



# Factors Influencing Audit Flexibility Management Competency: Empirical Evidence from Governmental Auditors in Thailand

## ปัจจัยที่มีอิทธิพลต่อความสามารถในการจัดการความยืดหยุ่นในการสอบบัญชี: หลักฐานเบื้องประจักษ์จากผู้สอบบัญชีภาครัฐในประเทศไทย

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## Abstract

This research aims to investigate factors influencing audit flexibility management competency. The questionnaire was used as an instrument for collecting data from 528 auditors of the office of Auditor General of Thailand (OAG). Multiple regression analysis (MRA) is used to test the hypotheses by the ordinary least squares method (OLS). The results reveal that the factors that have an influence on audit flexibility management competency comprise: top management support,

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audit learning, audit commitment, stakeholder expectation, and environmental change. Consequently, this research provides insights for regulators and organizations to strengthen their audit department in order to enhance the management competency of flexibility auditing.

## Keywords

Audit Flexibility Management Competency, Audit Success

## บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อตรวจสอบปัจจัยที่มีอิทธิพลต่อความสามารถในการจัดการความยึดหยุ่นในการตรวจสอบบัญชี โดยใช้แบบสอบถามเป็นเครื่องมือในการจัดเก็บรวบรวมข้อมูลจากผู้สอบบัญชีของสำนักงานการตรวจสอบเงินแผ่นดินแห่งประเทศไทย (สตง.) จำนวน 528 รายการ วิเคราะห์ข้อมูลใช้การวิเคราะห์สมการรถถอยพหุคุณด้วยวิธีกำลังสององค์ประกอบที่สุด ผลการวิจัยพบว่า 5 ปัจจัยที่มีอิทธิพลต่อความสามารถในการจัดการความยึดหยุ่นในการตรวจสอบบัญชีซึ่งประกอบด้วยการสนับสนุนจากผู้บริหารระดับสูง การเรียนรู้ด้านสอบบัญชี ความมุ่งมั่นในการสอบบัญชี ความคาดหวังจากผู้มีส่วนได้เสีย และการเปลี่ยนแปลงของสภาพแวดล้อม ผลจากการศึกษาครั้งนี้เป็นข้อมูลที่มีประโยชน์สำหรับหน่วยงานกำกับดูแลและผู้สอบบัญชีภาครัฐให้ทราบถึงความสำคัญของปัจจัยต่างๆ เหล่านี้ เพื่อเพิ่มขีดความสามารถในการปฏิบัติงานสอบบัญชีให้บรรลุเป้าหมายภายใต้สภาพแวดล้อมที่มีการเปลี่ยนแปลงอยู่ตลอดเวลา

## คำสำคัญ

ความสามารถการจัดการความยึดหยุ่นในการตรวจสอบบัญชี ความสามารถในการตรวจสอบบัญชี

## Introduction

Recently, anti-corruption in Thailand has gotten wide attention by which the general public has continuous tracking, owing to fraud and corruption that have disastrous effects. Corruption causes money loss or property loss of the state that should be used to develop the country completely. Corruption also affects the good image of the country, having an impact on cooperation and assistance from foreign countries (Phankasem, 2009). In addition, corruption affects the investment climate (Wechsler, 2012), and decreases the confidence of investors in the economic development of the country (Li, Xu & Zou, 2000).

The role of the governmental auditor is to perform the audit to obtain reasonable assurance that the operation of government agencies is in accordance with the law and regulations. This is accomplished by spending money effectively and without corruption. Moreover, in order to respond



to the demands of society as a controller and guardian of public interest. The goal of government agencies auditing is for a vital oversight in order to protect public financial assets and prevent embezzlement (Ross, 2016). The general public expects the results of governmental auditor operations to protect the interests of the country to detect and prevent corruption. A governmental auditor is the first whistleblower to check or estimate corruption risk through audit performance by collecting audit evidence and pointing out the corruption risk (Research and Development office, Office of the Auditor General of Thailand, 2015). Therefore, the result of governmental audit operations is important.

Governmental audit operations are affected by the continuous progress of technology and communication. Coping with the changing impact of various factors that are caused by globalization is what auditors face; so, they must be able to modify audit performance in accordance with the environment. Meanwhile, characteristics of corruption processes have been concomitantly developed with the progress of technology. Flexibility management competency is essential and important for governmental auditors in the era of globalization as well. Especially, the dynamic ability of governmental auditors has been always consistent with the changes of the environment in which the continual development ability of a governmental auditor can improve the auditing function in detecting fraud and corruption that would lead to achieving the audit objective efficiently and effectively. According to previous research, the competency of auditors plays an important role to drive audit quality (DeFond & Zhang, 2014).

However, the literature review found that the study factors influencing flexibility competency of governmental auditors have not been widely studied. Therefore, it leads to the research question, "What factors influence audit flexibility management competency?" for fulfilling the research gap. The findings of this research are a useful guideline for regulators and organizations to strengthen their audit departments by enhancing the management competency of flexibility auditing. In addition, this research provides benefits to increase auditors' awareness to improve and develop audit flexibility management competency in accordance with environmental change in order to achieve auditor professionalism in the future.

## Research Objectives

There are two objectives in this research, and they are as follows: (1) to identify the factors influencing audit flexibility management competency; and (2) to extend the understanding of how top management support, audit learning, audit commitment, stakeholder expectation, and environmental change have an influence on audit flexibility management competency.

## Literature Reviews and Hypotheses Development

This research implements the contingency theory to explain the factors that influence audit flexibility management competency. The concept of the contingency theory is that an appropriate action depends on the situation, both internally and externally; and it depends on the situation in which one selects the best way to perform, which is appropriate for each situation (Fiedler, 1967). Based on the preceding discussion of the literature, the researchers applied the contingency theory that determines situational factors which are five variables comprised of internal factors that are top management support, audit learning, and audit commitment; and external factors that are stakeholder expectation and environmental change. These factors, as situational factors, affect audit flexibility management competency. Therefore, the conceptual models present the factors influencing audit flexibility management competency, as presented in Figure 1.

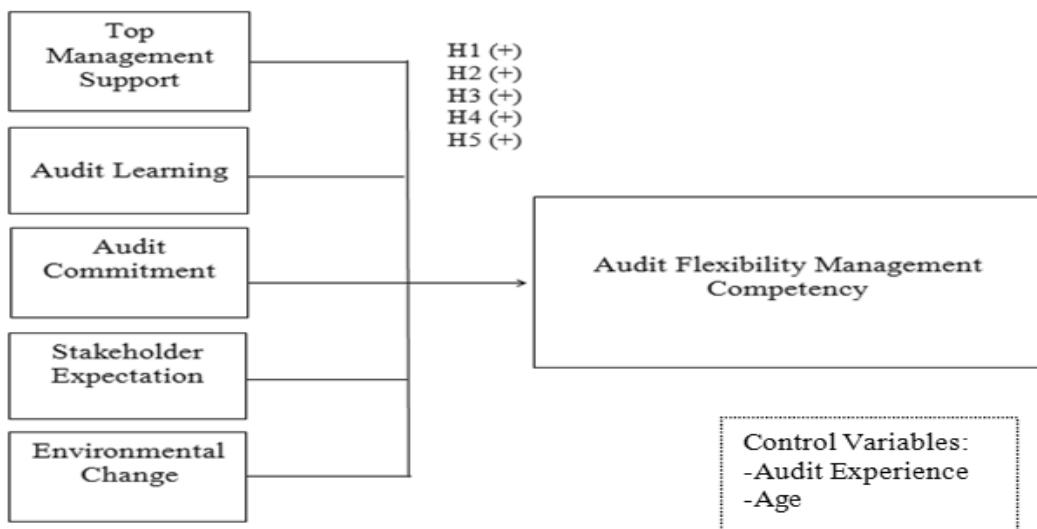


Figure 1: Conceptual Model of Factors Influencing Audit Flexibility Management Competency

### 1. Audit Flexibility Management Competency

This research focuses on investigating the factors influencing audit flexibility management competency. Audit flexibility management competency refers to auditors' abilities to efficiently audit operations through always developing and modifying audit processes in accordance with situations. In addition, this research developed a construct of audit flexibility management competency which is applied from Schneider & Spieth (2014); and Singh, Oberoi & Ahuja (2013) that focuses on innovation, technology, research and development, improvement, integration, and adaptation that are individual dimensions of strategic flexibility. Moreover, its measurement tries to



explain how external and internal factors (comprising top management support, audit learning, audit commitment, stakeholder expectation, and environmental change) have an effect on audit flexibility management competency.

## 2. Factors Influencing Audit Flexibility Management Competency

From the literature review and based on the concept of contingency theory, it is found that audit flexibility management competency is gained from the influence of both endogenous and exogenous individual determinants. This research provides five variables that have a meaningful influence on audit flexibility management competency, as follows:

### 2.1 Top Management Support

Organizational support is important to succeed in that it improves performance, including success in a new system (Chung & Lee, 2005; Lee, Kim, Rhee & Trimi, 2006). In this research, top management support refers to the backing from top executives to facilitate audit operations in order to achieve audit goal efficiency.

In a governmental auditor context, audit practice is based on a hierarchy of command and approval. As a result, top management support is important, leading to convenience, speed, an increase in developing new things, and an ability to apply technology in audit work. Hence, this research expects that a high level of top management support will have more audit flexibility management competency. Thus, the hypothesis is proposed as follows:

*Hypothesis 1: Top management support will have a positive influence on audit flexibility management competency.*

### 2.2 Audit Learning

Audit learning refers to the creation and accumulation of knowledge related to auditing through education, participation in training seminars, and exchange of ideas related to audit. Learning is important for an auditor to respond quickly to changes in their external environment (Coetzer & Perry, 2008 ; Elbanna, Ali & Dayan, 2011). The continuous learning would then stimulate new ideas and creativity (Wong & Chueng, 2008). Similarly, audit learning is a critical process in the professional audit, for it enhances improved attitudes and new ideas for techniques in the auditing task (Westermann, Bedard & Earley, 2015). Audit knowledge can help auditors to achieve audit objectives and audit work efficiency (Skaerbaek, 2009). This research expects that a high level of audit learning will have more audit flexibility management competency. Thus, the hypothesis is proposed as follows:

*Hypothesis 2: Audit learning will have a positive influence on audit flexibility management competency.*

### 2.3 Audit Commitment

This research defines audit commitment as the auditor's confidence in honor of the auditing profession, recognizing the vital role of the profession and adhering to the values and achievements of the audit profession. Professional commitment may be a factor in influencing an individual's behavior which has a compliance and duty to professional practice (Struweg & Meintjes, 2008). From the previous research, it is found that the importance of professional commitment has been linked to significant work performance outcomes (Lee, Carswell & Allen, 2000). Therefore, the auditor who has professional commitment has a tendency to develop all activities of the audit work in order to achieve professionalism. This research expects that a high level of audit commitment will have more audit flexibility management competency. Thus, the hypothesis is proposed as follows:

*Hypothesis 3: Audit commitment will have a positive influence on audit flexibility management competency.*

### 2.4 Stakeholder Expectation

Stakeholders are those who use the information in the financial statements to make economic decisions or who have benefits associated with this information. In this research, the focus by government auditors on which benefits are associated with the government agencies focuses on the public who expect monitoring the spending of the government to be effective, comply with the laws and regulations, and be without corruption. This research has defined stakeholder expectation as the demand of regulatory agencies, society, and the general public in monitoring the spending of government agencies, and offering useful information on the public sector for society (Nehme, 2013). Societies have a high expectation of auditing work in that they expect audit quality to provide reliability and assurance on the information presented in the financial statements, which is used to make economic decisions correctly and appropriately (Palau, 2001). In addition, stakeholders need the auditors to practice their duties in accordance with professional standards and responsibilities for the audit activities (Intakhan & Ussahawanitchakit, 2010). Therefore, this research expects that a high level of stakeholder expectation will have more audit flexibility management competency. Thus, the hypothesis is proposed as follows:

*Hypothesis 4: Stakeholder expectation will have a positive influence on audit flexibility management competency.*

### 2.5 Environmental Change

Audit environment is a complex process of audits performed under environmental factors dominated by economic, political, cultural and social pressures (Arnold, Collier, Leech &



Sutton, 2001). Therefore, this research has defined environmental change as the instability of external factors that affect the audit operation such as auditing standards and regulations regarding the disbursement of funds, government regulations, and technological progress, including the changing of characteristics of an auditee agency that increases the numbers and administrative structures that are more complex.

The previous research found that change in the audit environment affects auditor operations. For example, technology changes have pressured auditors to develop their audit work efficiency because technology is a very important tool for auditors to increase their performance (Wittayapoom & Limsuwan, 2012). Moreover, the changes in auditing standards and legal enforcement are the critical factors that may influence auditor judgment (Carcello, Vanstraelen & Willenborg, 2009). This research expects that a high level of audit environment change will have more audit flexibility management competency. Thus, the hypothesis is proposed as follows:

*Hypothesis 5: Environmental change will have a positive influence on audit flexibility management competency.*

### 3. Control Variables

Some variables may influence the dependent variables in this conceptual model. The inclusion of the control variable may help decrease spurious relationships (Shian & Tam, 2010). Therefore, audit experience and age are included as the control variables. (1) Audit experience is the number of years in governmental audit jobs, which is a dummy variable of  $0 \leq 10$  years old, and  $1 > 10$  years old. (2) Age is the auditors' ages, which dummy variables are  $0 < 36$  years old, and  $1 \geq 36$  years old.

## Research Methods

### 1. Sample Selection and Data Collecting Procedure

All auditors in the office of the Auditor General of Thailand (OAG) are the population and sample in this research which is chosen from the database of Human Resources Management Office, the Office of the Auditor General of Thailand (OAG), 2016. They are based on this data, comprised of 1,239 auditors since May 22, 2016. Data collection was by questionnaire, of which 532 questionnaire mailings were received, but four incomplete surveys were found and discarded. Therefore, there were only 528 surveys of which the effective response rate was approximately 42.61 percent. The questionnaires were measured on a five-point Likert Scale (1 = completely disagree, and 5 = completely agree).

## 2. Validation and Reliability

The questionnaire was constructed covering contents according to each variable in that the contents, wording, and item order of the questionnaires were reviewed by two experts to ensure all constructs were sufficient to cover the contents of the variables. In addition, the pre-test method was used to test the validity. Further, the reliability of the questionnaire for which this research has examined the quality of the instrument with confirmatory factor analysis (CFA) that is used to examine the construct validity, and internal consistency was calculated using Cronbach's alpha to assess the reliability.

The results of CFA found that all constructs have a factor loading of 0.551–0.925, and were greater than 0.40 (Nunnally & Bernstein, 1994). Cronbach's alpha coefficients are 0.736–0.938, which were greater than 0.70 (Hair, Black, Babin & Anderson, 2010). Therefore, the quality of the instrument in this research is considered acceptable, as shown in Table 1.

Table 1

Result of Measure Validation and Reliability

Constructs	Factor Loadings	Alpha Coefficient
Top Management Support (TOP)	0.593–0.822	0.748
Audit Learning (LEA)	0.551–0.867	0.739
Audit Commitment (COM)	0.817–0.910	0.893
Stakeholder Expectation (STK)	0.719–0.884	0.736
Environmental Change (ENV)	0.714–0.904	0.856
Audit Flexibility Management Competency (AFMC)	0.869–0.925	0.938

## 3. Statistical Testing

### 3.1 Non-response bias

A non-response bias was tested by comparing the demographic characteristic significant differences between two groups to prevent possible response bias problems between respondents and non-respondents. The result has shown that the t-test shows no significant difference between these two groups of respondents, which consisted of age ( $t = 0.463, p > 0.05$ ), status ( $t = 1.274, p > 0.05$ ), level of education ( $t = 0.825, p > 0.05$ ), audit experience ( $t = -0.074, p > 0.05$ ) and work position ( $t = 0.323, p > 0.05$ ). Therefore, a non-response bias was not considered as a key problem in this research.



### 3.2 Multiple regression analysis

Multiple regression analysis is used to test hypotheses by the ordinary least squares (OLS) method. One can test the relationship between audit flexibility management competency and five variables (comprising top management support, audit learning, audit commitment, stakeholder expectation and environmental change) by an equation as follows:

$$AFMC = \alpha + \beta_1 TOP + \beta_2 LEA + \beta_3 COM + \beta_4 STK + \beta_5 ENV + \beta_6 AGE + \beta_7 EXP + \varepsilon$$

### Results

#### 1. Descriptive statistics

Descriptive statistics were used to analyze the basic features of the data in this research. The results of demographic characteristics of 528 key participants show that 11.75 percent of participants were male and 88.25 percent were female. Most participants were single (53.60 percent), more than 40 years old (35.60 percent), the education level was at the bachelor's degree (72.20 percent), experience in government audit work was less than five years (30.90 percent), types of auditee was government (55.00 percent), positions were at the auditor professional level (49.40 percent) and the workplace was at headquarters (56.80 percent). In addition, the descriptive statistics of all the variables were presented in Table 2 with the means and standard deviation of all variables of 528 usable respondents. Overall, the range of mean scores for all constructs is 3.68–3.91, and has a standard deviation value of 0.47–0.64.

Table 2

Descriptive Statistics and Correlation Matrix

Variables	TOP	LEA	COM	ENV	STK	AFMC	AGE	EXP
Mean	3.68	3.76	3.91	3.86	3.80	3.69	N/A	N/A
S.D.	0.64	0.61	0.63	0.47	0.61	0.57	N/A	N/A
TOP	1.000							
LEA	.714***	1.000						
COM	.520***	.752***	1.000					
ENV	.503***	.581***	.612**	1.000				
STK	.428***	.475***	.498***	.622***	1.000			
AFMC	.533***	.638***	.585***	.561***	.485***	1.000		
AGE	.141***	.125***	.158***	.151***	.106**	.215***	1.000	
EXP	.076	.053	.104**	.096**	.071	.155***	.774***	1.000

Note: \*\*\* p <0.01, \*\* p < .05

## 2. Correlation analysis

The Pearson correlation for bivariate analysis of each variable pair is conducted in this research. The results of the correlation analysis of all constructs which the correlation matrix can prove, is the correlation between two variables and those that verify the multicollinearity problems by the inter-correlations among the independent variables in Table 2 which show the correlation coefficients between 0.428 and 0.752. However, clear evidence shows the variance inflation factors (VIFs) which are employed for testing; and the results indicate that the maximum value of VIFs is below the cut-off value of 10 as demonstrated in Table 3. Hence, there are no multicollinearity problems confronting this research (Kutner, Nachtsheim & Neter, 2008).

## 3. Multiple regression analysis

Table 3 demonstrates the results of ordinary least squares regression analysis as the factors influencing audit flexibility management competency that were comprised of top management support, audit learning, audit commitment, stakeholder expectation and environmental change, which are followed by Hypotheses 1 to 5.

The findings show that top management support has a significant positive influence on flexibility management competency (H1:  $\beta_1 = 0.109$ ,  $p < 0.05$ ); audit learning has a significant positive influence on audit flexibility management competency (H2:  $\beta_2 = 0.311$ ,  $p < 0.001$ ); audit commitment has a significant positive influence on audit flexibility management competency (H3:  $\beta_3 = 0.135$ ,  $p < 0.05$ ); stakeholder expectation has a significant positive influence on audit flexibility management competency (H4:  $\beta_4 = 0.134$ ,  $p < 0.05$ ); and environmental change has a significant positive influence on flexibility management competency (H5:  $\beta_5 = 0.207$ ,  $p < 0.001$ ). Therefore, Hypotheses 1- 5 were supported.

Table 3

Results of Multiple Regression Analysis<sup>a</sup>

Independent Variables	Dependent Variables	
	AFMC	
Top Management Support (TOP)	H1	0.109** (0.046)
Audit Learning (LEA)	H2	0.311*** (0.059)
Audit Commitment (COM)	H3	0.135** (0.051)
Stakeholder Expectation (STK)	H4	0.134** (0.041)
Environmental Change (ENV)	H5	0.207*** (0.046)
Age (AGE)		0.079 (0.044)
Audit Experience (EXP)		0.033 (0.042)
Adjusted R <sup>2</sup>		0.481
Maximum VIF		3.483

Note: \*\*\*p<.001, \*\*p<.05, <sup>a</sup> Beta coefficients with standard errors in parentheses

## Discussion

The results from this research have shown that external and internal factors (comprising top management support, audit learning, audit commitment, stakeholder expectation, and environmental change) have a positive influence on audit flexibility management competency. The results also indicated that these factors, as situational factors influence audit flexibility management competency by the appropriate action, depend on the situation, both internally and externally, which are in accord with the concept of the contingency theory.

In addition, these results were in line with the previous research. Wise (2004) found that governmental auditors have to comply and adhere to the policy of the agency by approval of a commander who has a system of command and control operations that are circumspect and

concise. An auditor's learning for understanding and using expert systems in operational audits tends to improve audit quality (Okab, 2013). Professional commitment was a factor in influencing an individual's behavior which has compliance and a duty to professional practice (Struweg & Meintjes, 2008). High - expectation stakeholders have an influence on auditors who have on maintain more professional skepticism (Pinsker, Pennington & Schafer, 2009). Besides, audit environmental change (technology, auditing standards, and legal enforcement) were the critical factors which have influenced the auditor's task, and that has pressured auditors to develop their audit work efficiency (Carcello, Vanstraelen & Willenborg, 2009; Wittayapoom & Limsuwan, 2012). As a result, top management support, audit learning, audit commitment, stakeholder expectation, and environmental change enhance and improve audit flexibility management competency.

## Conclusion

At present, rapid change in the accounting environment has affected audit operations. Auditors are required to develop the audit work in accordance with the changes of the environment in order to maintain audit quality. This research extends the understanding from prior research about factors which affect flexibility competency in an auditing context that investigates the factors that influence audit flexibility management competency among governmental auditors in Thailand. The results have revealed that top management support, audit learning, audit commitment, stakeholder expectation, and environmental change are factors that have an effect on audit flexibility management competency. Furthermore, these findings are a useful guideline for regulators, organizations, and auditors to enhance audit competency leading to flexibility management. However, the research still has some limitations. This research only examined governmental auditors from the Office of the Auditor General of Thailand. Thus, the population and sample are only one part of governmental auditors in Thailand. However, there are some governmental auditors in other agencies. Therefore, interpreting and applying the results should be done with care. Future research may consider using other governmental auditors in order to confirm the generalizability of this research, such as, the Office of the National Anti-Corruption Commission, the Department of Special Investigation, and the Cooperative Auditing Department. In addition, future research should consider investigate the moderating effect on the relationships between audit flexibility management competency and these variables.



## References

Arnold, V. ; Collier, P. A. ; Leech, S. A. & Sutton, S. G. (2001). The impact of political pressure on novice decision makers: Are auditors qualified to make going-concern judgments?. *Critical Perspectives on Accounting*. 12(3), 323-338.

Carcello, J. V. ; Vanstraelen, A. & Willenborg, M. (2009). Rules rather than discretion in audit standards: Going-concern opinions in Belgium. *The Accounting Review*. 84, 1395-1428.

Chung, S. H. & Lee, D. H. (2005). Impacts of TQM activities on employee's satisfaction in the support of task process, and on business performance in medical service industry. *The Korea Service Management Society*. 6(1), 57-85.

Coetzer, A. & Perry, M. (2008). Factors influencing employee learning in small businesses. *Education & Training*, 50(8/9), 648-660.

DeFond, M. & Zhang, J. (2014). A Review of archival auditing research. *Journal of Accounting and Economics*. 58, 275–326.

Elbanna, S. ; Ali, A. J. & Dayan, M. (2011). Conflict in strategic decision making: Do the setting and environment matter?. *International Journal of Conflict Management*. 22(3), 278-299.

Fiedler, F. E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.

Hair, J. F. ; Black, W. C. ; Babin, B. J. & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. New Jersey: Pearson Publishing.

Human Resources Management Office, Office of the Auditor General of Thailand (OAG). (2016). *Organization chart*. Retrieved May 22, 2016, from <http://www.oag.go.th/en/government/center>.

Intakhan, P. & Ussahawanitchakit, P. (2010). Role of audit experience and ethical reasoning in audit professionalism and audit effectiveness through a moderator of stakeholder pressure: An empirical study of Tax Auditors in Thailand. *Journal of Academy of Business and Economics*. 10(5), 1-14.

Kutner, M. C. ; Nachtsheim, C. & Neter, J. (2008). *Applied linear regression models*. (4<sup>th</sup> ed.). New York: McGraw Hill.

Lee, S. M. ; Kim, I. J. ; Rhee, S. G. & Trimi, S. (2006). The role of exogenous factors in technology acceptance: The case of object-oriented technology. *Information and Management*. 43(4), 469-480.

Lee, K. ; Craswell, J. J. & Allen, N. J. (2000). A meta-analytic review of occupational commitment: Relations with person and work-related variables. *Journal of Applied Psychology*. 85(5), 799-811.

Li, H. ; Xu, L. C. & Zou, H. F. (2000). Corruption, income distribution, and growth. *Economics & Politics*. 12(2), 155-182.

Nehme, R. (2013). *Dynamics of audit quality: Behavioral approach and governance framework: UK evidence*. Doctor of Philosophy, Durham University, UK.

Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.

Okab, R. (2013). The expert systems and their role in developing external auditor's performance and improving audit service's quality in information technology environment in audit's offices located in The Hashemite Kingdom of Jordan. *International Journal of Business and Management*. 8(17), 129-141.

Palau, S. L. (2001). Ethical evaluations, intentions, and orientations of accountants: Evidence from across-cultural examination. *International Advance in Economic Research*. 7(3), 351-364.

Phankasem, S. (2009). Office of the auditor general of Thailand and creation good governance in subdistrict administration organizations. *Sripatum Chonburi Journal*. 6(1), 41-49.

Pinsker, R. ; Pennington, R. & Schafer, J. K. (2009). The influence of roles, advocacy, and adaptation to the accounting decision environment. *Behavioral Research in Accounting*. 21(2), 91-111.

Research and Development Office, Office of the Auditor General of Thailand. (2015). *Audit to detect fraud and corruption: Evaluation of the fight against corruption and money laundering country paper of Thailand*. Retrieved October 17, 2016, from: <http://www.oag.go.th/sites/default/files/files/news/10.2015060001.2.pdf>.

Ross, D. (2016). *A case study of municipal government financial management and effective internal controls*. Ph.D. Dissertation, the School of Business and Technology Management, Northcentral University, Arizona, U.S.A.

Schneider, S. & Spieth, P. (2014). Business model innovation and strategic flexibility: Insights form an experimental research design. *International Journal of Innovation Management*. 18(6), 1-21.

Shian, S. G. & Tam, V. H. (2010). The relationship between corporate strategy, capital structure and firm performance: An empirical study of the listed companies in Vietnam. *International Research Journal of Finance and Economics*. (50), 62-73.

Singh, D. ; Oberoi, J. S. & Ahuja, I. J. (2013). An empirical investigation of dynamic capabilities in managing strategic flexibility in manufacturing organizations. *Management Decision*. 51(7), 1442-1461.



Skaerbaek, P. (2009). Public sector auditor identities in making efficiency audit able: The National Audit Office of Denmark as independent auditor and modernizer. *Accounting, Organizations and Society*. 34, 971-987.

Struweg, L. N. & Meintjes, C. (2008). The professionalism debate in South African Public Relations. *Public Relations Review*. 34(3), 224-229.

Wechsler, R. (2012). Local government ethics reform. *National Civic Review*. 101(3), 26-30.

Westermann, K. D. ; Bedard, J. C. & Earley, C. E. (2015). Learning the "Craft" of auditing: A dynamic view of auditors' on-the-job learning. *Contemporary Accounting Research*. 32(3), 864.

Wise, L. (2004). Bureaucratic posture: On the need for a composite theory of bureaucratic behavior. *Public Administration Review*. 64(6), 669-680.

Wittayapoom, K. & Limsuwan, S. (2012). Audit environment changes, audit knowledge, and audit efficiency: An empirical research of CPAs in Thailand. *International Journal of Strategic Management*. 12(1).

Wong, PSP. & Cheung, SO. (2008). An analysis of relationship between learning behavior and performance improvement of contracting organizations. *International Journal of Project Management*. 26, 112-123.