DOI: http://doi.org/10.4038/ija.v1i2.30

The Level of Effective Internal Control System of Licensed Commercial Banks in Anuradhapura District of Sri Lanka: A Comparative Study

[1]Vidanage K.R. and [2]Kumari J.S.

[1,2]Department of Accountancy and Finance, Rajarata University of Sri Lanka,

[1]k.v.rebeka28@gmail.com, [2]skjayasena@mgt.rjt.ac.lk

Abstract

Globalization has resulted in complex business procedures and activities as a result of global organizations. In the case of banking sector procedures, complicated banking transactions and an increase in banking activity fraud have prompted a focus on the Banking Sector's Internal Control System. Every organization relies on an effective Internal Control System. Accordingly, the purpose of this research is to examine and compare the level of effective internal control systems of state-owned and private domestic commercial banks in the Anuradhapura district. The level of effectiveness of the Internal Control System was assessed using the five components of the Committee of Sponsoring Organizations (COSO) framework (Control Environment, Risk Assessment, Information and Communication System, Control Activities, and Monitoring Activities). Structured questionnaires were used to collect data from fifty respondents from state-owned and thirty respondents from private domestic commercial banks, respectively. Managers (76.25 percent response rate) and secondary officers were the most common respondents (response rate was 23.75 percent). Descriptive analysis with one-sample t-test and independent sample t-test were used to analyze the data. The results of the study indicated that the level of the effective control environment, information and communication systems, and control activities are different between State-Owned and Private Domestic Commercial Banks in Anuradhapura district, whereas the level of effective risk assessment and monitoring activities are not different between State-Owned and Private Domestic Commercial Banks in Anuradhapura district. The findings of this study will help practitioners as a guideline to get the maximum benefit of their Internal Control System.

Keywords: *COSO Framework, Internal Control System, Level of Effective Internal Control System, Private Domestic Commercial Banks, State-Owned Commercial Banks*

Introduction

Organizations have become more complex as a result of globalization, resulting in more complex business procedures and activities. When considering banking sector procedures, a complication of banking transactions and an increase in banking activity fraud have caused the banking sector to pay attention to the Internal Control System (ICS). Although numerous sectors influence the economy, the banking sector is especially important in developing countries such as Sri Lanka. Internal Control Systems are typically set up by businesses to identify and manage risks. Establishing an effective ICS has become a critical issue in Corporate Governance because of the large number of high-profile fraud cases in recent years (Minelli *et al.*, 2009; Palermo, 2011). When following up the upgraded regulations, all firms should have maintained individual Internal Control Systems that can assure to manage those risks efficiently. The purpose of the Committee of Sponsoring Organizations (COSO) framework (Commission, 2013) is that sufficiently effective Internal Control comes up with an assurance that a firm can manage its operational activities efficiently. It is composed of the following elements: the Control Environment, the Risk Assessment, the Information and Communication System, the Control Activities, and the Monitoring Activities.

The ICS is a structure of a company consisting of the rules, policies, and procedures established to provide reasonable assurance that specific entity objectives will be achieved. Simply, Internal Control involves all activities that control risks to an organization. It is a process by which organizations' resources are directed, monitored, and measured. It helps organizations to prevent and detect frauds and protect the organizations' resources, both tangible and intangible. It is the backbone of the organization which is able to gain more advantages by having effective Internal Control in licensed commercial banks.

Hence, banks can achieve reliability in financial reporting, on-time feedback on the achievement of organization goals, and compliance with laws and regulations. Ultimately, banks can achieve objectives such as financial reports that are reliable, operations that are effective and efficient, and activities that comply with applicable laws and regulations. An effective ICS in a licensed commercial bank should have included the following characteristics: protecting business assets from theft and waste, ensuring compliance with business policies and the law of the land, evaluating the functions of each employee and officer to increase operational efficiency, and ensuring true and reliable operating data and financial statements.

When considering the level of effective ICS and its capability to achieve expected outcomes of the organization, it is affected by several factors. One of the most influential factors that affect achieving the expected outcome is the ICS and its ability. According to Lansiluoto, Annukka, and Eklund (2016) as defined in the COSO framework, Internal Control is a comprehensive system that consists of cultures, systems, processes, and resources that help organizations to achieve objectives in three main areas. The first objective is to achieve the effectiveness and efficiency of business operations, which means that the organization is facilitated in achieving operational objectives by ensuring smooth functioning and safeguarding assets. The second objective is to establish the reliability of financial reporting. It means that inputs to financial reporting as well as the preparation of financial information to disclose are closely controlled so that the reliability of output is enhanced.

Despite much research on the Level of Effective ICS, only a few research studies have taken into consideration Licensed Commercial Banks (Ayagre *et al.*, 2014; Karagiorgos *et al.*, 2008). Since most of the research has been done concerning other sectors rather than the banking sector (Onumah *et al.*, 2012; Yayla, 2006; Noorve, 2006), the existing literature is not enough to identify the level of effective ICS in the banking sector. Hence, currently, there is no definite conclusion on the level of effective ICS in licensed commercial banks.

When considering the most recent incidents in the Sri Lankan context, the authors could find out some predominant examples. Out of those incidents, it is noteworthy to state the following incidents: the failure of Pramuka Bank, ETI Finance Company, and a large fraud at Seylan Bank. The core problem with these incidents is the lack of an effective ICS. Based on the above-mentioned factors, the author was motivated to evaluate the level of effective ICS. Accordingly, the author narrowed down the scope to compare the Level of Effective ICS of both State-Owned and Private Domestic Licensed Commercial Banks in the Anuradhapura district as the specific aim of this study.

Problem Justification and Problem Statement

The level of the effective ICS and its capability are significant factors in achieving the expected outcome of the organization. The establishment of a proper ICS is a critical decision for any organization. It is important to have a proper ICS since it affects how well the organization achieves the expected outcome. Internal controls will provide any organization with reasonable comfort that its organizational activities are smooth-running given that the existing system of controls is effective. Therefore, studies have been carried out to establish the effectiveness of control systems using different types of assessment criteria.

Most organizations are not aware of the real benefit of having an ICS. Hence, there is no way to check whether they have achieved their expected outcomes within the time frame that they set. In this situation, it may lead to misuse of the organizations' resources. It should be noted that it is very essential to know the effectiveness of their business activities; otherwise, management would not be able to develop proper strategies to overcome those matters. As an organization, they should be aware of the positive effects of their ICS. Both in a national and international context, the researchers have highly considered State-Owned Commercial Banks. So, it is very essential to compare the level of effective ICS in both the state-owned and private domestic banking sectors. No sufficient studies are comparing the ICS in State-Owned and Private Domestic Commercial Banks in the Anuradhapura District. The above-stated factors motivated the author to conduct a unique research study comparing the Level of Effective ICS. By identifying this research gap, the author compared "What is the level of Effective ICS in Licensed Commercial Banks in Anuradhapura district?"

Based on the problem of the study, the objectives of the study are as follows;

1. To examine the Level of Effective Internal Control Components of State-Owned commercial banks in Anuradhapura district.
2. To examine the Level of Effective Internal Control Components of Private Domestic commercial banks in Anuradhapura district.
3. To determine whether the Level of Effective Internal Control System differs between in State-Owned and Private Domestic commercial banks in Anuradhapura district.

Literature Review

This section summarizes the findings related to the research area in terms of existing literature.

Historical Evolution of Internal Control System

According to Spira and Page (2003), the segregation of legal ownership from control structure a new risk arises to investors that management will misuse assets of the business and will work to the betterment of their personal goals rather than creating value to the real owners of the business. Accordingly, a requirement to change the governing style prompted, and as a result, Corporate Governance frameworks were introduced along with accountability mechanisms inclusive of Internal Controls. Due to massive scandals that occurred in the 1980s, a combined code was introduced which critically highlighted Internal Controls. The final component of this code was the guidance to directors on Internal Control Reporting as issued by the Turnbull committee 1999.

The Treadway report focused on the prevention of fraudulent financial reporting and triggered a universal debate on Corporate Governance malpractices. United Kingdom (UK) regulatory requirements for Internal Controls are considered when assessing risk management requirements for UK financial reporting Council UK, 2014. UK Corporate Governance Code section: accountability, clearly states that the Board of Directors has a prime responsibility towards entity's risk management and Internal Controls.

The Banking Industry in Sri Lanka

When Sri Lanka or then known as Ceylon was under the reign of the Sinhalese Kings and even the Portuguese, banks and banking were still alien to the Sri Lankan culture. It was only during the British colony (1802-1948) that banking was introduced to Sri Lanka with the main branches of foreign banks being set up. The Central Bank of Sri Lanka was established in 1950 under the MLA No.58 of 1949 which was a major milestone in Sri Lanka's economic history. Today, the Central Bank is the governing body of Commercial Banks. Banks that come under the service sector in Sri Lanka play a crucial role in its economy contributing to about 60% of the Gross Domestic Product and employing about 40% of the total workforce.

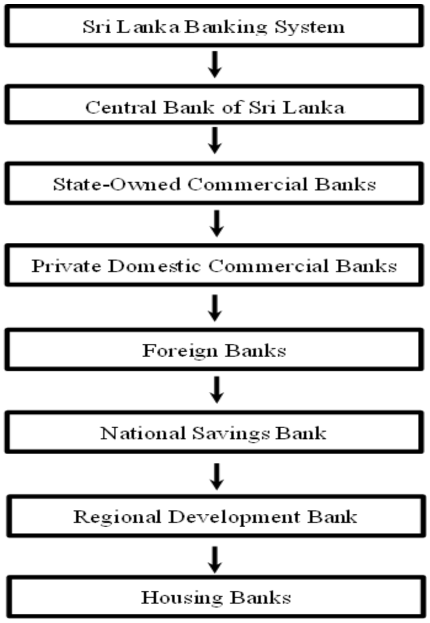

Figure 1: Structure of Sri Lankan Banking Sector (Source: Central Bank of Sri Lanka)

The banking industry in Sri Lanka, which comprises Licensed Commercial Banks (LCBs), dominates the financial system and accounts for the highest share of the total assets in the financial system. Banks play a critical role within the Sri Lankan financial system, as they are engaged in the provision of liquidity to the entire economy while transforming the risk characteristics of assets.

In terms of the asset base and the magnitude of service provided, the LCBs are the single most important category of financial institutions within the banking sector. LCBs dominate the financial system with the highest market share of the entire financial system's assets. Therefore, the health of the Sri Lankan financial system depends to a large extent on the soundness of the LCBs, primarily on the performance and financial strength of the six largest LCBs, generally referred to as the Systematically Important Banks (SIBs). The systemic importance of the LSB sector is relatively low in comparison to the LCBs, both in terms of size and their impact on the financial system, as it does not play a major intermediary role in the payment cycle. In Sri Lanka, Licensed Commercial Banks consist of State-Owned Commercial Banks and Private Domestic Commercial Banks. There are two and 11 banks, respectively (CBSL, 2019).

COSO Internal Control Framework

Internal Control is an integrated framework that provides guidance and leadership in designing frameworks for internal controls, enterprise risk management, and reducing fraud in organizations (Commission, 2013). Since the 1992 initial framework, the world of business has changed rapidly. In accordance with that, the revised framework was issued in 2013 May which introduced 05 components and 17 principles. Furthermore, as mentioned in the COSO framework (Commission, 2013), "the framework applies to all entities: large, mid-size, small, for-profit and not-for-profit, and government bodies". According to the framework Commission (2013), 'an effective system provides reasonable assurance regarding the achievement of an entity's objective'. Since those principles are directly associated with five components, complying with principles will enable the entity to have an effective ICS. Each variable in this study is derived from the COSO framework and is explained in detail in the methodology section.

Numerous research studies accentuate the need for and significance of the internal control system in the banking system. A lack of an internal control system frequently causes an inability to recognize fraudulent activities and a decline in the performance of the bank (Adeyemi and Adenugba, 2011).

Importance of Internal Control Systems in the Banking Sector

Due to globalization, organizations have resulted in complicated business procedures and activities. Once considering the banking sector's procedures, the complexity of banking transactions and, therefore, the increase in fraud in banking activities have led us to pay attention to the ICS in the banking sector. Although several sectors affect the economy, the banking sector plays a vital role in many economies, particularly in developing countries such as Sri Lanka. Firms generally set up ICS to identify and manage risks. Establishing an Effective ICS has become a central issue in corporate governance because of the large number of high-profile fraud cases in recent years (Minelli *et al.*, 2009; Palermo, 2011).

When following up the upgraded regulations, all firms should have their own ICSs that can provide assurance that risks are managed efficiently. The purpose of the Committee of Sponsoring Organizations (COSO) framework (Commission, 2013) is that sufficiently Effective Internal Control comes up with an assurance that a firm manages its operational activities efficiently. There are several types of research that emphasize the necessity and importance of the ICS within the banking industry. An insufficient ICS typically causes an inability to find fraudulent activities and a decrease in the performance of the bank. The Basel Committee (Basel, 1998), together with banking supervisors throughout the globe, has focused progressively on the importance of sound internal controls. Internal control could be used by the entire board of directors, senior management, and all levels of staff.

Empirical Evidence Based on Banking Sector in International Context

The Effectiveness of the Internal Control System in the Greek Bank Sector has been studied by (Karagiorgos *et al.*, 2008). The purpose of this study was to underline the importance of a well-organized ICS for ensuring the safe and soundness of a credit institution's activity and the stability of the banking system overall. This study has considered Variables in the COSO framework as Internal Control components and independent variables. The dependent variable of this study was the effectiveness of internal auditing. The findings of this study indicated that all components of the ICS are vital in the effectiveness of internal audits and consequently in business survival and success.

Amudo and Inanga (2009) have done a study on Evaluation of Internal Control Systems: A Case Study from Uganda in 2009, this study depended on the Regional Member Countries (RMCs) of the African Development Bank Group (AFDB) in Uganda. It is based on an analysis of the Internal Control Systems in Public Sector Projects in Uganda. The outcomes indicate that some control components of compelling Internal Control Systems are deficient in these ventures. These explanations point out that the present control structures were incapable. The study recognized Internal Control Components as Independent Variables, Internal Control as the Dependent Variable, authority, and working relationship as moderating variables. The independent variables decide the effectiveness of an ICS.

In Sultana and Haque (2011) Evaluation of Internal Control Structure: Evidence from Six Listed Banks in Bangladesh, they examined the effectiveness of the built-up internal control systems in listed banks in Bangladesh. The outcome demonstrates that practically all the banks in the example accomplished most components of Internal Control. In any circumstance, some banks have lacked a portion of the control components. This demonstrates that the current internal control structures of the banks included in the sample are largely effective.

Hayali *et al.* (2013) have studied the Importance of Internal Control Systems in Banking Sector: Evidence from Turkey in 2013. In their study, the importance of the ICS was expressed and its impacts on the banking systems were analyzed. The study evaluated and compared to select fifteen Turkish Banks and three main International Banks. The findings of this study were that the Internal Control activities of the banks are adapted to the international standards in Turkey and effective control procedures exist in the banking system.

Ayagre *et al.* (2014) have conducted a study on the Effectiveness of Internal Control Systems of banks: The case of Ghanaian banks in 2014. This study evaluated the control environment and monitoring activities components of the Internal Control System of Ghanaian Banks using COSO’s principles and attributes of assessing the effectiveness of Internal Control Systems. To measure respondents’ knowledge and perception of Internal Controls and the banks’ ICS effectiveness, the study used a five-point Likert scale. The study found out that strong controls exist in the control environment and monitoring activities components of the ICS of banks in Ghana.

Empirical Evidence Based on Other Sectors in International Context

The ICS affirms that the system ought to be constantly monitored and supervised since individuals will, in general, consider their interests more instead of the interests of the company. On the off chance that there is a disappointment in the monetary bookkeeping arrangement of a partnership, a reduction in resources and an expansion in misuses will unavoidably occur without a compelling ICS (Yayla, 2006).

Noorvee (2006) has conducted research to make proposals for Estonian organizations for improving the effectiveness of their Internal Control over financial reporting. A questionnaire and meetings were used to gather the data for Control Environment, Risk Assessment, Information, and Communication System, Control Activities monitoring considered as Internal Control components. The research found that however, the organizations follow Internal Control Systems; various Internal Control models are absent. Along these lines, the administration ought to consider improving those in the not-so-distant future.

Ofori (2011) has studied the effectiveness of the Internal Control Systems in Ghana Post Company. It is a case study type look into. The staff of the Ghana Post Company was used as the population. The study additionally considered control environment, risk assessment, information and communication system, control activities, and monitoring considered as Internal Control components. The study has found that each of the five components in the Internal Control System is not extremely solid but instead agreeable. Further, they discovered that there was no internal audit unit to monitor the exercises independently.

The effectiveness of Internal Control of listed firms in Ghana has been studied by (Onumah, *et al.,* 2012). Because of the ongoing budgetary detailing outrages, the guidelines push us to worry about the ICS to improve the quality of financial reporting. Thirty-three listed companies were considered as the samples of this study. They additionally think about the five parts of the ICS. The study found that the control environment demonstrated a greater level of effectiveness instead of different components.

Empirical Evidence Based on Banking Sector in National Context

Gamage *et al.* (2014) have studied the effectiveness of the internal control system in state commercial banks in Sri Lanka. Independent variables of this study were the Control Environment, the Entity's Risk Assessment Process, the Information and Communication System, Control Activities, and Monitoring. The population of this study was two State-Commercial Banks which have established 303 and 343 branches respectively throughout the country. The findings of this study provided the company to redefine approaches that would facilitate the success of State-Commercial Banks' objectives.

In the case of previous literature, the author can identify countries that have conducted research on this topic as developed and developing countries. According to the findings of these studies, they found that the ICS of organizations in developed countries was maintained at an effective level, whereas the internal control systems of organizations in developing countries were not maintained at an effective level.

Research Methodology

This section focuses on illustrating the methodological approach of the study. The methodology is one of the vital parts of the research study since it indicates the outcome of the study. The methodology is designed to achieve the objectives of the study explained in the first section.

A positivistic research approach was deemed appropriate for achieving the aforementioned objectives and is also supported in the extant literature. The population of this study consisted of all the Managers and Secondary Officers in State-Owned and Private Domestic Commercial Banks in the Anuradhapura district. There are 82 and 39 branches respectively. This research study was based on the

Managers and Secondary Officers in Licensed Commercial Bank branches, spread over Anuradhapura district. The sample of this study consisted of 100 observations by using a convenience sampling method while ensuring the representativeness of the population. The level of internal controls was first examined through mean ranking and the one-sample *t*-test to test whether the mean values were significantly different from the neutral value '3' in the 5-point Likert scale. The independent sample t-test was then used to test the differences of opinion between the groups.

Conceptualization

The identification of the independent variables plays a vital role in achieving the purpose of this study. The variables in this study are the Control Environment, the Entity's Risk Assessment Process, the Information and Communication System, Control Activities, and Monitoring Activities.

Control Environment

This is the environment developed by the board of directors and top management in which control activities are executed. Tone at the top set by senior management determines the ethical values in the organization. Performance appraisal systems, the delegation of authority, processes to attract and retain competent individuals, and rewards to make individuals accountable for performances are some components of it (Commission, 2013). Literature review shows that several researchers have used this as a variable (Ayagre, *et al*., 2014; Karagiorgos, *et al*., 2008; Lansiluoto, *et al*., 2016).

Risk Assessment

According to the framework, the risk is the possibility that an event will create an adverse impact on the achievement of organizational objectives. Under risk assessment, management is encouraged to establish objectives in terms of reporting, compliance, and operations (Commission, 2013). When reviewing the literature, several researchers have used this as a variable (Lansiluoto, *et al*., 2016; Gamage, *et al*., 2014; Ofori, 2011).

Information and Communication System

As per the framework Commission (2013), 'communication is the continual, interactive process of providing, sharing and obtaining the necessary information. Management will obtain internal as well as external information which facilitates both inbound and outbound communication channels that are essential to carry out Internal Control responsibilities. (Ofori, 2011; Karagiorgos, *et al*., 2008; Gamage, *et al*., 2014).

Control Activities

Those are the activities designed and implemented by the management to address the identified risks through risk assessment. Such activities can be preventive or detective in nature and can vary from manual controls to automated controls across a diversified range of actions such as reconciliations, approvals, reviews, etc.

(Commission, 2013) while surveying writing, quantities of looks into having used this as a variable (Koranteng, 2011; Gamage, *et al*., 2014; Noorvee, 2006).

Monitoring Activities

There are two types of monitoring activities, namely ongoing evaluations and separate evaluations as identified in the COSO framework 2013. On-going evaluations provide timely information and are incorporated into business processes. Separate evaluations are conducted periodically. Both results will be evaluated against established criteria designed based on regulatory requirements, management decisions, recognized standard-setting boards, etc. (Commission, 2013) while studying composing, amounts of studies have used this as a variable (Ayagre, *et al*., 2014; Koranteng, 2011; Karagiorgos, *et al*., 2008).

Hypotheses of the Study

In order to compare the Level of Effective ICS of Licensed Commercial Banks in Anuradhapura District. The authors have derived six hypotheses to achieve the purpose of this study. These are:

H_1 – The Level of Effective Control Environment is different between State and Private Domestic Commercial Banks in Anuradhapura District.

H_2 – The Level of Effective Entity's Risk Assessment Process is different between State and Private Domestic Commercial Banks in Anuradhapura District.

H_3 - The Level of Effective Information and Communication is different between State and Private Domestic Commercial Banks in Anuradhapura District.

H_4 - The Level of Effective Control Activities is different between State and Private Domestic Commercial Banks in Anuradhapura District.

H_5 – The Level of Effective Monitoring Controls is different between State and Private Domestic Commercial Banks in Anuradhapura District.

H_6 - The Level of Effective Internal Control System differs between State-Owned and Private Domestic commercial banks in Anuradhapura district.

Operationalization of Variables

In the case of the operationalization of variables, it is vital to identify how to measure the concept used in this research study. In other words, it is the process of recognizing the basis to measure the variables of this study. Hence, for the analysis of variables following dimensions, indicators and measurements have been taken in this study. It is explained in Table I.

Table I: Operationalization of Variables

Variable	Dimensions	Indicators	Question Numbers
The Level of Effective Internal Control System	The Control Environment (Institute of Internal Auditors), (Commission, 2013), and (Ngugi, 2011)	Integrity & ethical values. Independent IC. Clear organization chart. A commitment to competence. Assignment of authority & responsibilities.	04-20
	The Entity's Risk Assessment Process (Institute of Internal Auditors, Retrieved June 2, 2020), (Commission, 2013), and (Ngugi, 2011)	Change in operating environment. Mechanism to identify potential risks. Independent audit involvement to control risk. Management involvement in risk management.	21-33
	The Information & Communication System (Institute of Internal Auditors), (Commission, 2013), and (Ngugi, 2011)	Regular communication of key information Clear mode of communication. Consideration of external party matters.	34-42
	Control activities (Institute of Internal Auditors), (Commission, 2013), and (Ngugi, 2011)	Mitigation of risk. Supervision. Performance review.	43-48
	Monitoring (Institute of Internal Auditors), (Commission, 2013), and (Ngugi, 2011)	Ongoing and separation evaluation. IC deficiency communication	49-53

Source: Developed by Researchers, 2020

Questionnaire Development

The questionnaire has been designed in a friendly manner for respondents and uses simply worded questions. The questionnaire includes nine pages with six sections. The questionnaire was developed to compare the Level of Effective ICS of State-Owned and Private Domestic Commercial Banks in Anuradhapura District. In this research study, the author used the questionnaire to gather data from State-Owned and Private Domestic Commercial Banks in Anuradhapura District. The author developed the questions according to the objectives of this study. In this study, qualitative factors were measured by using a 1-5 point Likert Scale. The questionnaire consisted of 6 sections including 51 questions. Section 1 of the questionnaire included general information about the respondent. In this section, the author gathered the data on the sector, position, and experience of the particular respondent. The remaining five sections covered the five independent variables, such as control environment, risk assessment, information and communication, control activities, and monitoring activities**.**

Method of Data Analysis

The study uses descriptive statistical analysis to achieve the aforementioned first two objectives. Further, the authors use descriptive analysis to compare the Level of Effective ICSs. The study has established a range of means to analyze the Level of Effective ICS which is described in Table II.

Table II: Decision Rule of Effectiveness (Internal Control Score)

Range of Mean	Level
0.00-1.99	**Ineffective**
2.00-3.99	**Effective**
4.00-5.00	**High Effective**

Source: Developed by Researchers, 2020

Mean values between 0.00 and 1.99 are regarded as ineffective, values between 2.00 and 3.99 are considered effective, and values between 4.00 and 5.00 are considered highly effective. The current research used an independent sample *t*-test to determine if there is a statistically significant difference in the degree of effective internal control systems between state-owned and private domestic commercial banks in the Anuradhapura area.

Data Presentation and Analysis

Data Screening and Cleaning

The data set was cleaned and checked in this research, and there are no missing values. An outlier is a data point that deviates significantly from other comparable data points. Outliers contribute to measurement variation or suggest experimental mistakes. As a result, it is critical to exclude outliers from the data collection. The authors of this research identified and removed outliers from the data set. The skewness values were used to evaluate the normality test in this research. If the skewness values are between –1 and 1, the current research assumes that the data are regularly distributed. According to the findings, no skewness value in any bank sector surpassed -1 or +1, indicating that the data in this research were normally distributed.

Table III: Test of Normality

Variable	State-Owned Bank Skewness	Private Domestic Banks Skewness
CE	.575	-.058
RA	.753	-.552
ICS	.028	-.231
CA	.069	-.476
MA	.276	-.988

Source: Developed by Researchers, 2020

Reliability and Validity

The questionnaires were reviewed by three experts in the field of auditing. Based on the reviewers' comments the unclear and obscure questions were revised and the complex items reworded. Afterward, a pilot study was carried out as a means of pre-testing the research instrument and identifying any issues that may be faced in the actual study. The reliability and internal consistency of variables were analyzed by the author using Cronbach's alpha. If the Cronbach's alpha of any variable is closer to 1, it implies a high internal consistency. If Cronbach's alpha is greater than 0.7, it can be accepted and if it is less than 0.6, it should be rejected. According to the result, the Control Environment has reported 0.888, and questions used to measure that variable have high internal consistency. Cronbach's alphas of all other variables have reported range from 0.708 to 0.841. Hence, all the variables can be accepted in terms of Cronbach's alpha.

Table IV: Reliability Test

Variables	No. of items	Cronbach's Alpha
CE	16	.888
RA	11	.841
ICS	9	.830
CA	6	.708
MA	5	.832

Source: Developed by Researchers, 2020

Sample of the study

The questionnaire was used to collect the data necessary for this study's aims. In the Anuradhapura District, questionnaires were sent to managers and secondary officers of state-owned and private domestic commercial banks. Respondents were provided questionnaires through Google Forms. The survey received an overwhelming response rate of 80%. Mean values ranging from 0.00 to 1.99 are considered the level of ICS as ineffective, and 2.00 to 3.99 are considered the level of ICS as effective, whereas 4.00-5.00 are considered the level of ICS as highly effective. The present study performed an independent sample t-test to understand whether there is a significant difference in the level of effective Internal Control systems between State-Owned and Private Domestic Commercial banks in the Anuradhapura district.

Managers and secondary officers of both state-owned and private domestic commercial banks in the Anuradhapura district completed the surveys. The majority of sample respondents worked for State-Owned Commercial Banks as Managers and Secondary Officers. It was 62.5 percent and 47.5 percent, respectively. 47.5 percent of respondents from State-Owned Commercial Banks were managers, while 15 percent were secondary officers. In Private Domestic Commercial Banks, 28.75 percent of respondents were managers, while 8.75 percent were secondary officers. The results indicated that the majority of the samples consisted of managers from both sectors.

Analysis of the Demographic Factors

The purpose of this study is to compare the level of effective Internal Control Systems in State-Owned and Private Domestic Commercial banks. Hence, 62.5% of the respondents were from State-Owned Banks and 37.5% of the respondents were from Private Domestic Commercial Banks.

In the case of working experience of respondents in State-Owned Commercial Banks, 8.75% of the respondents were less than 5 years in their current capacity and 6.25% of respondents had 6-10 years of working experience. 13.75% of respondents had 11-15 years of working experience while 33.75% of respondents had over 15 years of working experience in their current capacity.

Descriptive Statistics

The researchers used descriptive statistics to identify the basic nature of the variables included in this study. The authors analyzed variable behavior using descriptive statistics such as mean, standard deviation, skewness, and kurtosis. According to the findings, the mean value of these five variables ranged from 3.6660 to 4.4219. The mean value for Information and Communication Systems is 4.4219, whereas the mean value for Risk Assessment is 3.6660. The mean values for the Control Environment, Control Activities, and Monitoring Activities are 3.9992, 4.2975, and 3.7595, respectively.

Control Environment

Appendix A demonstrates the comparison of the Internal Control components in both State-Owned and Private Domestic Commercial banks in the Anuradhapura district. Control Environment (CE) was measured by using 16 questions. The components of Control Environment (5-20) can be referred to by the statement of the questionnaire attached to the Appendix B. Accordingly, the Internal Control Systems of State-Owned Commercial Banks are much stronger than the Private Domestic Commercial Banks regarding this particular component.

The present study performed a One-Sample *t*-test and calculated Sig. (*p*-value) was less than 0.05. The mean value of both State-Owned and Private Domestic Commercial Banks in the Anuradhapura district was significant but was not tabulated.

When considering the elements of this component, such as 05, 06, 12, 14, and 15, State-Owned Commercial Banks are outperforming. Overall, every element of this particular component, state-owned commercial banks, is superior to private domestic commercial banks. According to the results, the author can conclude that State-Owned Banks have a high level of Effective Control Environment compared with Private Domestic Banks. Hence, the results support the first hypothesis of the study.

H_1 – The Level of Effective Control Environment is different between State-Owned and Private Domestic Commercial Banks in Anuradhapura District.

Risk Assessment

Risk Assessment (RA) was measured by using 11 questions. The components of Risk Assessment (21-31) can be referred to by the questionnaire attached to Appendix B. Accordingly, the mean values of both state-owned and private domestic banks are 3.68 and 3.63, respectively. The State-Owned Banks have strong components of risk assessment such as predefined performance goals and objectives, the entity periodically reviews accounting records against internal records and physical assets, whereas Private Domestic Commercial Banks have a strong component of risk assessment because the management has clearly defined objectives at each level, the entity considers internal and external factors in their risk assessment, and the entity has a process to identify changes in attitudes of key management and individuals about internal controls.

The present study performed a One-Sample t-test and calculated Sig. (*p*-value) was greater than 0.05. The mean value of both State-Owned and Private Domestic Commercial Banks in Anuradhapura district was not significant and it was not tabulated.

However, the author could not identify notable differences in the designs of the components of Risk Assessment of both State-Owned and Private Domestic Commercial banks. According to the results, the author can conclude that both State-Owned and Private Domestic banks have no difference in the level of the Effective Risk Assessment Process. Hence, the results do not support the second hypothesis of the study.

H_2 – The Level of Effective Entity's Risk Assessment Process is different between State and Private Domestic Commercial Banks in Anuradhapura District.

Information and Communication System

Information and Communication System (I&CS) was measured by using 09 questions. The components of ICS (32-40) can be referred to by the Statement of the questionnaire attached to the Appendix B. In accordance with the results, Internal Control of the State-Owned Commercial Banks is stronger than the Private Domestic Commercial Banks regarding this component. When considering the first two-element of this component, Private Domestic Banks are superior to State-Owned Banks, and all other elements of this component show that State-Owned banks are superior.

The present study performed a One-Sample t-test and calculated Sig. (*p*-value) was less than 0.05. The mean value of both State-Owned and Private Domestic

Commercial Banks in the Anuradhapura district was significant, and it was not tabulated.

According to the results, the author can conclude that State-Owned Banks have a high level of Effective Information and Communication Systems compared with Private Domestic banks. Hence, the results support the third hypothesis of the study.

H_3 - The Level of Effective Information and Communication System is different between State-Owned and Private Domestic Commercial Banks in Anuradhapura District.

Control Activities

Control Activities (CA) were measured by using 06 questions. The components of Control Activities (41-46) can be referred to by the statement of questionnaire attached to Appendix B.

The present study performed a One-Sample *T*-test and calculated Sig. (p-value) was less than 0.05. The mean value of both State-Owned and Private Domestic Commercial Banks in the Anuradhapura district was significant, and it was not tabulated.

Accordingly, the Internal Controls of State-Owned Commercial Banks are stronger than the Private Domestic Commercial Banks regarding this particular component. Every element of this component except Management has a mechanism to identify internal and external sources in collecting information required to operations of controls, State-Owned Commercial Banks are superior to Private Domestic Commercial Banks. According to the result, the author can conclude that the State-Owned Commercial Banks have a high level of Effective Control Activities compared with Private Domestic Commercial Banks. Hence, the results support the fourth hypothesis of the study.

H_4 - The Level of Effective Control Activities is different between State-Owned and Private Domestic Commercial Banks in Anuradhapura District.

Monitoring Activities

Monitoring Activities (MA) was measured by using 05 questions. The components of Monitoring Activities (47-51) can be referred to by the statement of the questionnaire.

The present study performed a One-Sample *t*-test and calculated Sig. (*p*-value) was greater than 0.05. The mean value of both State-Owned and Private Domestic Commercial Banks in Anuradhapura district was not significant, and it was not tabulated.

The Internal Control of State-Owned Commercial Banks and Private Domestic Commercial Banks have the same level of monitoring in their organizations. It is represented by the respective mean value of the particular banking sector (3.78 and 3.73). When considering the separate elements of this component, every element except 4, State-Owned Commercial Banks are stronger than Private Domestic

Commercial Banks. According to the results, the author can conclude that State-Owned Banks and Private Domestic Banks have the same level of effective monitoring in their organizations.

Hence, the results do not support the fifth hypothesis of the study.

H_5 – The Level of Effective Monitoring Activities is different between State-Owned and Private Domestic Commercial Banks in Anuradhapura District.

According to the result of the One-Sample *t*-test, mean values of Control Environment, Information, and Communication System, and Control Activities were significant whereas mean values of Risk Assessment and Monitoring Activities were not significant.

Table V: Comparison of Components of Effective Internal Control System in the State-Owned and Private Domestic Commercial banks.

Components of Effective Internal Control System	State-Owned			Private Domestic		
	Mean Score	SD	C.V.	Mean Score	SD	C.V.
CE	4.31	.269	.073	3.50	.179	.032
RA	3.68	.317	.101	3.63	.463	.215
I&CS	4.48	.344	.119	4.30	.522	.273
CA	4.36	.339	.115	4.18	.571	.327
MA	3.78	.606	.367	3.73	.843	.712

Source: Developed by researchers, 2020

Table V demonstrates the comparison of components of Effective ICS in the State-Owned and Private Domestic Commercial banks in Anuradhapura district. In the case of the standard deviation of Control Environment in these two banking sectors, the author could not observe a significant variance in both State-Owned and Private Domestic Commercial banks (0.269 and 0.179) and the author could not observe the significant variance of Risk Assessment in both State-Owned and Private Domestic Commercial Banks (0.317 and 0.463). Furthermore, there is no considerable difference between these two banking sectors as explained by the respective standard deviation (0.344 and 0.522).

With respect to the Standard Deviation of Control Activities in these two banking sectors, the author could observe the significant variance in both State-Owned and Private Domestic Commercial Banks in Anuradhapura district (0.339 and 0.571).

In the case of standard deviation, the author could observe a small variance between the two banking sectors represented by respective standard deviation and coefficient of variance (0.606 & 0.843, .367 & 0.712) of Monitoring Activities in both State-Owned and Private Domestic Commercial Banks in Anuradhapura district.

Table VI: Level of effective internal control systems of Licensed Commercial Banks in Anuradhapura district

Sector	Mean	Std. Deviation	t-value	Sig
State-Owned	4.126	.25979	3.567	.001
Private Domestic	3.874	.37312		

Source: Developed by researchers, 2020

The results of the independent sample t-test are shown in Table VI. It revealed that both State-Owned and Private Domestic Commercial Banks have reported high mean values M=4.126, and M=3.874 respectively whereas the mean difference is 0.25276. and revealed that there is a statistically significant difference between State-Owned and Private Domestic Commercial bank sectors on the Level of Effective ICS ($p<0.05$). Hence, the results support the sixth hypothesis of the study.

H_6 - The Level of Effective ICS differs between State-Owned and Private Domestic commercial banks in Anuradhapura district.

Discussion on the Findings

The main purpose of this study was to compare the level of effective Internal Control Systems in State-Owned and Private Domestic Commercial Banks in the Anuradhapura district. Six hypotheses were established, and four hypotheses were supported while the other two hypotheses were not supported. The authors performed an independent sample t-test to identify whether there is any significant difference in the level of effective internal control systems in both State-Owned and Private Domestic Commercial banks.

The first objective of this study is to examine the level of internal control components of state-owned commercial banks in Anuradhapura district. The result of the descriptive analysis indicates that the level of Effective Internal Control of State-Owned Commercial Banks was highly effective in terms of Control Environment, Information and Communication System, and Control Activities while the level of Effective Internal Control of State-Owned Commercial Banks was effective in terms of Risk Assessment and Monitoring Activities. Ayagre *et al*. (2014) found that strong control exists in the Control Environment and Monitoring Activities components of the effective ICSs of banks in Ghana. Karagiorgos *et al*. (2008) have conducted research on the effectiveness of the Internal Control System in the Greek Bank sector. The study found that all components of internal control are vital to the effectiveness of the internal control system and, consequently, to business survival and success. A study on the importance of internal control systems in the banking sector: Evidence from Turkey (Hayali *et al*., 2013) found that the internal control activities of the banks are adapted to international standards in Turkey and effective control procedures exist in the banking system.

The second objective of this study proposed to examine the level of Internal Control components of Private Domestic Commercial banks in Anuradhapura district. The findings of the study revealed that the effective internal control of private domestic commercial banks was highly effective in terms of information and communication, and control activities, whereas the level of effective internal control of private domestic commercial banks was effective in terms of the control environment, risk assessment, and monitoring activities. Sultana and Haque (2011) have conducted research on Evaluation of Internal Control Structure Evidence from Six Listed Banks in Bangladesh. The study found that more or less the current Internal Control Structure is effective for all the sample banks used in this study. Kumuthinidevi (2016) has conducted research on the Effectiveness of the Internal Control System in the Private Banks of Trincomalee. The findings of this study indicated that all the independent variables are supportive moderately to the effectiveness of the Internal Control System individually. Moreover, they found that overall, in the consideration of all the independent variables, the variables were supportive moderately.

The third objective of this study was to determine whether the level of effective ICS differs between state-owned and private domestic commercial banks in the Anuradhapura district. The author performed an independent sample T-test and the results indicated that there is a significant difference in the level of effective internal control systems in both state-owned and private domestic commercial banks in the Anuradhapura district.

Based on the mean values under the descriptive statistics, the present study identified the difference in the level of effective internal control components of State-Owned and Private Domestic Commercial banks in Anuradhapura district. According to the results of this study, the level of effective internal control components in terms of control environment, information and communication systems, and control activities was different between state-owned and private domestic commercial banks in Anuradhapura district, whereas the level of effective internal control in terms of risk assessment and monitoring activities was not different between state-owned and private domestic commercial banks in Anuradhapura district.

In this section, the author discussed the analysis part of this study by using descriptive statistics, one-sample t-test, and independent sample t-test. The author compared the level of effective ICS in both state-owned and private domestic commercial banks in the Anuradhapura District. The researcher analyzed the data collected from the selected sample of this study and presented basic information regarding the sample. A descriptive analysis and an independent sample t-test were performed to test the hypothesis of this study.

Conclusions and Recommendations

When developing and implementing controls an entity has to incur a lot of costs. Furthermore, designing and implementing controls within an organization is not always a success. For instance, if the control is poorly planned or proper control is inappropriately implemented, that would cause devastating results. Sometimes rigidly designed control may reduce the flexibility and adoption of the Company to changing environmental requirements. Moreover, certain internal control may lead to employee frustration and hence their motivation and loyalty towards the organization may get faded. Thus, it is not appropriate to conclude that always designing and implementing internal controls is good enough.

The purpose of this study was to fill a research gap in the ICS of the banking industry by conducting a comparative study. Additionally, this research assessed the effectiveness of ICSs in Anuradhapura district's state-owned and private domestic commercial banks. To accomplish the study's aims, the researcher developed six hypotheses. This was an explanatory sort of research, and a quantitative research technique was applied. The research population included all managers and secondary officers employed by state-owned and private domestic commercial banks in the Anuradhapura district. The research relied on 80 observations from Managers and Secondary Officers from this demographic. Data were collected from 50 and 30 respondents from State-Owned and Private Domestic Commercial banks, respectively, using standardized questionnaires. The majority of responders were managers (76.25 percent responded) and secondary officers (the response rate was 23.75 percent). The data were analyzed using SPSS version 23. The research used both descriptive and independent sample T-tests to assess the study's premise.

Implications

Empirical Implications

Several research have been conducted on internal control systems in the banking sector considering the international context (Ayagre, *et al*., 2014; Karagiorgos, *et al*., 2008; Hayali, *et al*., 2013). In the case of national context, research has been conducted considering the topic of Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka in 2014. The authors could not find any research conducted comparing the level of the effective internal control system in State-Owned and Private Domestic Commercial banks in Anuradhapura district. By filling this research gap the author conducted a comparative study on the level of effective internal control systems in both State-Owned and Private Domestic Commercial banks in Anuradhapura district. Therefore, the findings of this study contribute to the existing literature.

Practical Implications

The findings of this study will help practitioners as a guideline to get the maximum benefit of their Internal Control System. Managers in both State-Owned and Private Domestic Commercial banks can study and learn from each other how to design a high level of effective internal control. Managers in State-Owned banks can develop strategies to make the level of Risk Assessment and Monitoring Activities high effective whereas managers in Private Domestic banks can develop strategies to make the level of Control Environment, Risk Assessment, and Monitoring Activities high effective. When the managers have an Effective ICS they have the capability of securing assets, prevention, and detection of frauds. Based on the findings of this study, the managers are capable to redefine their control systems that would help to achieve their goals and objectives. Auditors in both State-Owned and Private domestic Commercial banks should consider above stated internal controls while they are planning the audit. Moreover, investors can decide which banking sector has the highest level of effective ICSs so that they will be able to make the best and most profitable investment decision to maximize their return. Apart from that, the findings will be benefited for the students and scholars as valuable reading material.

Methodological Implication

The present study used descriptive analysis to compare the Level of Effective ICSs. After analyzing existing literature such as the effectiveness of ICSs of banks: The case of Ghanaian banks and a survey of ICSs among the Listed Private Companies, and the Public Sector Companies in Kenya and so on, the study has developed an Internal Control Score based on a range of mean to analyze the Level of Effective ICSs. Mean values ranging from 0.00 – 1.99 are considered Level of ICSs as ineffective and 2.00-3.99 are considered Level of ICSs as effective whereas 4.00-5.00 are considered Level of ICSs as highly effective.

Limitations and Future Research Directions

Limitations

When considering the banking sector, a large number of bank branches are operating in Sri Lanka. However, only one district was selected for this study mainly due to time limitations and restrictions imposed by the management of many bank branches for required information since internal controls related information is highly sensitive. Thus, the scope of this study was limited to bank branches being operated in Anuradhapura district. The sample of this study was relatively low. The possibility of errors when using human judgment in assessing the effectiveness of internal control systems and the impact of such control systems are other limitations of this study.

Future Research Directions

The study focused only on bank branches being operated in Anuradhapura district. Thus, the findings of this study may not be generalized for the whole Sri Lankan banking sector. Therefore the author suggested future researchers increase the coverage areas in the country or conduct a survey representing whole country which will increase reliability ultimately. Since the study was based on a relatively low size sample the author suggested it to be based on considerable observations.

References

Adeyemi, B., and Adenugba, A. (2011), "Corporate governance in the nigerian financial sector: the efficacy of internal control and external audit",Global Conference on Business and Finance Proceeding, Vol. 6 No. 2, pp. 699-707.

Amudo, A., and Inanga, E. (2009), "Evaluation of internal control systems: a case study from Uganda", International Research Journal of Finance and Economics, Vol.1, pp. 124-144.

Ayagre, P., Gyamerah, I., and Nartey, J.(2014), "The effectiveness of internal control systems of banks: the case of ghanian banks, International Journal of Accounting and Financial Reporting, Vol.4 No.2, pp.377-389.

Central Bank of Sri Lanka (2019). Annual Report. [Online] Available at: <https://www.cbsl.gov.lk/ > [Accessed on 12 June.2020].

Commission, C. o. S. O. o. t. T.(2013), Internal control - integrated framework (executive summery), s.l.: American Institute of Certified Public Accountants, pp.3-10.

Fadzil, F., Haron, H., and Jantan, M.(2005). "Internal auditing practices and internal control system in malaysian limited company", Managerial Auditing Journal (MAJ), Vol.20 No.8, pp.844-866.

Gamage, C., Lock, K. L., and Fernando, A.(2014), "Effectiveness of internal control system in state commercial banks in sri lanka", International Journal of Scientific Research and Innovative Technology, Vol. 1 No 5, pp.25-42.

Hayali, A., Dinc, Y., Sarili, S., Dizman, A., and Gundogmu, A.(2013), "Importance of internal control system in banking sector: evidence from turkey", Research Gate, Vol.4, pp.212-221.

Karagiorgos, T., Drogalas, D., and Dimou, A. (2008), "Effectiveness of internal control system in the greek bank sector", South European Review of Business & Accounting, Vol.6(2), pp.1-8.

Koranteng, D. N. (2011), "Internal control and its contributions to organizational efficiency and effectiveness: a case study of ecobank ghana limited", http://ir.knust.edu.gh/bitstream/123456789/4210 , pp.1-11.

Kumuthinidevi, S. (June 2016), "A study on effectiveness of the internal control system in the private banks of trincomalee", International Journal of Scientific and Research Publications, Vol.6 No. 6, pp.600-612

Lansiluoto, A., Jokipii, A., and Eklund, T. (2016), "Internal control effectiveness - a clustering approach", Managerial Auditing Journal, Vol.3 No.1, pp.5-34.

Minelli, E., Rebora, G., and Turri, M. (2009), "Why do controls fail? results of an italian survey", Critical perspectives on accounting, Vol.20(8), pp.933-943.

Mokhtar , N. B. (2015), "the extent of environmental management accounting (ema) implementation and environmental reporting (er) practices: evidence from malaysian public listed companies", Kuala Lumpur: University of Malaya, p.532.

Ngugi, K. P. (2011), "A survey of internal control system among the listed private companies and the public sector companies in Kenya", pp.55-60.

Noorvee, L. (2006), "Evaluation of the effectiveness of internal control over financial reporting", University of Tartu, pp.4-114.

Ofori, W. (2011), “Effectiveness of internal controls: a perception or reality? the evidence of ghana post company limited in ashanthi region”, pp.12-16.

Olatunji, O. (2009), “Impact of internal control system in banking sector in Nigeria”, Pakistan Journal of Social Sciences, Vol. 6, pp. 181-189.

Onumah, J. M., Kuipo, R., and Obeng, V. A. (2012), “Effectiveness of internal control systems of listed firms in ghana”, Accounting in Africa (Research in Accounting in Emerging Economies, Vol.12, Part A, pp.31-49.

Palermo, T. (2011), “Managing organizational culture for effective internal control. from practice to theory”, European Accounting Review, Vol.20 No.4, pp. 763-774.

Sekaran, U. (2003), Research method for business: skill building approach (fourth edition), John Wiley & Sons, inc.

Siddiqui, J., and Podder, J. (2002), “Effectiveness of bank audit in bangladesh”, Managerial Audit Journal, Vol.17, No.8, pp.502-510.

Spira, L. F., and Page, M. (2003), “Risk management: the reinvention of internal control and the changing role of internal audit”, Accounting, Auditing & Accountability Journal, Vol.16 No.4, pp.640-661.

Sultana, R., and Haque, M. (2011), “Evaluation of internal control structure: evidence from six listed banks in Bangladesh”, ASA University Review, Vol. 5 No.1, pp.70-79.

Yayla, H. (2006), “Impact of power and authority relations on the accounting information decisions: a suggestion of structural model on turkish private sector hospitals”, PhD Thesis, Ankara University, p.112.

Appendix A

Comparison of Internal Control Components in the State-Owned and Private Domestic Commercial banks

CE	State-Owned Mean Score	Private Domestic Mean Score	RA	State-Owned Mean Score	Private Domestic Mean Score	I&CS	State-Owned Mean Score	Private Domestic Mean Score	CA	State-Owned Mean Score	Private Domestic Mean Score	MA	State-Owned Mean Score	Private Domestic Mean Score
05	4.46	3.07	21	4.19	4.47	32	4.23	4.53	41	4.32	4.40	47	3.75	3.57
06	4.44	3.43	22	3.98	4.03	33	4.33	4.57	42	4.36	3.97	48	3.60	3.50
07	4.38	3.50	23	3.96	4.23	34	4.54	4.37	43	4.13	4.13	49	3.69	3.67
08	4.25	3.80	24	4.00	4.43	35	4.60	4.10	44	4.26	4.23	50	4.04	4.20
09	3.98	3.43	25	4.10	4.17	36	4.46	4.10	45	4.53	4.27	51	3.83	3.77
10	4.06	3.53	26	4.25	4.03	37	4.58	4.27	46	4.50	4.13			
11	4.25	3.40	27	4.13	3.73	38	4.58	3.90						
12	4.42	3.33	28	4.46	4.10	39	4.54	4.50						
13	4.40	3.40	29	4.19	4.07	40	4.54	4.43						
14	4.44	3.63	30	4.58	3.73									
15	4.46	3.37	31	4.08	4.43									
16	4.33	3.37												
17	4.10	3.57												
18	4.52	3.33												
19	3.98	3.73												
20	4.35	4.07												
Total	**4.31***	**3.50***		**3.68**	**3.63**		**4.48***	**4.30***		**4.36***	**4.18***		**3.78**	**3.73**

Source: Developed by Researchers, 2020.

*****Indicates the statistically significant difference between a sample mean and a known value of the mean in the population.
(Hints: Mean of 0.00-1.99 = ineffective; 2.00-3.99 = effective; 4.00-5.00 = High effective)

Appendix B

Statements of Questionnaire

Question No.	Key Area
5	The organization has a written code of conduct which delivers to all levels of employees at recruitment
6	Entity has a whistleblowing policy and it is well communicated
7	All new managers hired are given a proper ethical training
8	Management demonstrates a proper tone-at-the-top
9	BoD frequently oversight entity's performances
10	BoD maintain direct communications with management and external auditors
11	Competency and independence of board members are adequately revised
12	Organizational structure is suitable for the operations and complexity of the entity.
13	Organization have clear policies for authorities and guidelines for approving transactions
14	Major activities are adequately segregated
15	Entity has proper training programs to maintain competency of employees
16	All positions have clearly written job descriptions
17	Current management demonstrate a competency level that is required to meet their duties
18	Entity has predefined performance goals/objectives which are periodically reviewed and approved
19	Management's tone-at-the top encourage individuals to be accountable for their responsibilities of internal controls
20	Organization has policies to ensure that outsourced parties are responsible for their internal control responsibilities
21	Management has clearly defined objectives at each level
22	Management has a process to identify risks associated with each objective in a timely manner
23.	Entity has entity-wide financial reporting controls and formal or informal process to assess the risk of frauds in financial reporting.
24.	Entity considers internal and external factors in their risk assessment
25.	Entity has designed internal controls to cover all identified risks
26.	Entity has predefined performance goals/objectives which are periodically reviewed and approved
27.	Assessment of fraud risk considers actions like use of disposed assets, altering financial records, unauthorized acquisitions etc.
28.	Entity periodically reviews accounting records against internal records and physical assets
29.	Entity has a process to identify and react to risks arise from changes in external environment
30.	Entity has a mechanism to identify significant risks and have designed controls to mitigate them.
31.	Entity has a process to identify changes in attitudes of key management and individuals about internal controls.
32.	Management periodically reviews access to IT systems for appropriateness
33.	Control activities covers all business locations, processes and IT systems relevant

34.	Controls implemented consist of segregation of duties, approval limits, reconciliations and supervising
35.	Entity restrict access to IT systems by individuals based on their job responsibilities
36.	Entity clearly identifies Personally Identifiable Information (PII) and has controls to protect their confidentiality.
37.	Entity has controls to reduce the risks associated with third-party hosted IT applications.
38.	Management periodically reviews appropriateness of policies and procedures
39.	Policies are designed to guide the related activities in such a way that they comply with applicable laws
40.	Policies guide to segregation of duties between record-keeping, custody and authorization of business processes.
41.	Management has a mechanism to identify internal and external sources in collecting information required to operations of controls
42.	Direct and frequent communications with BoD and management exist
43.	Entity has a mechanism to quickly give critical information to relevant employees
44.	Management properly communicates responsibilities of all employees
45.	Entity has a process to communicate information from external parties to relevant internal parties in a timely manner.
46.	Entity has a process that allows external parties to communicate any matter relevant quickly to the management.
47.	Management periodically evaluate their business processes along with controls related
48.	Entity has mechanism to observe adherence to policies and procedures established.
49.	Performance goals are linked to remuneration and internal control responsibilities
50.	Management takes timely actions for deficiencies reported internally or by external auditors.
51.	Management has identified parties who are responsible for corrective actions are they are competent for such tasks

Source: Developed by Researchers, 2020