

EFFECTS OF AUDIT ADAPTATION COMPETENCY ON AUDIT SURVIVAL OF TAX AUDITORS (TAs) IN THAILAND

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Abstract: *Since the business globalization has increased the demand for high-quality financial reporting, the professional auditors should adapt themselves with continuing professional development in order to play a crucial governance role of protecting and serving public interest. The purpose of this research is to identify the relationships between audit adaptation competency and audit survival. This research uses Ordinary Least Squares (OLS) regression analysis to test all hypotheses with 205 tax auditors in Thailand. The results indicate that the significantly positive effect of three dimensions of audit adaptation competency on audit function efficiency, audit practice excellence, and audit procedure effectiveness, which resulting to audit quality and audit survival. This research will provide valuable information regarding superior audit quality and audit survival are possibly determined by audit adaptation competency.*

Keywords: *Audit Adaptation Competency, Audit Function Efficiency, Audit Practice Excellence, Audit Procedure Effectiveness, Audit Survival*

1. Introduction

Pertaining to the Federation of Accounting Profession in Thailand (FAP) fully adopted the professional standards recommended by International Federation of Accountants (IFAC) have been revised International Financial Reporting Standards since 2009 to 2017 and International Auditing Standards since 2012 to 2017 in order to update and conform the International Standards (www.fap.or.th). Besides, the regulators such Revenue Department and Department of Business Development have been dynamically announced and enforced laws and related regulations. The aforementioned results directly and rapidly affect to Tax Auditors (TAs) to adapt themselves to continue the significant role of protecting and serving the public interest under

uncertainty and a rapidly changing environment. Since the globalization of business has rigorously increased the demand for reliable and high-quality financial reporting within countries and across borders, audit committees, management, investors, and other stakeholders all expect compliance with recognized international standards in auditing in global business environment. The research objective is to investigate the relationships between audit adaptation competency and audit survival. Using questionnaire data, the research obtained comprehension of Tax Auditors (TAs) in Thailand. Consequently, the competence of

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audit professionals leads to internationally professional standards. These standards enhance the fundamental role of professional auditors and heighten the audit quality as well as consistency of practice throughout the world. Moreover, they strengthen public confidence in the global auditing and assurance profession. However, standards frequently change in the globalized business world. Thus, professional auditors should know how to adapt themselves in order to ensure that they can work competently when undertaking their work. Prior studies indicated that audit adaptation competency is an imperative characteristic of professional auditor in the accounting profession's ability to protect public interest. (Forgarty & Rigsby, 2010). The quality of financial report audits depends on the job performance of auditors. Similarly, higher-competency auditors highlight the importance of the work of an auditor; lower-competency auditors do not. (McKnight & Wright, 2011). While the number of audit competency is increasing (Margheim et al., 2010; Musig & Ussahawanitchakit, 2011; Bame-Aldred et al., 2013), there are little studies in audit adaptation competency. To bridge this gap in our knowledge, we investigate TAs in Thailand, in terms of the relationships between audit adaptation competency and audit survival.

This research is divided into four parts. The first part explains audit adaptation competency and its consequence. The relationships of each variable and hypotheses development are included. The second part depicts research method. The third part illustrates the results. The fourth part indicates the conclusion and recommendations.

2. Literature Review and Hypotheses Development

-Audit Adaptation Competency

This research develops a model as shown in Figure 1; our approach is to investigate the relationships between audit adaptation competency (including audit change education, audit flexibility perception, audit learning continuity, audit dynamic improvement, and audit environmental understanding) and audit survival.

According audit adaptation competency definitions, they are based on three criteria, which are auditing, adaptation and competency. The term "auditing" refers to external auditing. Adaptation is an adjustment or changing in the behavior of professional auditors in order to be consistent with external changes and development. Competency is an individual characteristic that is recognized as a prominent indicator of employee performance and success. In this research, audit adaptation competency refers to the individual ability to efficiently adjust to new significant professional standards and regulations. Likewise, Rival et al. (2017) point out that audit team should adapt and respond to the widening of the objectives of audits, the satisfaction of those interested parts and the elevation of its efficiency levels.

-Audit Change Education

Audit change education is defined as the ability to study the changes in accordance with professional standards that foundation causes them to acquire professional auditing standards as well as essential professional auditing knowledge. Due to regulatory and institutional force, more specialized auditor leads to increase litigation consciousness, which appears to make auditors prioritize compliance with Generally Accepted Auditing Standards (GAAS) and Generally Accepted Accounting Principles (GAAP) over client relation goals. Audit education has a significant effect on audit expectation gap (Ihendinihu & Robert, 2014). Taking all of

the above into account, this research sets the following hypotheses:

H1a-e: Audit change education would be positively related to (a) audit function efficiency, (b) audit practice excellence, (c) audit procedure effectiveness, (d) audit quality, and (e) audit survival.

-Audit Flexibility Perception

Audit flexibility perception refers to the auditor's awareness of uncertain conditions and his or her ability to adapt in order to be consistent with the circumstances under limited audit resources. Evidence exists that individuals interpret information in a manner that justifies a decision they wish to make (Phosrichan & Ussahawanitchakit, 2013), particularly when some of the information is characterized by uncertainty and is consistent with the recent application of auditing by Blay (2005). Thus, this research's relationships are hypothesized as follows:

H2a-e: Audit flexibility perception would be positively related to (a) audit function efficiency, (b) audit practice excellence, (c) audit procedure effectiveness, (d) audit quality, and (e) audit survival.

-Audit Learning Continuity

Audit learning continuity is the ability to learn and document the skills, knowledge and experience that is gained both formally and informally from the workplace, and beyond any initial training. Continuous learning is fundamental for professional development in knowledge-based societies, including long-life learning and acquiring audit techniques in order to heighten audit performance, and continuous learning is a critical concept in serving the auditors to perform the responsibility (Rodgers, 2017). Hence, this research proposes the following hypotheses:

H3a-e: Audit learning continuity would be positively related to (a) audit function efficiency, (b) audit practice excellence, (c)

audit procedure effectiveness, (d) audit quality, and (e) audit survival.

-Audit Dynamic Improvement

Audit dynamic improvement is defined as the auditor continually enhancing greater audit review process in order to be consistent with changing conditions and increase audit quality through encouraging audit practice excellence. The review process serves as a quality control, supporting to ensure the adequateness of procedures performed, the appropriateness of conclusions drawn, and the reliability of the financial statements under audit (Bhattacharjee et al., 2017). The audit review process including work performed, methods used, and conclusions are subject to review by a supervising auditor. Thus, this research's relationships are proposed as follows:

H4a-e: Audit dynamic improvement would be positively related to (a) audit function efficiency, (b) audit practice excellence, (c) audit procedure effectiveness, (d) audit quality, and (e) audit survival.

-Audit Environmental Understanding

Audit environment understanding refers to the awareness of auditors to concern with changes in regulation and related law as well as stakeholder's expectation in order to utilize the knowledge, skills, and competence to maximize the utilization of audit practice. Simunic et al. (2017) showed that audit behavior as determined by audit quality can improve with the impacts of legal system and professional standards. Thus, these ideas lead to the following hypotheses:

H5a-e: Audit environmental understanding would be positively related to (a) audit function efficiency, (b) audit practice excellence, (c) audit procedure effectiveness, (d) audit quality, and (e) audit survival.

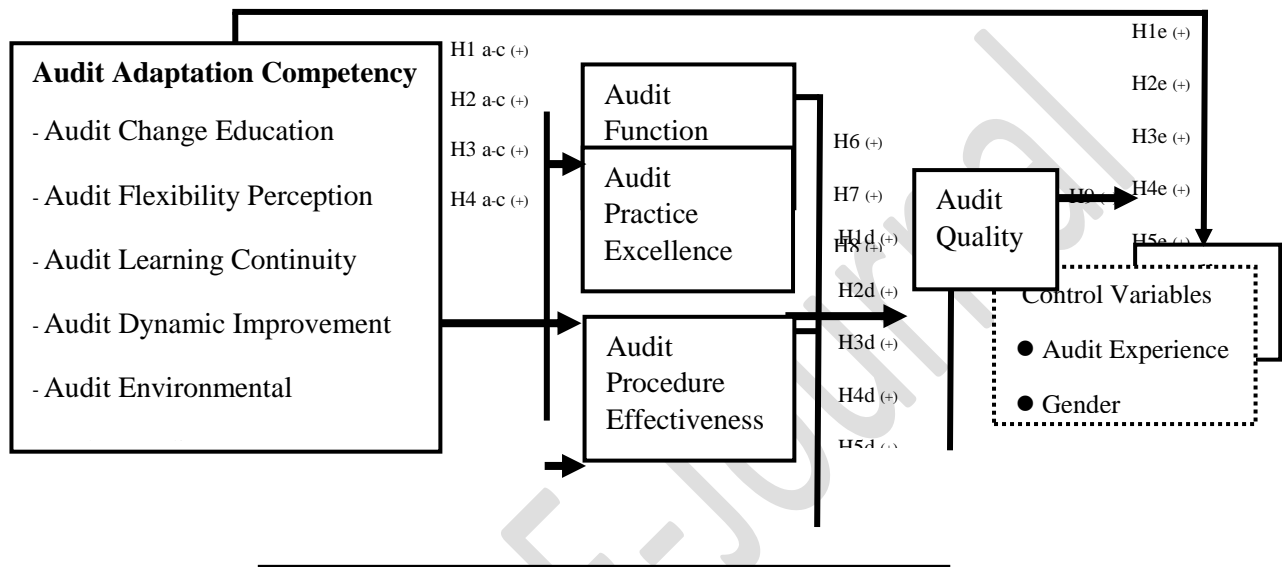
-Audit Function Efficiency

Audit function efficiency is defined as the lowest cost of the audit process of

collecting and evaluating audit evidence to determine a management assertions that embody in the financial statements. The auditor perform risk assessment procedures to identify and assess risks of material misstatement at the financial statements and assertion levels. Standards setters enforce

the auditor to understand client business risk that require special audit consideration (International Federation of Accountants (IFAC), 2012; Public Company Accounting Oversight Board (PCAOB), 2010). To enhance audit efficiency, the

Figure 1: Conceptual Model of Audit Adaptation Competency and Audit Survival



auditors are concerned with how to detect errors in the audit working paper and correct decisions regarding the presence of management fraud (Schultz et al., 2010). Thus, this research predicts that audit function efficiency may influence audit quality. Based on the above, the following hypothesis is postulated:

H6: Audit function efficiency would be positively related to audit quality.

-Audit Practice Excellence

The definition of excellence is the outcome of the best practice in auditing. Excellent auditors are those who have expertise in auditing skills, professional skepticism, problem solving, analytical thinking, and audit negotiations. Best practice includes five steps, which is critical continuous improvement as follows: scheduling, planning, management, reporting, and verification. Professional skepticism,

analytical skills, and audit negotiations are positively related to audit quality (Hurt, 2010; Perreault et al., 2017). Thus, the firm with greater audit practice excellence tends to encourage higher audit quality. Therefore, this research's relationship is proposed as follows:

H7: Audit practice excellence would be positively related to audit quality.

-Audit Procedure Effectiveness

The meaning of audit procedure effectiveness is the audit performance that achieves an audit objective in each move including expressing audit opinion and issuing an audit report consistent with client engagement. The auditors conduct an audit plan and gather sufficient and proper audit evidence in order to enhance the expression of an appropriate opinion. Additionally, audit analytical procedures are mandated for planning and overall review purposes.

Glover et al., 2014 stated that substantive analytical procedures can be combined in order to strengthen free of material misstatement as well as to yield high overall assurance. Based on this rationale, the hypothesis is formulated as follows:

H8: Audit procedure effectiveness would be positively related to audit quality.

-Audit Quality

Audit quality refers to the outcome of audit task, including quality of audit reports and financial reports, which reflects a position of statement, financial performance and cash flow in accordance with economic events. Audit quality stems from both the probability that auditors detect misstatements and on whether auditors report such misstatements (DeAngelo, 1981; Palmrose, 1988). In order for audit quality to improve, auditor's competence increases with long tenure (Lai, 2009). Therefore, the hypothesis is proposed as follows:

H9: Audit quality would be positively related to audit survival.

-Audit Survival

Audit survival is the final dependent variable in this research. Previous studies noted that audit survival is defined as the result of continuing audit qualities that initiate stakeholder acceptance and superior premium audit reputation. Finally, audit quality performance is the cause of subsequent audit appointment both of incumbent clients and new audit clients.

3. Research Methodology

3.1 Sample selection, data collection procedure and method

The population and sample of this research is Tax Auditors (TAs) in Thailand.

Furthermore, to earn the prestige associated with Tax Auditor license, certified independent professionals are required to demonstrate their knowledge and competence by passing the TAs examinations. The sample of this research was gathered from the Revenue Department, Ministry of Finance, on their website (www.rd.go.th). Based on database, there are 2,863 TAs.

In this research, concepts in the model are developed as new scales and are adapted from prior research. Cronbach's Alpha test is conducted in order to confirm that the questions are valid, consistent, and reliable. Also, a pre-test method is appropriately conducted to assert validity and reliability of the questionnaire. The rationale of the pre-test is to clearly check and to accurately understand a questionnaire before using it for real data collection. After the pre-test, the questionnaire was modified to become the most effective instrument. Therefore, the purpose of conducting the pre-test is to examine the validity and reliability of each measure employed in the questionnaire.

With respect to the questionnaire mailing, 1,705 questionnaires were distributed to TAs; the valid mailing was 207 surveys. Consequently, 205 responses were returned and usable. The effective response rate was approximately 12.06%, respectively. Even though Aaker, Kumar and Day (2001) point out that the 20% response rate for a mail survey without an appropriate follow-up procedure is considered acceptable. Therefore, 1,705 TAs is selected as the sample for data collection, which are an appropriate sample for a distributed mail survey.

Table 1: Results of Validity and Reliability Testing

Constructs	Factor Loadings	Alpha Coefficient
Audit Change Education (EDU)	.737-.887	.831
Audit Flexibility Perception (PER)	.590-.785	.707
Audit Learning Continuity (LEA)	.783-.862	.839
Audit Dynamic Improvement (IMP)	.704-.908	.875
Audit Environmental Understanding (UND)	.636-.857	.801
Audit Function Efficiency (FUN)	.700-.902	.759
Audit Practice Excellence (PRA)	.752-.885	.814
Audit Procedure Effectiveness (PRO)	.857-.897	.843
Audit Quality (QUA)	.818-.890	.800
Audit Survival (SUR)	.821-.897	.800

3.2 Statistical techniques

This research analyzes the data which is calculated in the form of factor scores for which all variables are prepared to avoid multicollinearity problems, and are evaluated by the Ordinary Least Squares (OLS) regression analysis. To test all hypotheses, not only this research analyzes data of TAs, but also the all of data is analyzed by the Ordinary Least Squares (OLS) regression analysis. Therefore, all hypotheses in this research are transformed into seven equations.

$$\begin{aligned}
FUN &= \alpha_1 + \beta_1 EDU + \beta_2 PER + \beta_3 LEA + \beta_4 IMP \\
&\quad + \beta_5 UND + \beta_6 EXP + \beta_7 GEN + \varepsilon \\
PRA &= \alpha_2 + \beta_8 EDU + \beta_9 PER + \beta_{10} LEA + \beta_{11} IMP \\
&\quad + \beta_{12} UND + \beta_{13} EXP + \beta_{14} GEN + \varepsilon \\
PRO &= \alpha_3 + \beta_{15} EDU + \beta_{16} PER + \beta_{17} LEA + \beta_{18} IMP \\
&\quad + \beta_{19} UND + \beta_{20} EXP + \beta_{21} GEN + \varepsilon \\
QUA &= \alpha_4 + \beta_{22} EDU + \beta_{23} PER + \beta_{24} LEA + \beta_{25} IMP \\
&\quad + \beta_{26} UND + \beta_{27} EXP + \beta_{28} GEN + \varepsilon \\
QUA &= \alpha_5 + \beta_{29} FUN + \beta_{30} PRA + \beta_{31} PRO \\
&\quad + \beta_{32} EXP + \beta_{33} GEN + \varepsilon \\
SUR &= \alpha_6 + \beta_{34} EDU + \beta_{35} PER + \beta_{36} LEA \\
&\quad + \beta_{37} IMP + \beta_{38} UND + \beta_{39} EXP + \beta_{40} GEN + \varepsilon \\
SUR &= \alpha_5 + \beta_{41} QUA + \beta_{42} EXP + \beta_{43} GEN + \varepsilon
\end{aligned}$$

Cronbach's alpha coefficients represent between 0.707 and 0.843. It can be shown that these constructs are accepted at the reliability level (Nunnally & Bernstein, 1994). The statistical techniques contain factor analysis,

variance inflation factor, correlation analysis which show on Table 2. Furthermore, the Ordinary Least Squares (OLS) regression analysis is employed to test all hypotheses following the conceptual model and depicted in Table 3.

4. Results and Discussion

Regarding table 3, the regression results of TAs report that audit change education has significant and positive relationships with audit function efficiency ($\beta = .166$, $p < .10$). This finding is in keeping with the prior study of Biloslavo & Trnavcevic (2007), who found that audit knowledge contributes to superior judgment and reliability of financial statements. Additionally, the results of TAs show that audit change education significantly affects audit practice excellence ($\beta = .166$, $p < .05$) audit procedure effectiveness ($\beta = .202$, $p < .05$) and audit quality ($\beta = .199$, $p < .05$). These results endorse Gardner (2017) in that the development of knowledge and skills in auditing practice to accumulate client-specific knowledge stem from audit education and understanding. Continuously on the other side, the results also indicate

Table 2: Descriptive Statistics and Correlation Matrix

Variable	EDU	PER	LEA	IMP	UND	FUN	PRA	PRO	QUA	SUR	EXP	GEN
MEAN	4.12	3.75	4.20	4.05	3.93	3.92	3.93	3.90	3.84	3.54	n.a.	n.a.
S.D.	0.56	0.63	0.57	0.62	0.61	0.58	0.57	0.60	0.62	0.74	n.a.	n.a.
EDU	1											
PER	.599***	1										
LEA	.723***	.580***	1									
IMP	.641***	.592***	.665***	1								
UND	.666***	.661***	.678***	.743***	1							
FUN	.509***	.400***	.548***	.439***	.476***	1						
PRA	.582***	.493***	.582***	.607***	.604***	.761***	1					
PRO	.558***	.543***	.510***	.550***	.556***	.662***	.769***	1				
QUA	.520***	.425***	.537***	.462***	.520***	.695***	.759***	.773***	1			
SUR	.423***	.367***	.445***	.496***	.440***	.551***	.603***	.549***	.685***	1		
EXP	-.078	-.001	-.084	-.151***	-.093	.036	-.018	-.033	.069	.105	1	
GEN	-.003	.063	.051	.065	.181***	-.037	-.033	-.081	.005	.034	-.043	1

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

that audit change education does not significantly affect audit survival of TAs ($\beta = .096$). The results presented here do not support the findings of Biloslavo & Trnavcevic (2007) in that audit knowledge influences the judgment and reliability of financial statements and that this knowledge will be an advantage. Therefore, H1a, H1b, H1c and H1d are fully-supported; however, H1e is not supported. Secondly, the results of TAs indicate that audit flexibility perception has a significantly effect on audit procedure effectiveness ($\beta = .183$, $p < .05$). However, the results of TAs indicate that audit flexibility perception do not affect audit function efficiency ($\beta = .003$). These results are in accordance with the previous studies where the auditors have flexible work perception leading to individual's professional success. The professional auditors have flexible work schedules who experienced higher job satisfaction and reported lower levels of role conflict, emotional exhaustion, depersonalization,

and turnover intentions that resulting to audit procedure effectiveness (Smith & Emerson, 2017). On the other hand, the results of TAs indicate that audit flexibility perception does not affect audit practice excellence ($\beta = .019$). Based on the results of TAs, audit flexibility perception also does not affect audit quality ($\beta = .008$) and audit survival ($\beta = -.024$). Therefore, H2c is supported; however, H2a, H2b, H2d and H2e are not supported.

Thirdly, the findings show that the audit learning continuity of TAs does significantly affect audit function efficiency ($\beta = .309$, $p < 0.01$), audit practice excellence ($\beta = .152$, $p < .10$), and audit quality ($\beta = .232$, $p > .05$). This finding is in keeping with the prior study of Chu and Zhang (2016) in that the auditors who learning have greater audit efforts and less biased reports leading to improve audit quality. Furthermore, the results of TAs also indicate that audit learning continuity does not significantly affect audit procedure

Table 3: Results of Regression Analysis

Independent Variables	HO	Dependent Variables ^a						
		FUN Eq.1	PRA Eq.2	PRO Eq.3	QUA Eq.4	QUA Eq.5	SUR Eq.6	SUR Eq.7
EDU	H1(a-e)	.166* -.093	.166** -.083	.202** -.087	.199** -.091		.096 -.095	
PER	H2(a-e)	.003 -.083	.019 -.074	.183** -.078	.008 -.081		-.024 -.085	
LEA	H3(a-e)	.309*** -.094	.152* -.084	.021 -.088	.232** -.092		.149 -.096	
IMP	H4(a-e)	.015 -.094	.220*** -.084	.167* -.087	.029 -.091		.324*** -.096	
UND	H5(a-e)	.163 -.102	.237*** -.092	.187* -.095	.227** -.100		.071 -.105	
FUN	H6					.206*** -.061		
PRA	H7					.289*** -.070		
PRO	H8					.428*** -.061		
QUA	H9							.694*** -.005
EXP		.171 -.119	.120 -.106	.055 -.111	.248** -.116	.156** -.077	.0356** -.122	0.116 -.102
GEN		.152 -.125	.195* -.112	.280** -.117	.112 -.122	.101 -.080	-.0015 -.128	0.065 -.105
Adjusted R ²		.319	.453	.406	.353	.703	0.286	0.483
Maximum VIF		3.132	3.132	3.131	3.132	3.38	3.132	1.006

*** p<0.01, ** p<0.05, * p<0.10, ^aBeta coefficients with standard errors in parenthesis

effectiveness ($\beta = .021$) and audit survival ($\beta = .149$). These results contrast with Bobek et al. (2012) pointed out that audit learning in the term of team communication, audit negotiation, and usefulness of prior auditing experience are significantly related to successful resolution of audit challenges. Therefore, H3a, H3b, and H3d, and 3e are supported; however, H3c and H3d are not supported.

Fourthly, the findings show that the audit dynamic improvement of TAs significantly affects audit practice excellence ($\beta = .220$, $p < .01$), audit

procedure effective-ness ($\beta = .167$, $p < .10$) and audit survival ($\beta = .324$, $p < .01$). The results of this exploratory study are consistent with those reported by Kent, Munro, and Gambling, 2006. On the other hand, the findings illustrate that there are no differences between audit function efficiency of TAs, which are not positively affected by audit dynamic improvement ($\beta = .015$). Additionally, the findings also indicate that the audit dynamic improvement of TAs significantly affects audit quality ($\beta = .029$). Due to professional competency stem from accumulated audit

experience and continuing development, the short-run improvement cannot boost audit practice excellence (Plan et al., 2017). Therefore, H4b, H4c and H4e are supported; however, H4a and H4d are not supported.

Finally, the findings show that the audit environmental understanding of TAs significantly affect audit practice excellence ($\beta = .237, p < .01$), audit procedure effectiveness ($\beta = .187, p < .10$), and audit quality ($\beta = .227, p < .05$). However, the findings reveal that the audit environmental understanding of TAs does not affect audit function efficiency ($\beta = .163$). Likewise, there are similarities between the audit survival of TAs, which are not positively affected by audit environmental understanding ($\beta = .071$). Owing to the understanding of circumstances, CPAs and TAs are concerned with rapid changes in regulations and related laws. These results were consistent with Gaganis et al. (2013) who assert that the high quality of audit outcome stems from compliance with financial and auditing requirements, and capital requirements. Therefore, H5b, H5c and H5d are supported; however, H5a and H5e are not supported.

Regarding to the evidence Table 3 indicates that audit adaptation competency consequences, including audit function efficiency ($\beta = .206, p < .01$), audit practice excellence ($\beta = .289, p < .01$), and audit procedure effectiveness ($\beta = .428, p < .01$), have significant and positive relationships on audit quality. The results of this exploratory study confirm previous reports (Francis, 2011; Christensen et al., 2016; Ningrum & Wedari, 2017) that indicated that audit quality is the result of audit function efficiency, audit practice excellence and audit procedure efficiency. Furthermore, the results of TAs also show that audit quality has a significant and positive relationship with audit survival ($\beta =$

.694, $p < .01$). This finding is in keeping with the prior studies of Stice et al. (2017) in that high quality audit related with a lower likelihood of client restatement, fewer client abnormal accruals, and a higher likelihood of a client receiving a going concern opinion which are stemmed from conformance of products, services and processes to given requirements and standards. Bills et al., 2016 point out that higher audit quality are not realized immediately and rapid growth temporarily after one year. Due to continuing high audit quality, professional auditors have continued clients, generate new clients and have offered other services (Weber et al., 2008). Therefore, H6, H7, H8 and H9 are supported.

Pertaining to the control variables, the results do not determine the relationships of each factor to the gender as audit function efficiency ($\beta = -.152$), audit practice excellence ($\beta = -.195, p > .10$), audit procedure effectiveness ($\beta = -.280, p > .05$), audit quality ($\beta = -.112$) and audit survival ($\beta = .101$). On the other hand, audit experience impact on audit quality ($\beta = .248, p > .05$), and audit survival ($\beta = .365, p > .05$). In summary, gender does not impact on audit survival, however, audit experience have significant and positive relationships on audit quality and audit survival.

5. Conclusion and Recommendations

Comprehensively, professional auditors should have audit adaptation competency to continue the significant role of protecting and serving the public interest under uncertainty and a rapidly changing environment. Because of the globalization of business has rigorously increased the demand for reliable and high-quality financial reporting within countries and across borders, audit committees, management, investors, and other stakeholders all expect compliance with recognized international standards in auditing in global business environment.

Therefore, this research aims to investigate the effects of audit adaptation competency to audit survival of TAs in Thailand. Furthermore, the research provide five dimensions of audit adaptation competency.

Our results can be summarized as follows. First, the finding indicates that audit adaptation competency is positively associated with audit function efficiency, audit practice excellence, audit procedure effectiveness. Principally, three dimensions of audit adaptation competency comprise audit change education, audit learning continuity, and audit environmental understanding. Our finding is consistent with previous studies (Francis, 2011; Christensen et al., 2016 & Ningrum et al., 2017) indicating audit quality to be the result of audit function efficiency, audit practice excellence and audit procedure efficiency. Second, the result demonstrates that all of audit adaptation consequences including audit function efficiency, audit practice excellence, and audit procedure effectiveness are positively associated with audit quality and audit survival regarding the results TAs. This finding is in keeping with the prior studies of Alderman & Brown (2005) and Bills et al. (2016) in that high audit quality which is consistent with professional standards lead to grow and survive the audit market in the long-run. Overall, our results suggest that both regulators and audit firms should pay more attention to the behavior of TAs in terms of adaptation competency. They are more likely to be economically based on particular clients, and effecting to compromise audit quality.

Furthermore, the suggestions for the future research direction should include moderating variables to enhance the relationship among five dimensions of audit adaptation competency, its antecedents and consequences. Additionally, the psychological variables can be improved the ability to efficiently adjust to new

significant professional standards and regulations. Furthermore, the future research can be studied in a new context, location and/or culture.

References

- Aaker, A., Kumar, V., & Day, S. (2001). *Marketing Research*. NY: John Wiley & Sons.
- Alderman, G., & Brown, R. (2005). Can quality assurance survive the market? Accreditation and audit at the crossroads. *Higher Education Quarterly*, 59(4), 313-328.
- Bame-Aldred, C. W., Brandon, D. M., Messier Jr, W. F., Rittenberg, L. E., & Stefaniak, C. M. (2012). A summary of research on external auditor reliance on the internal audit function. *Auditing: A Journal of Practice & Theory*, 32(sp1), 251-286.
- Bhattacharjee, S., Maletta, M., & Moreno, K. (2017). Audit Reviewers' Judgments in Multiple Client Audit Environments. *Behavioral Research in Accounting*.
- Bills, K. L., Swanquist, Q. T., & Whited, R. L. (2016). Growing pains: Audit quality and office growth. *Contemporary Accounting Research*, 33(1), 288-313.
- Biloslavo, R., & Trnavčević, A. (2007). Knowledge management audit in a higher educational institution: a case study. *Knowledge and Process Management*, 14(4), 275-286.
- Blay, A. (2005). Independence threats, litigation risk, and the auditor's decision process. *Contemporary Accounting Research*, 22(4): 759-789.

Bobek, D. D., Daugherty, B. E., & Radtke, R. R. (2012). Resolving audit engagement challenges through communication. *Auditing: A Journal of Practice & Theory*, 31(4), 21-45.

Christensen, B. E., Glover, S. M., Omer, T. C., & Shelley, M. K. (2016). Understanding audit quality: Insights from audit professionals and investors. *Contemporary Accounting Research*, 33(4), 1648-1684.

Chu, L., & Zhang, P. (2016). An Analysis of Auditor's Learning Costs and Non-Audit Services on Audit Quality.

DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of accounting and economics*, 3(3), 183-199.

Fogarty, T. J. & Rigsby, J. T. (2010). A reflective analysis of the "new audit" and the public interest: The revolutionary innovation that never came. *Journal of Accounting & Organizational Change*, 6(2): 300-329.

Francis, J. R. (2011). A framework for understanding and researching audit quality. *Auditing: A journal of practice & theory*, 30(2), 125-152.

Gardner, T. A. (2017). Exploring the Importance of Soft Skills Training for Accountants (Doctoral dissertation, Walden University).

Gaganis, C., F. Pasiouras, & Spathis, C. (2013). Regulations and Audit Opinions: Evidence from EU Banking Institutions. *Computational Economics*, 41(3), 387-405.

Glover, S. M., Prawitt, D. F., & Drake, M. S. (2014). Between a Rock and a Hard Place: A Path Forward for Using Substantive Analytical Procedures in Auditing Large P&L Accounts: Commentary and Analysis. *Auditing: A Journal of Practice & Theory*, 34(3), 161-179.

Hurt, R. K. (2010). Development of a scale to measure professional skepticism. *Auditing: A Journal of Practice & Theory*, 29(1), 149-171.

International Federation of Accountants (IFAC). (2012). International auditing and assurance standards board: Identifying and assessing the risks of material misstatement through understanding the entity and its environment. *International auditing standard 315 (revised) IFAC*, New York.

Ihendinihu, J. U. & Robert S.N. (2014). Role of Audit Education in Minimizing Audit Expectation Gap (AEG) in Nigeria. *International Journal of Business and Management*, 9(2): 203-211.

Lai, K. W. (2009). Does audit quality matter more for firms with high investment opportunities?. *Journal of Accounting and Public Policy*, 28(1), 33-50.

Margheim, L., Hora, J. A., & Pattison, D. (2010). Educational Competencies That Mid-Sized CPA Firms Value In Their Professional Accounting Staff. *American Journal of Business Education*, 3(6), 69.

McKnight, C. A. & Wright, W. F. (2011). Characteristics of Relatively High-Performance Auditors. *Audit: A Journal of Practice & Theory*, 30(1): 191-206.

Musig, Pornpun & Ussahawanitchakit, Phapruek. (2011). Dynamic Audit Competency and the Antecedents and

Consequences: Evidence from Tax Auditors in Thailand. *International Journal of Business Research*, 11(3): 47-75.

Ningrum, G. S., & Wedari, L. K. (2017). Impact of Auditor's Work Experience, Independence, Objectivity, Integrity, Competency and Accountability on Audit Quality. *Journal Economics & Business Atmajaya Indonesia*, 1(1), 19-33.

Nunnally, J. C., & Bernstein, I. H. (1994). Validity. *Psychometric theory*, 99-132.

Palmer, K. N., Ziegenfuss, D. E. & Pinsker, R. E. (2004). International knowledge, skills, and abilities of auditors/accountants: Evidence from recent competency studies. *Managerial Auditing Journal*, 19 (7): 889-896.

Palmrose, Z. V. (1988). 1987 Competitive Manuscript Co-Winner: An analysis of auditor litigation and audit service quality. *Accounting review*, 55-73.

Perreault, S., Kida, T., & David Piercey, M. (2017). The Relative Effectiveness of Simultaneous versus Sequential Negotiation Strategies in Auditor-Client Negotiations. *Contemporary Accounting Research*, 34(2), 1048-1070.

Phosrichan, N. and Ussahawanitchakit, P. (2013). Audit Creativity, Best Audit Practice and Audit Goal Achievement: Evidence from Tax Auditors in Thailand. *Journal of International Finance Studies*, 13(3), 83-94.

Plant, K., Barac, K., & De Jager, H. (2017). Developing early career professional auditors at work: what are the determinants

of success?. *Meditari Accountancy Research*, (just-accepted), 00-00.

Public Company Accounting Oversight Board (PCAOB). (2010). Identifying and assessing risks of material misstatement. Auditing standard no. 12 PCAOB, Washington.

Rivera, D. E., Villar, A. S., & Marrero, J. I. S. (2017). Auditors Selection and Audit Team Formation in Integrated Audits. *Calitatea*, 18(157), 65.

Rodgers, W., Mubako, G. N., & Hall, L. (2017). Knowledge management: The effect of knowledge transfer on professional skepticism in audit engagement planning. *Computers in Human Behavior*, 70, 564-574.

Schultz, J. J., Bierstaker, J. L., & 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.

Smith, K. J., & Emerson, D. J. (2017). An analysis of the relation between resilience and reduced audit quality within the role stress paradigm. *Advances in Accounting*, 37, 1-14.

Simunic, D. A., Ye, M., & Zhang, P. (2017). The joint effects of multiple legal system characteristics on auditing standards and auditor behavior. *Contemporary Accounting Research*, 34(1), 7-38.

Stice, D., Stice, H., & White, R. M. (2017). Opening the Black Box of Audit Quality: The Effect of Individual Auditor Quality on Audit Outcomes.

Weber J., Willenborg M. & Zhang J.
(2008). Does Auditor Reputation Matter?
The Case of KPMG Germany and
ComROAD AG. *Journal of Accounting
Research*, 46(4): 941-972.

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