

# ปัจจัยที่มีผลต่อความสามารถการสอบบัญชีอย่างมืออาชีพของผู้สอบบัญชีภาษีอากร

## Factors Affecting Tax Auditors' Professional Audit Proficiency

นันทิยา พรหมทอง<sup>1</sup>, กรไชย พรหมภัสสรชกร<sup>2</sup>, ศรีัญญา รักสงฆ์<sup>2</sup>

Nantiya Promtong<sup>1</sup>, Kornchai Phornlaphatrachakorn<sup>2</sup>, Saranya Raksong<sup>2</sup>

<sup>1</sup>นิสิตปริญญาเอกสาขาวิชาการบัญชี คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม

<sup>2</sup> คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม

<sup>1</sup>Ph.D. (Candidate) in Accounting, Mahasarakham Business School, Mahasarakham University

<sup>2</sup>Mahasarakham Business School, Mahasarakham University

E-mail: nantiya207@gmail.com

### บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อวิเคราะห์ผลกระทบของความผูกพันต่อการอยู่รอดทางการสอบบัญชี การพัฒนาการสอบบัญชีอย่างต่อเนื่อง ความหลากหลายของประสบการณ์ทางการสอบบัญชี การเติบโตของการพัฒนาด้านเทคโนโลยีและความเข้มข้นของแรงกดดันของผู้มีส่วนได้เสียที่มีต่อแต่ละองค์ประกอบของความสามารถการสอบบัญชีอย่างมืออาชีพของผู้สอบบัญชีภาษีอากรในประเทศไทย ข้อมูลที่ใช้ในการศึกษานี้รวบรวมโดยใช้แบบสอบถามจากผู้สอบบัญชีภาษีอากรจำนวน 296 คน งานวิจัยนี้ใช้สถิติเชิงพรรณนาคือค่าร้อยละรวมถึงใช้สถิติเชิงอนุมานในการวิเคราะห์ถดถอยพหุคูณเพื่อทดสอบสมมติฐาน ผลการศึกษาพบว่าปัจจัยด้านความผูกพันต่อการอยู่รอดทางการสอบบัญชีและความหลากหลายของประสบการณ์ทางการสอบบัญชีมีอิทธิพลในทิศทางบวกอย่างมีนัยสำคัญต่อองค์ประกอบทั้งหมดของความสามารถการสอบบัญชีอย่างมืออาชีพ นอกจากนี้ความเข้มข้นของแรงกดดันของผู้มีส่วนได้เสียมีอิทธิพลในทิศทางบวกอย่างมีนัยสำคัญต่อศักยภาพในการเรียนรู้ทางการสอบบัญชี การบูรณาการวิธีการสอบบัญชีการมุ่งเน้นใช้วิจญาณทางการสอบบัญชี และการให้ความสำคัญกับจริยธรรมทางการสอบบัญชี นอกจากนี้การเติบโตของการพัฒนาด้านเทคโนโลยีมีอิทธิพลในทิศทางบวกอย่างมีนัยสำคัญต่อการประยุกต์ใช้เทคโนโลยีทางการสอบบัญชีและการให้ความสำคัญกับจริยธรรมทางการสอบบัญชี

**คำสำคัญ:** ความสามารถในการสอบบัญชีอย่างมืออาชีพ, ผู้สอบบัญชีภาษีอากร, การสอบบัญชีภาษี

### Abstract

The purpose of this research is to analyze the effects of audit survival commitment, audit experience diversity, continuous audit improvement, technological development growth, and stakeholder pressure intensity on each dimension of professional audit proficiency of the tax auditor in Thailand. The data used in this study, has been collected directly from questionnaire surveys from 296 tax auditors. This research uses descriptive statistic which is a percentage, as well as using inferential statistics in which multiple regression analysis is used to test the hypotheses. The results had revealed that both audit survival commitment and audit experience diversity have positive influences on all components of professional audit proficiency. Besides, stakeholder pressure intensity has a significant, positive influence on audit learning capability, audit method integration, audit skepticism orientation, and audit ethics focus. Moreover, technology development growth has a significant, positive influence on audit technology implementation and audit ethics focus.

**Keywords:** professional audit proficiency, tax auditor, tax audit.

**Paper type:** Research



## 1. Introduction

The growth of and changes in information technology, business structures, communications, and laws/regulations made the role of auditors have many changes. This has resulted in a challenge to prepare and develop the professional knowledge, skills, ethics, and attitudes of auditors to ensure their proficiency is prepared to meet the challenges that lie ahead. Especially, the specific knowledge, skills, and attributes that were deemed necessary in the past may no longer apply; thus, the auditors must ensure that they obtain sufficient competence to financial statements assertions. Besides, in performing audit duties, auditors must attempt to meet the audit standards; that means professional audit proficiency is significant to perform audit activities. Moreover, professional audit proficiency has influenced audit quality to provide trusted information for the owner-manager, and other users for business decision-making as well (Al-Khadash et al., 2013; Zarefar et al., 2016). Consequently, it is interesting to understand how professional audit proficiency is developed.

In this study, professional audit proficiency had focused on auditors' behaviors; that were used and applied to their proficiency for the purpose of completing audit duties. Interestingly, professional audit proficiency is caused by many factors, that affect auditors' professional audit proficiency. Here, five factors are examined that affect tax auditors' professional audit proficiency. The five factors that were examined include audit survival commitment, audit experience diversity, continuous audit improvement, technology development growth, and stakeholder pressure intensity. Firstly, the auditor with audit survival commitment reflects the willingness to spend efforts and proficiencies to achieve their goal (Mela et al., 2016; Paino et al., 2012). Secondly, continuous audit improvement for auditors are necessary to improve their technical knowledge, audit skills, and communication (Isa & Pope, 2011). Thirdly, auditors with a variety kind of audit experience tend to perform best audit practices in order to achieve superior audit outcomes (Ussahawanitchakit, 2012). Fourthly, emerging technologies will change the business activities, make audit methods and techniques must change to meet the technology changed (Moorthy et al., 2011). Finally, stakeholders have expectations about

types of audited financial information, and audit opinion; it puts the pressure on auditors' duties, and activities (Ussahawanitchakit, 2012). These factors are important factors in enhancing auditors' professional audit proficiency in their operations. Presently, audit survival commitment, continuous audit improvement, audit experience diversity, technology development growth, and stakeholder pressure intensity are hypothesized to play significant factors in stimulating tax auditor's professional audit proficiency.

## 2. Research Objective

To analyze the effects of audit survival commitment, audit experience diversity, continuous audit improvement, technological development growth, and stakeholder pressure intensity on each dimension of professional audit proficiency.

## 3. Literature Review

### 3.1 Professional Audit Proficiency and Its Dimensions

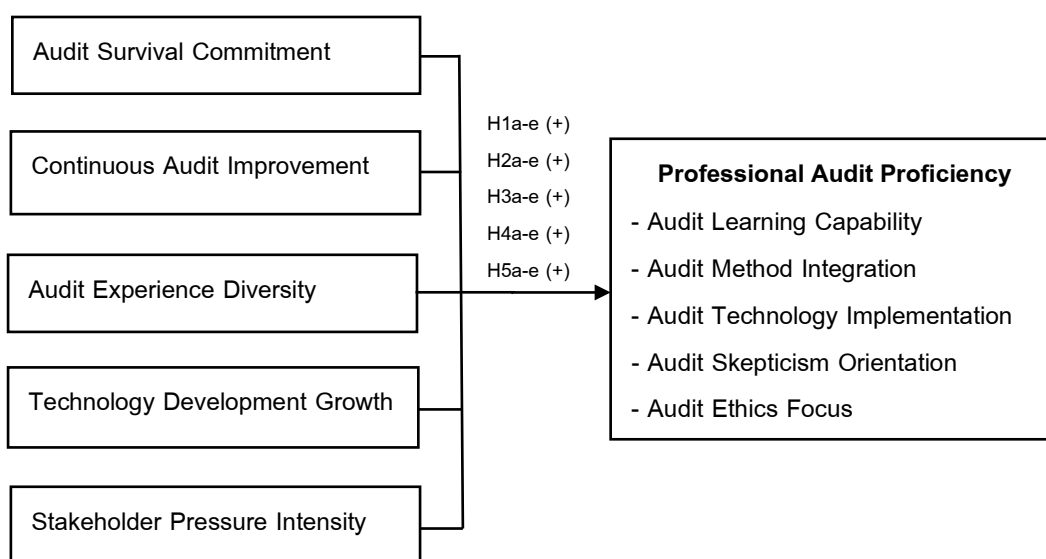
According to the standard issued by IFAC, International Education Standard 8 (IES 8), outlines that auditors must have deep knowledge relevant to accounting and auditing, professional skills, and be able to apply the values, ethics, and attitudes to different contexts and organizations (International Accounting Education Standards Board [IAESB], 2008). In terms of the internal auditor, audit proficiency is the knowledge, skills, and other competencies needed to perform their responsibilities (Institute of Internal Auditors [IIA], 2016). Additionally, auditing researchers have defined audit proficiency as the ability of an auditor to use knowledge, and skills to successfully perform in a given role (Furiady & Kurnia, 2015; Samuel & Afiah, 2013). Based on definitions above, auditor proficiency is determined by considering a set of relevant attributes; such as knowledge, skills, and attitudes that are necessarily required to succeed in a certain field of work. In this study, professional audit proficiency is the ability of tax auditors to completely operate audit tasks through use or application of knowledge, skills, and attitudes associated with a profession (Furiady & Kumia, 2015; IAESB, 2008; IIA, 2016; Samuel & Afiah, 2013). Prior studies have found that professional audit proficiency is important to create a successful audit task, the quality of

audit results, the reliability, and benefits of audited information (Moorthy et al., 2011; Syamsuddin et al., 2014; Zarefar et al., 2016). Audited information is carried by a proficient person; who can help users to assess the audited firm's risks, uncertainty, and the company's ability to continue operations.

Regarding the dimensions of professional audit proficiency in this study, according to IES8 (IAESB, 2008), this standard requires that auditors have audit competence. Hence, this research had applied this concept to a tax auditor's professional audit proficiency; of whom has responsibilities to verify partnership enterprises' financial statements, which can serve as a basis for a better understanding of an important professional audit proficiency in a tax audit context. Under section 2 of IES 8, this standard identified the auditor competence; that is required in five areas: composed professional knowledge; professional skills; professional values, ethics, and attitudes; practical experience; and continued professional development. However, in parts of practical experience

and continued professional development they haven't indicated the auditors' competence; but its' factors enhance the auditors collective knowledge and skills. Therefore, the current study has applied the first three concepts to tax audit context. Here, professional audit proficiency has identified five components: audit learning capability, audit method integration, audit technology implementation, audit skepticism orientation, and audit ethics focus.

In this research, the independent variables are audit survival commitment, continuous audit improvement, audit experience diversity, technology development growth, and stakeholder pressure intensity. Professional audit proficiency is assigned as the dependent variable, there are five characteristics consisting of audit learning capability, audit technology implementation, audit method integration, audit skepticism orientation, and audit ethics focus. The relationships of independent variables and dependent variables are shown in Figure 1 as follows.



**Figure 1:** Conceptual Model of the Factors Affecting Tax Auditor's Professional Audit Proficiency

3.1.1 Audit learning capability means the tax auditor had increased knowledge; through prior work reviews, analyzed events in the past, interpreted new audit issues, and adapted to perform audit tasks (Al-khaddash et al., 2013; Lysaght & Altschuld, 2000). Professional audit proficiency cannot remain without due knowledge (Tudor et al., 2013). Outcomes of audit learning are increasing auditor's tacit, and explicit knowledge because there can be a perception when and how to adapt one's knowledge

in different and difficult situations. Therefore, audit learning capability is one important component of professional audit proficiency.

3.1.2 Audit method integration is the ability of the tax auditor to combine various audit techniques, audit steps linkage, and coordination about audit procedures together into audit activities (Calota & Vinatoru, 2015). The audit method is a set of guidance presented as a detailed approach, and used for the gathering of audit evidence;

which depends on audit risks. (Bedard et al., 2005). Thus, well-designed audit methods assist auditors to obtain sufficient audit evidence, and detect fraud in a financial audit (Sarwoko & Agoes, 2014). Hence, the ability of auditors to carefully design the audit method within restricted audit resources, is a vital component of professional audit proficiency.

3.1.3 Audit technology implementation means the tax auditor use a computer, software, and tools in audit activities which allows one to gather information about the audit work efficiently (Abou-El-Sood et al., 2015; Bahador & Haider, 2013; Maria & Ariyani, 2014). Auditors have sufficient knowledge and skills of technology, be aware of the importance of technology, and be able to utilize technology. Inclusively, the ability to use and apply existing technology together with new technology; can help the auditors in carrying out inspection tasks efficiently and effectively can reduce the time an auditor spend on each audit (Drogalas et al., 2015). Accordingly, audit technology is a significant component of professional audit proficiency.

3.1.4 Audit skepticism orientation means the tax auditor performing audit tasks with a questioning mind, must be alert to situations that may cause errors or frauds, and evaluate and summarize the audit evidence carefully (American Institute of Certified Public Accountants [AICPA], 2012; Laohamethanee et al., 2013). The skepticism is an essential attitude for auditors, when they question something in the audit process, and when gathering audit evidence. Furthermore, it appears in terms of how the auditor pays attention to evidence which indicates any material misstatements (Nelson, 2009), searches and collects more convincing evidence and suspending judgment until sufficient evidence is available for a judgment (Hurt, 2010). Thus, audit skepticism orientation is a significant attitude that represents the proficiency of auditor.

3.1.5 Audit ethics focus means the tax auditor applies the ethical principles, and determines a suitable method to respond when faced with ethical dilemmas (Taddei & Siddiqui, 2016; Ussahawanitchakit, 2012). An auditor with ethical principles with fair dealing is respected; must be able to perform fairly without being influenced by the judgment of the other parties; keep the privacy of information without the client's permission unless legally entitled; and always give professional service with care

and competence (Akenbor & Onuoha, 2013; Furiada & Kurnia, 2015). Thus, audit ethics focus is a significant attitude that represents the proficiency of auditor.

### 3.2 Antecedent variables

#### 3.2.1 Audit Survival Commitment

The professional commitment is the strength of an individual's involvement in their profession. This is an individual's involvement with their profession reflects a positive attitude toward their job (Ortegren et al., 2016). Thus, auditors with professional commitment spend more efforts to achieve the professional objectives without being asked (Mela et al., 2016). Here, audit survival commitment is the auditor's intent is to remain in the ongoing audit profession, focusing on making greater efforts to create value for stakeholders, intended to work fully to achieve the objective, take the time to develop more knowledge and skills and avoid abnormal monitoring behaviors (Mela et al., 2016; Ortegren et al., 2016). The tax auditor's intention to remain in the ongoing audit profession implies that the auditor will be more sensitive to situations that may conflict with the objective of the profession and negatively affect the value of audit service provided to clients. Hence, auditors who intend to pursue a career will be willing to work hard to achieve the audit objectives, include pay more effort to benefit stakeholders by adhering to the code of conduct, and avoiding malfunctions (Paino et al., 2012). Additionally, auditors who possess a strong commitment to survive in the career that trend to spend more time to develop knowledge and skills, emphasize following audit methods, and exercise professional skepticism in fulfilling their job. Consequently, audit survival commitment is hypothesized to have a positive effect on each dimension of professional audit proficiency. Thus, the hypotheses are proposed as follows:

*Hypothesis 1: Audit survival commitment will have a positive influence on (a) audit learning capability, (b) audit method integration, (c) audit technology implementation, (d) audit skepticism orientation, and (e) audit ethics focus*

#### 3.2.2 Continuous Audit Improvement

Because each auditor must follow both accounting and auditing standards, the auditor should focus on the continuing audit improvement; in order to develop knowledge and skills in accounting and auditing.



Also, a client's business activities are unlikely to remain constant over time. Thus, if the auditor learns new topics, rules, recently methods; they can apply techniques which are learning to current situations. Hence, Auditors should maintain their knowledge and skills through continuous audit improvement. Audit skills, beliefs, and behaviors can be changed for better from the continuous audit learning (Wong and Cheung, 2008). In this paper, continuous audit improvement is the obligation of auditors to join education and training in accounting and auditing courses; in terms of communication with the others to the development of audit capabilities (Al-khaddash et al, 2013). Continuous training and development for auditors are necessary; in order to improve their technical knowledge audit skills (Isa & Pope, 2011; Kaspina, 2015), and change working procedures and utilize the modern technology (Lee et al., 2016). Overall, tax auditors must attend continuing professional development at least twelve hours per year that includes taxation knowledge and related knowledge (Revenue Department, 2017). These methods enhance the knowledge, and skills of the tax auditor. Thus, continuous audit improvement can help auditors attain more audit learning capability, audit method integration, audit technology implementation, audit skepticism orientation, and audit ethics focus. Therefore, the hypotheses are proposed as follows:

*Hypothesis 2: Continuous audit improvement will have a positive influence on (a) audit learning capability, (b) audit method integration, (c) audit technology implementation, (d) audit skepticism orientation, and (e) audit ethics focus*

### 3.2.3 Audit Experience Diversity

The knowledge and skills of the auditor would change as the experience improves (Badara & Saidin, 2013). Especially, the different type of experience will enable the auditor to understand the business thoroughly, accurately, and can handle the uncertainty of a situation; if they are with extensive inspection experience in the type of industry, corruption scheme, including information technology, and internal control systems that differ in each business. In this paper, audit experience diversity refers to the different characteristics of knowledge, and skills which are the result gained through the duration of tenure of the audit practices (Badara & Saidin, 2013; Knapp & Knapp, 2001). Auditors who have greater audit experience are

better able to find out errors from accounting transaction, aware of the effect of rules on audit processes (Wang et al., 2015), have the capability of discover fraud (Carpenter et al., 2002). Hence, auditors with a different kind of audit experience; are likely to provide their audit proficiency and commit to auditing standards and respond to the users' expectations very well. In addition, the different kinds of experience enable auditors to choose the best way to respond when facing ethical dilemmas (Pflugrath et al., 2007), and helps to exercise suspicion because it will be easier for them to understand faults accurately, and find the cause of errors (Syamsuddin et al., 2014). Accordingly, the diversity of experience is an important factor for developing audit learning capability, audit method integration, audit technology implementation, audit skepticism orientation, and audit ethics focus. Thus, the hypotheses are proposed as follows:

*Hypothesis 3: Audit experience diversity will have a positive influence on (a) audit learning capability, (b) audit method integration, (c) audit technology implementation, (d) audit skepticism orientation, and (e) audit ethics focus*

### 3.2.4 Technology Development Growth

The expansion and development of accounting technology, makes the format of accounting recording and storing of accounting transaction paper are more electronic (Maria & Ariyani, 2014). Hence, the growth and development of auditing technologies help an auditor to select the right technology and be able to perform tasks more quickly, including reducing audit time and make costs lower (Ernts & Young, 2015). Also, the increase of technological development makes auditors improve their own individual behaviors to gain greater quality of audit results (Musig & Ussahawanitchakit, 2011). In this paper, technology development growth is the expansion and changes in the technologies; that increase both in parts used in the auditing and accounting (Moorthy et al., 2011). The growth of technology development stimulates the auditor to prepare, develop knowledge, and select suitable technology to benefit auditors. Technology development growth puts pressure on the auditors to seek and make up the professional knowledge and skills; such as training or getting to know the latest technologies that are used in the audit field. Moreover, the growth in technology is affecting various aspects of accounting and auditing; thus, auditors must develop audit methods and exercise skepticism to

assess business risk more carefully (Schultz et al., 2010). Hence, technology development growth is an important factor for improving audit learning capability, audit method integration, audit technology implementation, audit skepticism orientation, and audit ethics focus. Therefore, the hypotheses are proposed as follows:

*Hypothesis 4: Technology development growth will have a positive influence on (a) audit learning capability, (b) audit method integration, (c) audit technology implementation, (d) audit skepticism orientation, and (e) audit ethics focus*

### 3.2.5 Stakeholder Pressure Intensity

A stakeholder is any individual who can affect or is affected by the achievements of an individual professional's duties and responsibilities. Stakeholders are expected to use the audited financial information to make different decisions. Thus, the financial information verified not only for shareholders, but also for the other stakeholders as public goods (Adeyemi & Fagbemi, 2011). The stakeholders' expectation affects the survival, and success of auditors who must strive to meet the needs and expectations of the stakeholders because their success depends on the capability to create values for stakeholders by satisfying their expectations (Ussahavanichakit, 2012). Thus, the expectations from stakeholders are correlated with the level of auditors' operation. Here, stakeholder pressure intensity is the degree of the stakeholder's expectation and impetus to demand certain actions from the auditors (González-Benito & González-Benito, 2010). The expectations and pressures from stakeholders will motivate the auditors to perform audit task with a high level of knowledge and skills (Perez-Batres et al., 2012). Besides, the pressure from stakeholders is cause for auditors to pay more attention to ethical principles when performing audit duties (Ussahawanitchakit, 2012). Also, Hatfield et al. (2011) have found that client pressure affects auditor judgments by motivating auditors to search for evidence that supports a client's preferred outcome. Hence, the high level of expectation of stakeholders has a positive impact on audit learning capability, audit method integration, audit technology implementation, audit skepticism orientation, and audit ethics focus. Therefore, if there is a high level of stakeholder pressure, it will drive auditors to use more

professional audit proficiency. As aforementioned, the hypotheses are proposed as follows:

*Hypothesis 5: Stakeholder pressure intensity will have a positive influence on (a) audit learning capability, (b) audit method integration, (c) audit technology implementation, (d) audit skepticism orientation, and (e) audit ethics focus*

## 4. Research Methods

### 4.1 Sample Selection and Data Collection

#### Procedure

The Revenue Department offers certified independent professionals as tax auditors; who have had functions to examine partnership enterprises' financial statements. As of May 2017, there are 1,510 tax auditors who signed on enterprises' financial statements of the 2016 year ended. All of them are the sample group in this study. The questionnaire was sent by post over the period between June 2017, and August 2017. Totally, 1,468 questionnaires were successfully sent to the participants, after undelivered questionnaires were deducted. A total of 296 surveys have been received, and usable questionnaire surveys. Moreover, this study tested non-response bias for generalization (Armstrong and Overton, 1977), by comparing characteristics of respondents between early, and late responses; in terms of the length of audit tenure, the period of the tax auditor certificate holder, the number of asserted financial statements, and average monthly income. The result showed that there is no statistically significant difference between two groups of respondents. Summarily, there is no non-response bias in the current study.

### 4.2 Reliability and Validity

The main purpose of this research is to gain some insight into the perceptions of the tax auditor about professional audit proficiency and its antecedents. According to Likert (1932) suggested a summated scale for the assessment of survey respondent's attitudes. A Likert scale is used question format that value characterizes the respondents' opinions and attitudes. Hence, Likert scales are appropriately used to measure tax auditor perceptions and attitudes in the current study.

The current study, a survey questionnaire method has been used; the questionnaire survey would

allow us to ascertain the views of a larger sample. The questionnaire consists of three parts: the first part sought demographic information about the respondents. The second part which asked for the rating of factors had stimulated tax auditor's behavior. The third part obtained perceptions about professional tax auditor's proficiencies. A five-point Likert scale was used, where 5 stands for strongly agree and 1 refers to strongly disagree. In order to get further comments from the respondents, optional spaces were provided for them given to provide opinions about the topic professional audit proficiency. Regarding the validity, two academic researchers were used to ensure the survey instrument was clear to the participants, and gained the information that was being sought. Moreover, the factor loadings of each item ranged from 0.562 to 0.953, indicating the construct validity of the questionnaire (Nunnally & Bernstein, 1994). In terms of the reliability, all variables were examined using Cronbach's alpha coefficients. The result found that the alpha coefficients ranged from 0.837 to 0.924 (Hair et al., 2010), indicating the scale is considered to be highly reliable.

## 5. Analysis and Results

**Table 1:** Correlation matrix

Variables	ALC	AMI	ATI	ASO	AEF	ASC	CAI	AED	TDG	SPI
ALC	1									
AMI	.764***	1								
ATI	.640***	.675***	1							
ASO	.685***	.696***	.640***	1						
AEF	.661***	.594***	.613***	.744***	1					
ASC	.658***	.647***	.596***	.687***	.714***	1				
CAI	.563***	.527***	.555***	.603***	.603***	.723***	1			
AED	.674***	.646***	.639***	.735***	.711***	.755***	.760***	1		
TDG	.512***	.507***	.669***	.565***	.618***	.607***	.611***	.620***	1	
SPI	.638***	.552***	.558***	.626***	.667***	.663***	.680***	.665***	.693***	1

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

### 5.3 The Results and Discussion

In order to test hypotheses, regression analysis was used to test the effects of audit survival commitment, continuous audit improvement, audit experience diversity, technology development growth, and stakeholder pressure intensity on each dimension of professional audit

### 5.1 Descriptive analysis of respondents

There are 296 respondents, most of them are female (57.43%), ages more than 40 years old (67.57%), and obtained a bachelor's degrees (52.03%). The period of holding a certificate is concentrated in 5-10 years (34.46%), as same as the length of audit tenure (31.42%). The majority of respondents had asserted financial statements of underneath 50 statements per year (60.14%) and possessed only of tax audit certification (72.64%).

### 5.2 Correlation Analysis

Table 1 shows the Pearson correlation coefficient of the variables. The finding reveals that audit survival commitment (ASC), continuous audit improvement (CAI), audit experience diversity (AED), technology development growth (TDG), and stakeholder pressure intensity (SPI) were positively correlated with each component of professional audit proficiency; namely, audit learning capability (ALC), audit method integration (AMI), audit technology implementation (ATI), audit skepticism orientation (ASO), and audit ethics focus (AEF). These results had showed that overall antecedents have a certain significance to each dimension of professional audit proficiency.

proficiency. The regression results were presented in Table 2.

According to Table 2, audit survival commitment had a significant positive effect on audit learning capability, audit method integration, audit technological implementation, audit skepticism orientation, and audit



ethics focus. Tax auditors who have audit survival commitment are more likely to spend more effort in creating value for users, working hard to achieve their objectives, spending more time on developing knowledge and skills, and avoiding the use of dysfunctional audit behaviors (Mela et al., 2016; Ortegren et al., 2016; Paino et al., 2012). Therefore, audit survival commitment increases tax auditors' professional proficiencies. Consequently, hypotheses 1a, 1b, 1c, 1d, and 1e are supported.

Secondly, continuous audit improvement had no significance of audit learning capability, audit method integration, audit technology implementation, audit skepticism orientation, and audit ethics focus. Possibly, tax auditors may not sufficiently realize the importance of continuous audit improvement. There may be possible reasons, firstly, according to the continuous professional development requirement by the audit profession agency, the tax auditor doesn't focus on knowledge obtained from seminar programs, but attends program to reach the requirements of the agency ( Khampichit &

Ussahawanitchakit, 2011) . Secondly, the regulators' requirements don't include the course that is relevant to individual practices, making the information obtained to not apply to practice (Lysaght & Altschuld, 2000). Thus, the continuous training, and development for tax auditors don't enhance their proficiency as well. Accordingly, hypotheses 2a, 2b, 2c, 2d, and 2e are not supported.

Thirdly, audit experience diversity has a significant positive effect on audit learning capability, audit method integration, audit skepticism orientation, audit technology implementation, and audit ethics focus. Tax auditors' professional proficiency changes when different experience levels of auditors change (Badara & Saidin, 2013; Knapp & Knapp, 2001) . The different kinds of knowledge, and skills that are acquired through different experiences give tax auditors the ability to identify the right red flag, the right methods, and the right data that will support audit performance. Therefore, a variety kind of audit experience improves tax auditors' professional proficiencies. Thus, hypotheses 3a, 3b, 3c, 3d, and 3e are supported.

**Table 2:** Results of the multiple regression analysis

Independent Variables	Dependent Variables				
	ALC	AMI	ATI	ASO	AEF
Audit survival commitment (H1a-1e)	.278*** (.066)	.344*** (.071)	.137** (.066)	.252*** (.063)	.316*** (.060)
Continuous audit improvement (H2a-2e)	-.097 (.068)	-.111 (.073)	-.011 (.068)	-.071 (.064)	-.101 (.062)
Audit experience diversity (H3a-3e)	.354*** (.070)	.349*** (.075)	.294*** (.070)	.451*** (.066)	.312*** (.064)
Technology growth development (H4a-4e)	-.031 (.058)	.064 (.062)	.397*** (.058)	.057 (.055)	.138*** (.053)
Stakeholder pressure intensity (H5a-5e)	.304*** (.063)	.121* (.067)	-.005 (.063)	.165*** (.060)	.215*** (.057)
<b>Control Variables:</b>					
Age	-.031 (.085)	-.035 (.090)	.269*** (.084)	.050 (.080)	.001 (.077)
Professional certification	.162* (.089)	.085 (.094)	.160* (.088)	.065 (.083)	-.028 (.080)
<b>Adjusted R<sup>2</sup></b>	<b>.540</b>	<b>.479</b>	<b>.545</b>	<b>.591</b>	<b>.614</b>

Note: Beta coefficients with standard errors in parenthesis, \*\*\* p<0.01, \*\* p<0.05, \* p<0.10



Fourthly, technology development growth has a significant positive influence on audit technology implementation, and audit ethics focus. The tax auditor perceives, and interprets a change of technology as having positive implications for them, and it is presented as a potential gain if they use it in work. Therefore, the growth of technology development pushes tax auditors to develop the ability to use new technologies, and develops audit specialization skills when auditing in particular task (Ernst & Young, 2015). Thus, hypotheses 4c and 4e are supported. At the same time, the result also showed that technology development growth doesn't impact audit learning capability, audit method integration, and audit skepticism orientation. Hence, hypotheses 4a, 4b, and 4d are not supported. Possibly, tax auditors verify an enterprises' statements with not that many transactions, and no complexity (Musig & Ussahawanitchakit, 2011). Certainly, tax auditors don't become aware of the influence of clients to use technology. Hence, the expansion, and change in technology may not stimulate tax auditors to develop their proficiencies.

Lastly, stakeholder pressure intensity has a significant positive effect on audit learning capability, audit method integration, audit skepticism orientation, and audit ethics focus, but it doesn't affect audit technology implementation. Accordingly, hypotheses 5a, 5b, 5d, and 5e are supported, but 5c is not. Tax auditors who are concerned with stakeholders, will try to create values for these stakeholders by satisfying users' expectations. The level of stakeholder pressure has to force the tax auditor to develop knowledge, and skills in audit practices (Ussahawanitchakit, 2012). However, the pressure from a stakeholder doesn't force tax auditors to use audit technology; so long as paper-based work still helps to complete the audit work as scheduled.

## 6. Conclusion and Contribution

The purpose of this study was to investigate the effect of antecedents, including audit survival commitment, continuous audit improvement, audit experience diversity, technology development growth, and stakeholder pressure intensity; on each dimension of professional audit proficiency. The results revealed that audit survival commitment and audit experience diversity had a positive, significant effect on all dimensions of professional audit

proficiency. Also, stakeholder pressure intensity had a positive significant impact on all components of professional audit proficiency, except for audit technology implementation. Besides, technology development growth has a significant, positive influence on audit technology implementation and audit ethics focus.

This study has significant implications for audit practices and regulations. According to the results had revealed that both audit survival commitment and audit experience diversity are significant factors that stimulate tax auditor's professional audit proficiency. Thus, the profession regulator can use the results to develop training programs; of which relate instruction from realistic experience that can raise the professional audit proficiency. Meanwhile, the profession regulator should build the confidence of tax auditors in terms of survival in their career, in regards to suitable audit fees with tasks and risks. Also, the result had contributed to tax auditors about what significant factors that might stimulate their audit proficiencies. Especially, to increasing a variety type of audit experience, tax auditors should take on new projects, or new non-audit services as soon as possible, and carefully observe, watch, and listen to others when doing fieldwork. Audit experience diversity and mindset about surviving in their career as a tax auditor, is a valuable resource that stimulates the tax auditor development in knowledge, and skills that will allow them to be effective and efficient in performing the audit tasks.

The future research may shed light on investigating audit experience diversity regarding the type of experiences such as general-audit experience, and client-specific experience; to identify which type is important for practitioners.

## 7. References

- Abou-El-Sood, H., Kotb, A., & Allam, A. (2015). Exploring auditors' perceptions of the usage and importance of audit information technology. *International Journal of Auditing*, 19, 252–266.
- Adeyemi, S. B. & Fagbemi, O. T. (2011). The

- perception of ethics in auditing profession. **Journal of Accounting and Taxation**, 5(November), 146–157.
- Akenbor C.O. & Onuoha T.E. (2013). Ethical concept and professional judgment in corporate financial reporting-empirical evidence from Nigeria. **The Business and Management Review**, 4(2), 78-90.
- Al-khaddash, H., Nawas, R. A., & Ramadan, A. (2013). Factors affecting the quality of auditing : The case of Jordanian commercial banks. **International Journal of Business and Social Science**, 4(11), 206–222.
- American Institute of Certified Public Accountants. (2012). **AU-C Section 240: Consideration of Fraud in a Financial Statement Audit**. New York: n.p.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating non-response bias in mailsurveys. **Journal of Marketing Research**, 14(3), 396-402.
- Badara, S. M., & Saidin, Z. S. (2013). Antecedents of internal audit effectiveness: A moderating effect of effective audit committee at local government level in Nigeria. **International Journal of Finance and Accounting**, 2(2). 82-88.
- Bahador, K. M. K., & Haider, A. (2013). Information technology competencies for accounting practitioners: A TOPC framework. **24th Australasian Conference on Information Systems**. 4-6 Dec 2013, Melbourne.
- Bedard, J., Graham, L., & C. Jackson. (2005). Information systems risk and audit planning. **International Journal of Auditing**, 9, 147.
- Calota, G. & Vinatoru, S. S. (2015). Techniques and procedures to obtain audit evidence assets. **Internal Auditing & Risk Management**, 1(1), 13–23.
- Carpenter, T., Durtschi, C., & Gaynor, L. M. (2002). The role of experience in professional skepticism, knowledge acquisition, and fraud detection. **American Accounting Association Mid-Year Auditing Meeting**, 1-28.
- Drogalas, G., Ioannis, S., Dimitra, K., & Ioannis, D. (2015). Tax audit effectiveness in Greek firms: Tax auditors' perceptions. **Journal of Accounting, and Taxation**, 7(7), 123-130.
- Ernst and Young. (2015). **The future of assurance: How technology is transforming the audit**. Retrieved March, 20, 2017. From <http://www.ey.com/uk/en/services/assurance/ey-the-future-of-assurance-viewpoint-series>
- Furiady, O. & Kurnia, R. (2015). The effect of work experiences, competency, motivation, accountability, and objectivity towards audit quality. **Procedia-Social and Behavioral Sciences**, 211, 328-335.
- González-Benito, J. & González-Benito, Ó. (2010). A study of determinant factors of stakeholder environmental pressure perceived by industrial companies. **Business Strategy and the Environment**, 19(3), 164–181.
- Hair, J. F., Black, W.C., Babin, B. J. & Anderson, R. E. (2010). **Multivariate Data Analysis: A Global Perspective**. New Jersey: Pearson Prentice Hall.
- Hatfield C., R., Jackson, B., S., & Vandervelde, D., S. (2011). The effects of prior auditor involvement and client pressure on proposed audit adjustment. **Behavioral Research in Accounting**, 23(2), 117-130.
- Hurt, R. K. (2010). Development of a scale to measure professional skepticism. **Auditing**, 29(1), 149–171.
- International Accountants Education Standards Board. (2008). **International Education Standards (IES8): Competence Requirements for Audit Professionals**. New York, NY. 1-14.
- Institute of Internal Auditors. ( 2016). **International Standards for the Professional Practice of Internal Auditing**. Altamonte Springs.
- Isa, K. & Pope, J. (2011). Corporate tax audits :

- Evidence from Malaysia. **Global Review of Accounting and Finance**, 2(1), 42–56.
- Kaspina, S. (2015). Continuing professional development of accounting and auditing: Russian experience and challenges. **Procedia-Social and Behavioral Sciences**, 191, 550 – 553.
- Khampichit, U. & Ussahawanitchakit, P.(2011). Audit ethical al orientation of CPAs in Thailand: An empirical investigation of the antecedents and consequences. **Journal of International Management Studies**, 11(2), unpagd.
- Knapp, A. C. & Knapp, C. M. (2001). The effects of experience and explicit fraud risk assessment in detecting fraud with analytical procedures. **Accounting, Organizations and Society**, 26, 25-37.
- Laohamethanee, W., Ussahawanitchakit, P. & Boonlua, S. (2013). Internal audit skepticism and firm value of Thai-listed firms: An empirical investigation of its antecedents and consequences. **Review of Business Research**, 13(3), 123.
- Lee, C. S., Su, M. J., Tsai, B. S., Lu, L.T., & Dong, W. (2016). A comprehensive survey of government auditors' self-efficacy and professional development for improving audit quality. **Springerplus**, 5, 1-25.
- Likert, R. (1932). **A Technique for the measurement of attitudes**. New York: Archives of Psychology.
- Lysaght, M. R. & Altschuld, W.J. (2000). Beyond initial certification: the assessment and maintenance of competency in professions. **Evaluation and Program Planning**, 23, 95-104.
- Maria, E. & Ariyani, Y. (2014). E-commerce impact: The impact of e-audit implementation on the auditor's performance. **Indian Journal of Commerce and Management Studies**, 5(3), 1– 8.
- Mela, F. N., Zarefar, A., & Andreas. (2016). The relationship of professional commitment of auditing student and anticipatory socialization toward whistleblowing intention. **Procedia-Social and behavioral Sciences**, 219, 507-512.
- Moorthy, K., Mohamed, Z. S., Gopalan, M., & Dan, H. L. (2011). The impact of information technology on internal auditing. **African Journal of Business Management**, 5(9), 3523-3539.
- Musig, P. & Ussahawanitchakit, P. (2011). Dynamic audit competency and the antecedents and consequences: evidence from tax auditors in Thailand. **International Journal of Business Research**, 11(3), 47.
- Nelson, M. W. (2009). A Model and literature review of professional skepticism in auditing. **Auditing: A Journal of Practice & Theory**, 28(2), 1-34.
- Nunnally, J.C. & Bernstein, I. H. (1994). **Psychometric Theory**. New York: McGraw- Hill.
- Ortegren, M., Downen, T., & Kim, S. (2016). **Linking skepticism judgment with skeptical action: Consideration of potentially influential client and professional factors**. Retrieved February, 12, 2017. From <http://ssrn.com/abstract=2727864>
- Paino, H., Thani, A., & Si, Z. I. S. (2012). Organizational and professional commitment on dysfunctional audit behaviour. **African Journal of Business management**, 6(4), 1434-1440.
- Perez-Batres, L. A., Jonathan P. D., Van V. M. & Michael J. P. (2012). Stakeholder pressures as determinants of CSR strategic choice: Why do firms choose symbolic versus substantive self-regulatory codes of conduct?. **Journal of Business Ethics**, 110, 157-172.
- Pflugrath, G., Marinov-Bennie, N., & Chen, L. (2007). The impact of code of ethics and experience on auditor judgments. **Managerial Auditing Journal**, 22(6), 566-589.
- Revenue Department. (2017). **12-hour Training of Tax Auditors**. Retrieved May, 1, 2017. From <http://www.rd.go.th/publish/23514.0.html>.
- Samuel, H. N. & Afiah, N. N. (2013). The impact of objectivity, proficiency and due professional care of auditors to quality of performance audit results : Survey on audit teams of Jakarta Provincial Inspectorate. **Proceedings of 8th**

- Asian Business Research Conference**, 1 - 2 April 2013, Bangkok, Thailand.
- Sarwoko, I. & Agoes, S. (2014). An empirical analysis of auditor's industry specialization, auditor's independence and audit procedures on audit quality: Evidence from Indonesia. **Procedia-Social and Behavioral Sciences**, 164, 271-281.
- Schultz, J. J., Bierstaker, L. J., & O'Donnell, E. (2010). Integrating business risk into auditor judgment about the risk of material misstatement: The influence of a strategic systems audit approach. **Accounting, Organizations and Society**, 35(2), 238-251.
- Syamsuddin, Sudarma, M. I., Habbe, H. A., & Mediaty. (2014). The influences of ethics, independence, and competence on the quality of an audit through the influence of professional skepticism in Bpk of South Sulawesi, Central Sulawesi and West Sulawesi. **Journal of Research in Business and Management**, 2(7), 8-14.
- Taddei, S. A. & Siddiqui, J. (2016). Regulation and the promotion of audit ethics: Analysis of the content of the EU's policy. **Journal of Business Ethics**, 139, 183-195.
- Tudor, G. C., Gheorghe, M., Oancea, M., & Sova, R. (2013). An analysis framework for defining the required IT&C competencies for the accounting profession. **Accounting and Management Information Systems**, 12(4), 671-696.
- Ussahawanitchakit, P. (2012). Audit independence of tax auditors in Thailand: roles of ethical orientation, professional responsibility, stakeholder pressure, and audit experience. **Journal of Academy of Business and Economics**, 12(1).
- Wang, X., Wang, Y., Yu, L., Zhao, Y., & Zhang, Z. (2015). Engaging audit partner experience and audit quality. **China Journal of Accounting Studies**, 3(3), 230-253.
- Wong, P.S.P. & Cheung, S.O. (2008). An analysis of relationship between learning behavior and performance improvement of contracting organizations. **International Journal of Project Management**, 26(2), 112-123.
- Zarefar, A., Andreas, & Zarefar A. (2016). The influence of ethics, experience and competency toward the quality of auditing with professional auditor skepticism as a moderating variable. **Procedia-Social and Behavioral Sciences**, 219, 828-832.