loopholes through which revenue lost.

### **Approval of transactions**

The studies revealed that approval of transactions uphold a direct line of channels to follow with the internal auditors. There were formalized policies and approvals procedures for all operations

of the entity and policies. The management was committed to the internal audit operation of the system and provides feedback to the officers about the operation of the system.

Supermarkets management defined appropriate approval for the entire organization and the criteria for ascertainment of fraud related to approval risks to the supermarkets were for the most critical. Management has identified individuals who were responsible for coordinating the various activities in the authority of approval in the entity.

### **Procurement procedures**

The study revealed that procurement process purchasing in changing the process, to the set procurement audit require various approval of an authorized individual in procurement in the supermarkets. Bank reconciliation was done monthly to reconcile separate procured records and properly to resolve any difference in the stores. Procedures exist to prevent alteration by unauthorized persons of billings or before posting stores. There were self-governing progression checks as well as evaluations of controls activities on ongoing basis.

## **10. Recommendations**

### **Book keeping**

The study recommends firms to develop honesty and moral values among supermarkets employees and management. Effective board of section heads, account and finance officer and human resource, and internal audit division should be established supermarkets. Qualified accounts clerk and effective internal audit should be hired in supermarkets. Internal audit should be encouraged to cooperate well.

### **Approval of Transactions**

Supermarkets management should determine the level of authority to approve to avoid a risk of theft in stock levels. Management should design internal controls to ensure efficiency and effectiveness, reliability of financial reporting is done.

### **Recommendation for Procurement procedures**

This can be achieved by periodic procurement check review and evaluation of the adequacy and effectiveness of the store purchasing controls designed by the internal auditors.

## **11. Suggestion for Further Studies**

The study focused on the effect of internal control procedures on profitability thus another study should be carried out on the effect of external control on profitability in supermarkets.

The study examined the effects of approval of transactions as one of the objective on supermarkets alone thus another study should be carried out on the effect of internal controls on revenue generation in other public organizations.

Another study should be done on the effect of internal controls on private companies since the study was a representative of manufacturing sector. The study suggested for a study to be done on procurement procedures on profitability in supermarkets as one of the objective.

## References

- Allen B. (2010) *Auditing and Assurance services; An Integrated Approach*, 13<sup>th</sup> Edition, Upper Saddle River, N.J, Pearson.
- Ashbaugh-Skaife, H., D. Collins and W. Kinney. (2008). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits. *Journal of Accounting and Economics*
- Alleyne and Ahmed, 2011 et al. (2010) *The Swansea Internal Quality Audit Processes Quality Assurance in Education*.
- Arthur S. (2013) *the management control system on elected microfinance institutions in Uganda*
- Bakibinga David J. (2001) *the effects of internal return on company efficiency in Pakistan*, Fountain Publishers. Kampala, Pakistan.
- Cieslewicz, J. K (2012), "The Fraud Model in International Contexts: A Call to Include the Societal level Influences in the Model", *Journal of Forensic and Investigative New York University Stem School of Business*, New York.
- Caswell A. (2001) *the effects of internal auditing practices on the internal control systems*. Managerial of auditing Journal of October 2005, Malasia (COSO 1985). Committed of sponsored organization
- Emasu (2010) *The Role of Auditing in Public Sector Governance*: New York
- Pandey (1996) *financial Management 7th Edition*. Vikas Publishing House Pvt Ltd. New Delhi, India

- Orodho B. A (2003). *Essential of Education and Social Sciences Research Methods*. Nairobi; Masola Publishers
- KPMG, (2003). *Internal Audit's role in modern corporate Governance/ [www.kpmg.com](http://www.kpmg.com)*
- Jensen, K. L. (2003), "A Basic Study of Agency-Cost Source and Municipal Use of Internal Versus External Control", *Accounting and Business Research*, united Kingdom
- Howard (2005). *Auditing Today* (3rd ed.). Prentice Hall International (UK) Ltd United Kingdom.
- KPMG,2003), Jensen and Payne 2003). *Business research methods*
- Loo (2007) survey of liquidity management approaches and their effect on profitability of supermarkets in Kenya.
- Mathai, A. (2012). "Relationship between auditing of working capital management and profitability of retail ". Unpublished MBA project. University of Nairobi.
- Michael A. Hitt, Robert E. Hoskisson, Richard A. Johnson, Douglas D. Moesel. (1996). *The Market for Corporate Control and Firm Innovation*
- Monks (2001) the role of internal audit. *Journal of Ethiopia*
- Mohammad Abdolmohammadi Sarens (2010), *Monitoring Effects of the Interna control*. Pakistan.
- Millichamp (2008). *Auditing practices 8<sup>th</sup> Edition*, London: ELBS chapman and Hall publishers
- Moesel. Michael A. (1996). *The Market for Corporate Control and Firm Innovation*
- Morris J. ( 2011). *The Impact of Enterprise Resource Planning (ERP) Systems on the Effectiveness of Internal Controls over financial Reporting*.
- Mugenda A.G (2008) *Social science research; theory and principles* Nairobi;Kijabe printers
- Mugenda O.M & Mugenda A. G (2003). *Research Methods; quantitative and qualitative approaches* Nairobi; ACT Press.
- Mbugua Mburu J. (2011) *the relationship between inventory turnover and financial performance* University of Nairobi, Kenya.
- Manasseh, (2007) studied the effect of profitability of a firm. Kenyatta University.

- Nancy Tanker 2008. *Strategies to Prevent Shoplifting and Employee Theft* University of Florida  
Department of Criminology, Law and Society.
- Njui, R. W. (2012), “*The Effectiveness of Internal Audit in Promoting Good Governance in the Public Sector in Kenya*”, Unpublished MBA thesis, University of Nairobi
- Ndungu and Mbugua H. (2013) *The effects of internal controls in Revenue collection in Kenya*, UoN, Kenya
- Onen Willis Yuko Oso and David (2008) *A General Guide to Research Proposal and Report in Makerere*
- Ngechu (2004), *Decentralization of police pensions is beneficial to all Vanguard.*
- Rick Hayes et al. (2005) *Principles of Auditing* Pearson Education Limited.
- Riech A. (2012) *Revenue audit Diversification in Kenya’s Public Universities and implications for Efficiency and Equity. Analysis of Education Finance in the African Context*
- Pandey, I. M (1996), *Financial Management* 55th Edition, Vikas Publishing House Pvt Ltd: New Delhi, India.
- Raja Tun Arsha Raja Tun Uda. (2002). Auditor independence, *The Edge*, November 2002
- Rittenberg, L. E and Schwieger, B. J. (2005), *Revenue Generation: Concepts for a Changing Environment* Mason: South-Western, Thomson Corporation.
- [Sarbanes- Oxley Act](#) of 2002). Institute of internal auditors.
- Sarens, G (2006). *The relationship between internal audit and management; Qualitative analysis of expectations and perceptions*, international journal of auditing, vol. 10.
- Sekaran (2001) *sampling theory*, Prentice Hall
- Subramaniam, N. (2006). *International Journal of Auditing* Vol. 10
- Sawyer and Spira .L .M. (2003), *Risk Management: The Reinvention of Internal Control and the Changing Role of Internal Audit Accounting*, *Auditing and Accountability Journal*, prentice Hall

Yuko Oso and David Onen (2008) *A General Guide to Research Proposal and Report* in  
Makerere

Walsh (2000) procedures and Thompson, 1997) the Institute of Internal Auditors *The Role of  
Auditing in Public Sector Governance*: New York.