

Influencing Factors towards Internal Audit Effectiveness under the Ministry of Commerce, Phnom Penh, Cambodia

[Samedy Hong, Chittipa Ngamkroectjoti]

Abstract - This paper aims to understand a wide range of diverse perspectives of the Cambodian government officers' towards an internal audit department's extended service effectiveness. It also explores how much successful of an internal audit department's effectiveness since its 2007 establishment under the Ministry of Commerce (MOC), Kingdom of Cambodia. Also, how significant of determinant factors towards an internal audit department's performance. This paper focuses on both primary and secondary resources. The secondary sources are used to design the main themes of the discourses deployed by the internal audit department while the primary the contemporary publications are supported. For data collection, this research uses a self-administrative technique through the samples of 277 questionnaires were contributed to government officers including audit and non-audit officers who are working in the Ministry of Commerce, Phnom Penh, Cambodia. Pearson Correlation Coefficient, furthermore with multiple regression analysis had been applied through SAS enterprise. The medium positive relationships are shown through Pearson Correlation Coefficient between quality assurance factors and internal audit effectiveness. However, only three determinant factors, such as effective internal control system, quality of audit work, and organizational independence had significantly indicated internal audit effectiveness without violation of Multicollinearity based on ordinary least square (OLS) assumption. Finally, the conclusion is presented and future study is also provided.

Keywords - Internal Audit Effectiveness, Pearson Correlation Coefficient, Multiple linear Regression, and Kingdom of Cambodia.

I. Introduction

National Audit Authority of the Kingdom of Cambodia was created in 2001 in accordance with Royal Krom No. CS/RKM/0300/10 issued on 03 March 2000, promulgated by the law on the audit of the Kingdom of Cambodia. National Audit Authority (NAA) started its operation since 2002 (Financial Audit Guidelines, National Audit Authority, 2009).

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For the total of twelve years or during 2002-2014, an internal audit department authorized by the National Audit Authority (NAA) in the Kingdom of Cambodia had been widely established in government ministries. The successful establishment had followed the instructions mutually agreed by the ten ASEAN countries, in other words they are called as the ASEAN Supreme Audit Institution (ASEANSAI). However, since internal audit department especially underneath the Ministry of Commerce had successfully been established in 2007, the head officers still put a lot of effort to attract qualified internal auditors, given the low rates of remuneration offered. The lack of qualified accountants and auditors in the Kingdom of Cambodia further exacerbates the internal audit effectiveness problem (Internal Audit Department of Ministry of Commerce, 2011). *Internal Audit effectiveness* in this study is vital in the organization in light of the fact that a viability of internal audit can prompt the upgrade of four vital methodology in the organization: adapting by teaching staff how to improve their work, inspiration by evaluating additionally prompts improvement of performance, prevention by realizing that an audit debilitates anything that can prompt ill-use, and procedure enhancements by an internal audit might likewise guarantee that the privilege things are carried out in the privilege way (Eden and Moriah, 1996). Even though the great improvement of internal audit effectiveness has far distance to be successfully achieved, therefore this research examines which determinant factor(s) need to be improved in terms of its internal audit effectiveness the most and the least.

II. Literature Review

A. Internal Audit effectiveness

Arena and Azzone (2009) defined internal audit effectiveness as an understanding between evaluating work and the objectives secured by administration, the aptitudes of the internal auditors and organization help for the internal auditing staff. Also, (IIA, 2010) characterized effectiveness of internal auditing as the degree including quality to which secured destinations are accomplished.

However, Dittenhofer (2001) also noted that the insufficiency of internal auditing came about because of insufficient administration control, which is in some cases opposed to the organization's destinations. Again, Beckmerhagen *et al.* (2004) also argued that the effectiveness of internal auditing ought not

to be measured depended on accomplishment of the audit goals or on the quantity of finding of the internal auditor alone, additionally more imperative is to focus the quality and suitability of the auditing plan, execution and follow-up.

B. Effective Internal Control System

Amudo and Inanga (2009) noted that executing and keeping up such effective internal control system will guarantee consistence with laws and regulations even in the social insurance segment. Also, Jokipii (2010) point out that effectiveness of internal control system has a key part to play in firm achievement. Similarly, Baltaci and Yilmaz (2006) observed that creating an internal control system and audit training at the local government level has gotten practically no consideration. What's more without such foundation, location and control of unfortunate behavior in the local government would not be conceivable. In the same circumstance, (Feng *et al.*, 2009) clarified that local governments ought to guarantee that their internal control system is settled so as to aid internal audit towards target accomplishment of the organization. Thus, all government ministries and agencies should expand the effectiveness of internal control systems, internal audit functions and organizational obligation because they develop good governance (Eko & Hariyanto, 2011).

C. Audit Experience

It is vital to characterize auditing experience in order to distinguish the course of the exploration work. Chung and Monroe (2000) considered audit experience as the auditors' skills, abilities and capacities that are picked up from job implementation in auditing profession. Similarly, Musig and Ussahawanitchakit (2011) clarified audit experience as the abilities, which are acquired from audit assignments regarding related auditing standard and accounting management and financial default, influencing review errand and review execution. Lastly, Intakhan and Ussahawanitchakit (2010) concluded that audit experience indicates to various types of information and aptitudes which the evaluator gets on account of the length of residency of the employment rehearse in the evaluating callings which will improve his adequacy.

D. Cooperation between Internal and External Auditors

Cooperation between two auditors meeting up for a typical reason for finishing certain normal targets (Fowzia, 2010; Mihret and Admassu, 2011; Munro and Stewart, 2011) is alluded to as collaboration in the middle of external and internal auditors. Fowzia (2010) also claimed that the collaboration ought to be given due attention regarding the adequacy of internal auditing issues. Munro and Stewart (2011) also added that cooperation between two auditors can improve the high quality of audit work in the organization. This behavioral perspective is a great degree because of the

fact that the working group relationship that must exist. In the event that it doesn't exist, it is likely that this behavioral perspective can altogether impact numerous examining choices made by the external auditors (Golen, 2008). Finally, the advantage of a cooperative relationship between two auditors incorporate deduction of fee, enhanced customer relationship, enhanced perceptivity by the external auditor of the organization processes, and information relevancy in assessing internal audit (Cockburn, 1984)

E. Quality of Audit Work

Owing to Glazer and Jaenike (1980) defined that the internal auditing standards, the performance of internal auditing work is contributed considerably to the internal auditing effectiveness. Similarly, Watts and Zimmerman (1986) also stated quality of audit work is the consolidated likelihood that the evaluator will distinguish and write about deformities in records. However, Janet (1993) stated that the assessment of the adequacy of the quality of auditing work, irrespective to the level of capability and objectivity of the internal auditors, the external auditors are obliged to assess the quality and viability of the work done by internal auditors.

F. Organizational Independence

The internal auditing role in organizations is difficult. Brown (1983) recognized organizational independence as urgent to the feasibility of the internal auditing capacities. Auditors ought to be sufficiently free from the individuals who are obliged to audit, ought to lead their work without intervention. Also, Bou-Raad (2000) claimed that the quality of an internal audit department is assessed by the level of freedom it appreciates from administration and from working obligations. However, Van Peurseem (2004) recognized solid potential for disarray in the relationship between internal auditors and management. Internal auditors are relied upon to help supervisors in doing their occupations, and in the meantime to freely assess organization's adequacy. Rittenberg (1977); Chambers *et al.* (1988); Montondon (1995) differentiated between organizational independence depended on organizational care and individual freedom depended on individual dynamics. They expressed that organizational independence is essential for the adequacy of internal auditors as it prevents the auditor from intimidation and expands the objectivity of the auditing work.

III. Research Framework

This research framework is based on two theoretical frameworks (Barada and Saidin, 2014; and Cohen and Sayag, 2010). This development covers the most appropriate variables that had already existed in the Ministry of Commerce, the Kingdom of Cambodia. For example, effective internal control system, audit experience, and cooperation between internal and external auditors issued by Barada and Saidin (2014)

while quality of audit work and organizational independence issued by Cohen and Sayag (2010).

Quality Assurance Factors

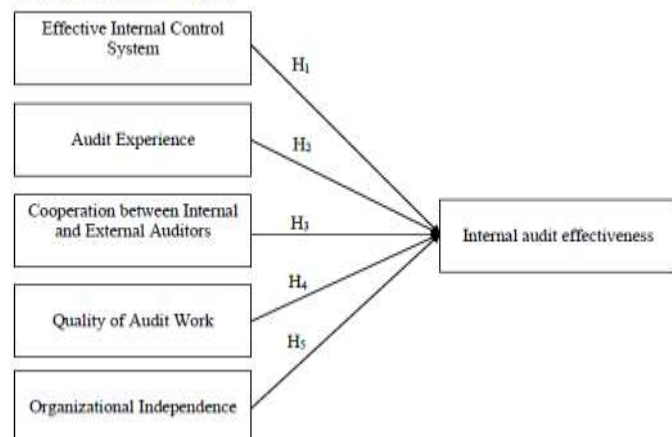


Figure 1. The relationship between quality assurance factors and internal audit effectiveness in the Internal Audit Department of the Ministry of Commerce.

IV. Research Methodology

For data collection, the researcher used a self-administrative technique through samples of 277 questionnaires were contributed to government officers including 14 audit and 263 non-audit officers who are working in the Ministry of Commerce, Phnom Penh, Cambodia. The reason is that the number of audit officers who are working in the Internal Audit Department is smaller if compared with the number of non-audit officers. That is why; the researcher wants to develop new research by including both audit and non-audit officers perspectives. The target population is government officers who are working in the Ministry of Commerce, Phnom Penh, Cambodia, including audit and non-audit officers. Anderson (1996) stated that the number of respondents is accepted and the confident level is 95% that is applied in this study and 5% error rate accepted. Sample size was adapted following Anderson's (1996) table. The total population in this study is 751, including audit and non-audit officers. Therefore, based on Anderson (1996) the sample size is 277 respondents at 95% confidence level. The probability sampling technique included the stratified sampling, in which samples were drawn from all 19 sub departments in the Ministry of Commerce, Phnom Penh, Cambodia.

V. Result and Discussion

Descriptive Statistical Analysis: This study shows that the majority were aged from 31-40 years old at 84 individuals (or considered as 30.32% of the total respondents), the majority were male 184 (66.43%). Most of them have a bachelor's degree 176 (63.54%), a majority of them are government officers 164 (59.21%). Also, they have working experience of more than 10 years 102 (36.82%), and majority of them are married 181 (65.34%).

Inferential Statistical Analysis: Table 1 through the Pearson Correlation Coefficient, all hypotheses testing show the significant relationships between determinant factors and internal audit effectiveness. The quality of audit work and internal audit effectiveness shows 0.636 or the highest correlation coefficient while the cooperation between internal and external auditors and internal audit effectiveness show 0.407 or the least value of correlation coefficient.

Multiple Regressions Analysis: The following equation shows

$$\text{Internal audit effectiveness} = 0.299 + 0.221X_1 - 0.006X_2 + 0.24X_3 \quad (1)$$

X_1 = effective internal control system; X_2 = quality of audit work; X_3 = organizational independence

Table 2 shows summary of multiple regression results between quality assurance factors and internal audit effectiveness. H_1 : There is a positive relationship between effective internal control system and internal audit effectiveness in the Internal Audit Department of the Ministry of Commerce ($\beta = 0.221$, P-value = 0.0003). This result linked with the study of (Theofanis *et al.*, 2011) that examines the relationship between elements of internal control system (control environment, risk assessment, control activities, information and communication, and monitoring) and internal audit effectiveness. The result shows that there is positive relationship between two variables. It means that the five foundations of internal control system are related to achievement of internal audit effectiveness. Similarly, Badara and Saidin (2014) conducted a study about the relationship between effective internal control systems with internal audit effectiveness in Nigeria aspect. And the result of the research showed that there is a significant relationship between the two variables. Also, with the study of Badara and Saidin (2013) concludes that the experiential validation of the relationship between an effective internal control system and internal audit effectiveness should be analyzed in different countries by using the examination of different techniques. Finally, this research can imply that internal audit effectiveness can be achieved if there is effective internal control in place.

H_2 : There is a negative relationship between quality of audit work and internal audit effectiveness in the Internal Audit Department of the Ministry of Commerce ($\beta = -0.006$, P-value = 0.0001). The result is supported by Cohen and Sayag (2010), who studies the relationship between the quality of audit work and internal audit effectiveness. And the results found out that there is a significant negative relationship between two variables. It means that the greater quality of audit's work will develop the effectiveness of internal auditing. This in line with a study by Glazer and Jaenike (1980), which found that owing to the internal auditing standards, the performance of internal auditing work is contributed considerably to the internal auditing effectiveness. Furthermore, the study of Cohen and Sayag (2010) shows that the greater quality of audit's work will develop the effectiveness of auditing. Finally, this research can prove that the quality of audit work is another important factor for a director or top management in the

Internal Auditing Department to measure the performance of the internal auditors' work in order to improve the level of efficiency.

H₃: There is a positive relationship between organizational independence and internal audit effectiveness in the Internal Audit Department of the Ministry of Commerce ($\beta = 0.214$, P-value = 0.0006). The result is supported by Cohen and Sayag (2010), whose study was about the relationship between organizational independence and internal audit effectiveness. And the results found out that there is significant positive relationship between the two variables. It means that organizational independence will improve internal audit effectiveness. As the result of Bou-Raad (2000) found out, the strength of the internal audit department must be evaluated with respect for the level of independence it receives from the management and from operating responsibly. Finally, this research can give evidence that organizational independence is playing an important key for a director or top management in the Internal Audit Department to consider before it comes to internal audit effectiveness.

Table1: Summary of Hypotheses Testing Results

No	Hypothesis	r-value (r)	Magnitude	P-Value	Result
H ₁₀	There is no significant relationship between effective internal control system and internal audit effectiveness.	0.589	Medium Positive Correlation	0.05	Reject H ₁₀
H ₂₀	There is no significant relationship between audit experience and internal audit effectiveness.	0.510	Medium Positive Correlation	0.05	Reject H ₂₀
H ₃₀	There is no significant relationship between cooperation between internal and external auditors and internal audit effectiveness.	0.407	Medium Positive Correlation	0.05	Reject H ₃₀
H ₄₀	There is no significant relationship between quality of audit work and internal audit effectiveness.	0.636	Medium Positive Correlation	0.05	Reject H ₄₀
H ₅₀	There is no significant relationship between organizational independence and internal audit effectiveness.	0.594	Medium Positive Correlation	0.05	Reject H ₅₀

Source: The author had calculated based on the SAS enterprise software

Table 2: Multiple Regression Results

Parameter Estimates							
Variable	DF	Parameter r Estimate	Std Error	t Value	Pr> t	Tolerance	VIF
Intercept	1	0.299	0.127	2.35	0.0195		0
EICS	1	0.221	0.061	3.64	0.0003	0.440	2.270
QAW	1	-0.006	0.064	5.97	<.0001	0.536	1.865
OI	1	0.214	0.061	3.48	0.0006	0.486	2.059

Dependence Variable: Internal Audit Effectiveness

VI. Conclusion

This paper aims to understand a wide range of diverse perspectives of the Cambodian government officers' towards an internal audit department's extended service effectiveness. It also explores how much successful of an internal audit department's effectiveness since its 2007 establishment under the Ministry of Commerce (MOC), Kingdom of Cambodia. Also, how significant of determinant factors towards an internal audit department's performance. This paper focuses on both primary and secondary resources. The secondary sources are used to design the main themes of the discourses deployed by the internal audit department while the primary the contemporary publications are supported. For data collection, this research uses a self-administrative technique through the samples of 277 questionnaires were contributed to government officers including audit and non-audit officers who are working in the Ministry of Commerce, Phnom Penh, Cambodia. Pearson Correlation Coefficient, furthermore with multiple regression analysis had been applied through SAS enterprise. The medium positive relationships are shown through Pearson Correlation Coefficient between quality assurance factors and internal audit effectiveness. However, only three determinant factors, such as effective internal control system, quality of audit work, and organizational independence had significantly indicated internal audit effectiveness without violation of Multicollinearity based on ordinary least square (OLS) assumption. Further support is provided for studies that seek to expand the auditing research agenda into new determinant factors. The result presented the fact that the Internal Audit Department of the Ministry of Commerce (MOC) should determine more clearly and show how significantly of internal audit control play in the accounting, administration, and operational activities system.

VII. Recommendation

this research recommends that the Ministry of Commerce should provide more technical assistance in training the audit staff in using modern techniques on the job, including a comprehensive training program covering modern audit methodology, techniques, standards, reporting and audit administration. This will require hands-on training as well as classroom training. As the internal auditing and evaluation of internal control systems is a relatively new activity within the Ministry of Commerce, the technical assistance, whilst focusing on building capacity in internal audit will also be needed to assist the Internal Audit Department in raising the awareness within line management on the establishment and maintenance of internal control systems to achieve the objectives of the ministry.

VIII. Future Study

Future research should be conducted more on internal auditing effectiveness in the public sector organization because

it can help the public sector to take a great care of the internal auditing in order to achieve their organizations' goals. As the literature review of this study is limited, and it also focuses on the context of the Internal Audit Department in the Ministry of Commerce only.

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