

Internal Audit Outsourcing and Sustainable Audit Success: An Empirical Investigation of Listed Companies in The Stock Exchange of Thailand

การจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายในและความสำเร็จของการตรวจสอบที่ยั่งยืน: ตรวจสอบเชิงประจักษ์ของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย

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บทคัดย่อ

การจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายในได้รับความสนใจมาเป็นเวลานาน การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อต้องการตรวจสอบตัวแปรของการจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายในที่มีต่อความสำเร็จของการตรวจสอบที่ยั่งยืน โดยมีตัวแปรเชื่อมกลางที่สอดคล้องระหว่างตัวแปรต้นและตัวแปรตาม ประกอบด้วยความน่าเชื่อถือรายงานทางการเงิน ประสิทธิภาพการตรวจสอบและความสำเร็จของการกำกับดูแลกิจการ นอกจากนี้ ยังมีตัวแปรการเรียนรู้อย่างมืออาชีพซึ่งเป็นตัวแปรแทรกซ้อนนี้เพื่อตรวจสอบภายในของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย โดยใช้แบบสอบถาม

ในการเก็บข้อมูลจากผู้อำนวยการตรวจสอบภายใน จำนวน 136 คน ซึ่งเป็นบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย วิเคราะห์การถดถอยแบบ OLS โดยทดสอบจากสมมติฐาน ผลการศึกษา พบว่า ตัวแปรทั้งหมดของการจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายใน มีผลกระทบเชิงบวกอย่างมีนัยสำคัญต่อตัวแปรเชื่อมกลางทั้งสามตัวแปร รวมถึงตัวแปรความสำเร็จของการตรวจสอบที่ยั่งยืน โดยเฉพาะอย่างยิ่ง ความน่าเชื่อถือรายงานทางการเงินมีผลกระทบเชิงบวกอย่างมีนัยสำคัญกับตัวแปรประสิทธิผลการตรวจสอบ และตัวแปรประสิทธิผลการตรวจสอบก็ยิ่งส่งผลกระทบต่อตัวแปรความสำเร็จของการกำกับดูแลกิจการ ตัวแปรแทรก ได้แก่ การเรียนรู้ อย่างมืออาชีพมีความสัมพันธ์เชิงบวกอย่างมีนัยสำคัญกับตัวแปรการจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายใน แต่มีปฏิสัมพันธ์เชิงลบกับตัวแปรการบริหารความเสี่ยงที่มีประสิทธิภาพ ข้อเสนอแนะชี้ให้เห็นว่าการจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายในยังเป็นโอกาสที่ดีสำหรับวิชาชีพบัญชี ประโยชน์ที่ได้รับก่อให้เกิดความเข้าใจในบทบาทการให้บริการการตรวจสอบภายใน ช่วยให้บริษัทต่าง ๆ มีมาตรฐานในการตรวจสอบอย่างเข้มข้น การวิจัยในอนาคตควรเก็บข้อมูลในเชิงลึกเพื่อสะท้อนให้เห็นถึงแนวคิดที่แท้จริงของการจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายใน

คำสำคัญ: การจัดจ้างจากภายนอกกิจการเพื่อตรวจสอบภายใน ความสำเร็จของการตรวจสอบที่ยั่งยืน การเรียนรู้อย่างมืออาชีพ

Abstract

Internal audit outsourcing has been the focus of much attention in recent years. This study is to investigate the effects of internal audit outsourcing on sustainable audit success via the mediating influences of operational effectiveness, which include financial reporting reliability, audit effectiveness, and corporate governance achievement. In addition, professional learning is the moderating variable of the relationship between internal audit outsourcing and operational effectiveness of Listed Companies in The Stock Exchange of Thailand (SET), according to data from a survey administered to internal audit directors substituting at The Stock Exchange of Thailand. Based on data from 136 persons, the results from the Ordinary Least Squares (OLS) regression analysis employed to examine all hypotheses indicated that most of the variables from the outsourced internal audit were positively significant, and related to factors relevant to financial reporting reliability, audit effectiveness, corporate governance achievement and sustainable audit success. Specifically, evidence was found that financial reporting reliability had a positive significance to audit effectiveness, and audit effectiveness also had a positive significance to the corporate governance achievement. Additionally, professional learning is positively related to internal audit

outsourcing, but interaction showed a negative relationship to efficiency risk management. These results suggest that internal audit outsourcing is an expanding business opportunity for professional accountants. This study contributes to our understanding of internal audit services and it allows companies to set a benchmark in internal auditing. However, future research is needed to collect in-depth data so as to reflect more accurately the actual concept of internal audit outsourcing.

Keywords: Internal Audit Outsourcing, Sustainable Audit Success, Professional Learning

Introduction

Effective internal control is a foundation for the safe and sound operation of companies. An important element in assessing the effectiveness of the internal control system is an internal audit function. Each company should have an internal audit function that is appropriate to its size and the scope of its activities. In addressing various quality and resource issues, many companies have been engaging independent public accounting firms and other outside professionals (outsourcing vendors) in recent years to perform work that traditionally has been done by internal auditors. These arrangements are often called “internal audit outsourcing,” “internal audit assistance,” “audit co-sourcing,” and “extended audit services” (hereafter collectively referred to as outsourcing).

Outsourcing may be beneficial to a company if it is properly structured, carefully conducted, and prudently managed. Furthermore, a company needs to ensure that these arrangements with outsourcing vendors have

been responsible for maintaining an effective system of internal control and for overseeing the internal audit function (Schneider, 2009: 73). Accordingly, directors and senior management should have reasonable assurance that the system of internal control prevents or detects significant inaccurate, incomplete, or unauthorized transactions, deficiencies in the safeguarding of assets, unreliable financial reporting (which includes regulatory reporting), and deviations from laws, regulations, and the institution’s policies.

Internal audit outsourcing is defined as being responsible for the results of the audit work, including finding, conclusions, and recommendations. Moreover, internal audit outsourcing can be an arrangement that enhances the quality of the control environment by obtaining the services of a vendor with the knowledge and skills to critically assess, and with strong technical expertise, to examine the internal control systems. In this study internal audit outsourcing consists of three types, namely creating information richness,

efficiency risk management, and sophisticated technical proficiency. Accordingly, sustainable audit success is something that is necessary and needed by every firm, though difficult to gain. Prior researchers argue that performance evaluation can provide a contribution to the companies' stability through usefulness of the information process coupled with high technological management (Abdolmohammadi, Burnaby, and Hass, 2006: 816). However, internal audit outsourcing can directly influence sustainable audit success and also other programs that take precedence to continue providing operation effectiveness. Therefore, financial reporting reliability, audit effectiveness, and corporate governance achievement reflect operational effectiveness to enhance audit success. Furthermore, the results of internal audit outsourcing is useful for providing guidance, recommendations and helping with valuable information to manage, to understand the operation and bring about value-added changes that support improvement through sustainable audit success and stability of the company.

Research Objectives

The present study examines the extent and the determinants of internal audit outsourcing in relation to what needs to be investigated, hence the specific research questions are: (1) How do internal audit outsourcing relate to sustainable audit success and with influence

financial reporting reliability, audit effectiveness, and corporate governance achievement? (2) How do financial reporting reliability, audit effectiveness, and corporate governance achievement have an effect on sustainable audit success? (3) How does financial reporting reliability have an effect on audit effectiveness, while audit effectiveness has an effect on corporate governance achievement? (4) How does professional learning moderate the relationship between internal audit outsourcing and operational effectiveness?

Theoretical Foundation

This study uses two theories to explain the phenomena of internal audit outsourcing by integrating the dynamic capability view of firms and the contingency theory, to make this conceptual model clearly understood.

Firstly, based on the dynamic capability view of firms, internal audit outsourcing reflects the capability of the organization as a tool of operation to improve management efficiency and effectiveness and help the organization achieve its objectives and goals.

Correspondingly, internal auditing is a dynamic profession that should continuously develop mechanisms for the function of internal auditing to increase their effectiveness and add value to their organization's long-term success in a dynamic environment (Verschoor, 2008: 46). In this study, the dynamic capability

view of firms is applied to describe the relationships between internal audit outsourcing and operational effectiveness that lead to sustainable audit success. The value of internal audit outsourcing can help firms to achieve their stated objectives, the stakeholder’s confidence, competitive advantage management, and audit effectiveness.

Secondly, the contingency theory offers an explanation in an organizational context as moderator variables (Professional Learning) for internal audit outsourcing.

Literature Review and Hypotheses Development

The hypothesis is based on the literature review and two theories to explain the phenomena of internal audit outsourcing by integrating the dynamic capability view of firms and the contingency theory, making this conceptual model clearly understood. A conceptual model is presented in Figure 1 below:

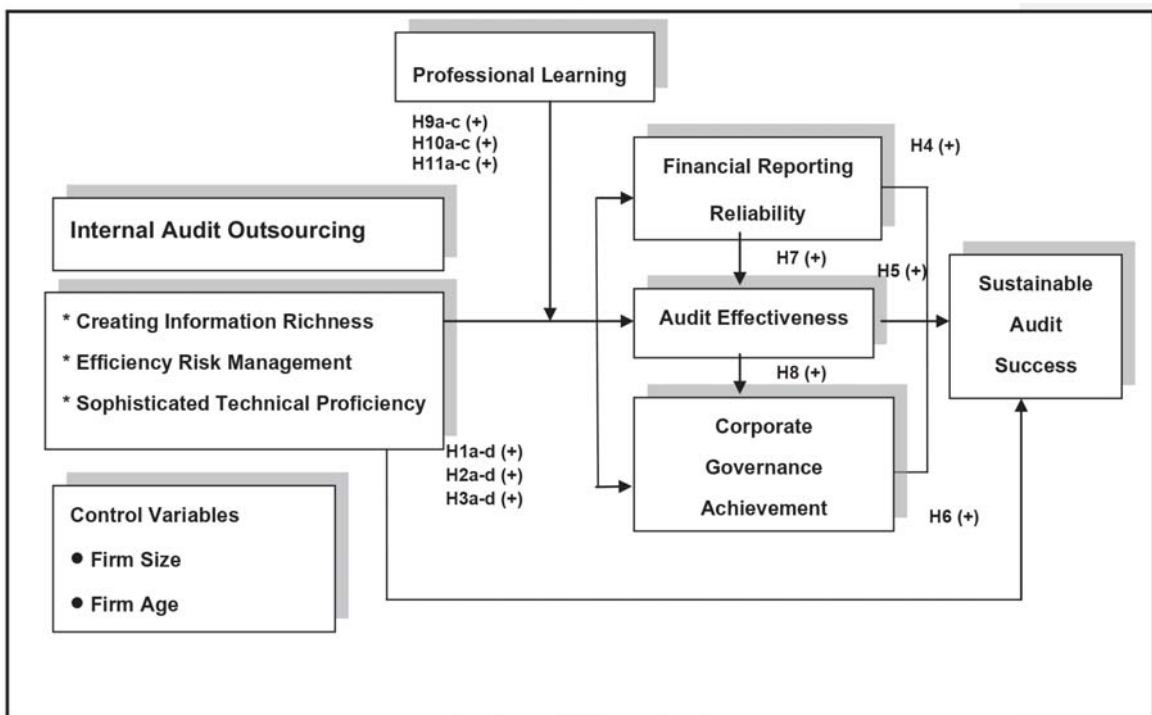


Figure 1 Conceptual Model of Internal Audit Outsourcing and Sustainable Audit Success: An Empirical Investigation of Listed Companies in SET

1. Internal Audit Outsourcing

Internal audit outsourcing is a process designed to provide reasonable assurance that the institution will achieve the following internal control objectives, such as efficient and effective operations, including safeguarding of assets, reliable financial reporting, and compliance with applicable laws and regulations.

1.1 Creating Information Richness

Creating information richness is the ability of auditors to provide the amount or wealth of information to a customer's satisfaction (Zhang, Zhou, and Zhou, 2007: 305). There are many previous studies identifying the creation of information richness as a systematic process used to acquire, store, maintain, manipulate, analyze, retrieve, and validate data needed by organizations about its resources, activities, and organization unit characteristics (Smithson, and Simkins, 2005: 12), data that is used for decision-making within companies. Thus, the hypothesis emerged for testing as below:

Hypothesis 1: The higher the creation of information richness is, the more likely that companies will gain greater (a) financial reporting reliability, (b) audit effectiveness (c) corporate governance achievement, and (d) sustainable audit success.

1.2 Efficiency Risk Management

Efficiency risk management refers to a practice of systematically selecting effective approaches for minimizing the effect of threat realization to the organization about the audit function (Curtis, and Payne, 2008: 108). In businesses, efficient audit risk management entails organized activity to manage uncertainty and threats, and involves people following procedures and using tools in order to ensure conformance with risk-management policies. Thus, the hypothesis emerged for testing as below:

Hypothesis 2: The higher the efficiency risk management is, the more likely that companies will gain greater (a) financial reporting reliability, (b) audit effectiveness, (c) corporate governance achievement, and (d) sustainable audit success.

1.3 Sophisticated Technical Proficiency

Sophisticated technical proficiency is defined as information that leads to new technical elements, introduced into an organization's management. It can be specifically related to strategies, structure, system, or people in the organization. Also, it is acquisition of new innovations that require new ways of managing and organizing (Lord, and DeZoort, 2001: 220), consistent with administrative technology that pertains to the organizational

structure and audit processes. Thus, the hypothesis emerged for testing as below:

Hypothesis 3: The higher the sophistication technical proficiency is, the more likely that companies will gain greater (a) financial reporting reliability, (b) audit effectiveness, (c) corporate governance achievement, and (d) sustainable audit success.

2. Mediating of the relationship between Internal Audit Outsourcing and Sustainable Audit Success

The consequence in this study is operational effectiveness, which consists of financial reporting reliability, audit effectiveness, and corporate governance achievement.

2.1 Financial Reporting Reliability

Financial reporting reliability refers to the information in the financial statements that are free from material error and bias, and can faithfully represent actual events and transactions. As a result, users receive correct data, complete and timely information. According to Zhang, Zhou, and Zhou (2007: 308), financial reporting reliability is the factor for making decisions regarding the relationship between the disclosures of the internal audit report. Thus, the hypotheses were proposed as follows:

Hypothesis 4: The company with the stronger financial reporting reliability will

potentially achieve greater sustainable audit success.

Hypothesis 7: The company with the stronger financial reporting reliability will potentially achieve greater audit effectiveness.

2.2 Audit Effectiveness

Audit effectiveness is the purpose of the management audit, that is an improvement in control functions to achieve effectiveness and economy of overall organizational operation and strategy. The control processes are related to ensure that an organization obtains effective planning and good coordination of the organization's activities (Dixon, Mousa, and Woodhead, 2004: 122). Thus the hypotheses were proposed as follows:

Hypothesis 5: The company with the stronger audit effectiveness will potentially achieve greater sustainable audit success.

Hypothesis 8: The company with the stronger audit effectiveness will potentially achieve greater corporate governance success.

2.3 Corporate Governance Achievement

The corporate governance achievement is the companies' system to direct and control business practice, which emphasizes rights and responsibility of the stakeholder, including securing reliable information disclosures that will be fully transparent, and based on

integrity and accountability (Nielsen, and Madsen, 2009: 849). Thus, the hypothesis was proposed as follows:

Hypothesis 6: The company with the stronger corporate governance achievement will potentially achieve greater sustainable audit success.

3. Moderating effects of the relationship between the internal audit outsourcing and operational effectiveness

Professional Learning refers to skill development via training, pursuing relevant news in tasks, and to communication or interaction with the external environment (Mcknight, and Wright, 2011: 195). Thus, the hypotheses were proposed as follows:

Hypothesis 9: The greater the professional learning, the more likelihood of a stronger relationship between internal audit outsourcing and financial reporting reliability.

Hypothesis 10: The greater the professional learning, the more likelihood of a stronger relationship between internal audit outsourcing and audit effectiveness.

Hypothesis 11: The greater the professional learning, the more likelihood of a stronger relationship between internal audit outsourcing and corporate governance achievement.

4. Research Methods

4.1 Sample Selection and Data Collection Procedure

According to relevant literature, Listed Companies in SET are appropriate to use as the population, and the internal audit director of each company is appropriate to use as the key participant of this study. Database is drawn from The Stock Exchange of Thailand on its website: <http://www.set.or.th>. Based on this database, there are all 637 Listed Companies as of September 21, 2013. Thus, the sample is 637 Listed Companies.

A mail survey procedure via a questionnaire was used for data collection. Of the surveys completed and returned, only 136 were usable. The response rate was 21.35%. According to Aaker, Kumar, and Day (2011: 84), the response rate of this study is considered acceptable.

4.2 Questionnaire Development and Variable Measurements

4.2.1 Questionnaire Development

In this study the questionnaire consists of six parts. Part one asks for personal information and part two generates information and details of the companies. Part three through five are related to evaluating each of the constructs in the conceptual model. These parts are designed as a five-point Likert scale,

ranging from 1 (strongly disagree) to 5 (strongly agree). In the third part, all questions deal with the measurement of internal audit outsourcing. The questions in the fourth part measure the consequences of internal audit outsourcing, which operate effectively with sustainable audit success. Professional Learning is the external factor in the fifth part. Finally, an open-ended question for suggestions regarding internal audit outsourcing and opinions is included in the seventh part.

4.2.2 Variable Measurement

The questionnaire as the instrument of this study was constructed based on each construct's definition and related literature. Before using it to collect data, the questionnaire was verified by two academic experts and adjusted where necessary to ensure an effective instrument. Moreover, a pretest method was conducted to increase the assertive measure. As a result, the instrument verifications ensure the validity and reliability of the questionnaire that was designed to measure all constructs in the conceptual model of this study.

4.2.2.1 Dependent Variables

Sustainable Audit Success is defined as a good auditor-client relationship, enhancement of the opportunity to get new clients, and achievement of their objectives or goals for the long-term. This construct is developed as a new scale based on its definition and includes four items.

4.2.2.2 Independent Variables

The main construct of this study is the *internal audit outsourcing* that encompasses three dimensions, namely creating information richness, efficiency risk management, and sophisticated technical proficiency. All of the dimensions represent a new scale, and they were measured by the four items below:

Creating information richness as one of the modules for internal audit outsourcing refers to the ability of internal audit outsourcing to provide the depth of information, detail of services, and company to customer's decisions and customer's satisfaction.

Efficiency risk management refers to the ability of the audit plan to produce details covering the audit objectives and audit procedures to be performed linked to an efficient audit and business goals.

Sophisticated technical proficiency refers to the choice of technology tools that help internal audit functions achieve their objective, including improving the effectiveness of risk management, internal control and the governance process.

4.2.2.3 Mediating Variables

Financial Reporting Reliability is measured by a four-item scale developed with some modifications from prior research related to the perceptions of relative users' acceptance

of the quality of the public information presentation, the understanding of the actual economic event and the completeness of the information according to the General Accepted Accounting Principles (GAAP).

Audit effectiveness is defined as achieving the audit's objective by gathering sufficient and appropriate audit evidence in order to form a reasonable opinion regarding the financial statement's compliance with generally accepted accounting principles (GAAP).

Corporate governance achievement refers to completely achieving the corporate governance objectives of an organization, which includes fairness, transparency, accountability, and responsibility. This construct is developed as a new scale and includes four items.

4.2.2.4 Moderating Variable

Professional Learning is measured through three items relating to (1) behavior of skill development training, (2) pursuing relevant news in accounting and audit tasks, (3) and to communicate or interact with the external environment (Brewster, 2011: 920). This construct is an adopted scale with four items.

4.2.2.5 Control Variable

The firm size determines the extent and frequency of internal audit activities. In particular, a large and complex firm has difficulty managing its systems and controls. In this study, firm size is defined as the total assets of the invested firm. Therefore, the firm size is measured by its total assets.

The firm age is the period of time the firm has been in business. The empirical evidence suggests that there is a clear relationship between firm age and growth. In this study, firm age is measured by the number of years a firm has been in operation.

4.3 Reliability and Validity

This study tests the validity of the instrument to confirm that the set of measures accurately represents the concept of study. The factor loading is considered high convergent validity with a minimum; each construct is tested and all factor loadings should be greater than the 0.40 cut-off and statistically significant (Nunnally and Berstein, 1994). The Cronbach's Alpha was used to examine the multi-item list in order to measure the reliability of data, that to be accepted must show a minimum greater than 0.70 (Hair, et al., 2006: 325). In Table 1, the results for factor loadings shows the construct validity. Cronbach's Alpha shows the reliability of all variables was accepted.

Table 1 Results of Measure Validation

Variables	Factor	Cronbach's Alpha
	Loadings	
Sustainable Audit Success (SAS)	0.716-0.891	0.839
Creating Information Richness (CIR)	0.723-0.887	0.848
Efficiency Risk Management (ERM)	0.843-0.915	0.916
Sophisticated Technical Proficiency (STP)	0.827-0.923	0.920
Financial Reporting Reliability (FRR)	0.844-0.912	0.895
Audit Effectiveness (AE)	0.762-0.904	0.842
Corporate Governance Achievement (CGA)	0.751-0.841	0.784
Professional Learning (PL)	0.721-0.804	0.754

4.4 Statistical Techniques

Regression analysis was employed to analyze the relationship between a dependent variable and independent variables. The Ordinary Least Squares (OLS) regression analysis was used to test the hypotheses. Equation models were formulated from the following 7:

$$\text{Equation 1: FRR} = \alpha_1 + \beta_1 \text{CIR} + \beta_2 \text{ERM} + \beta_3 \text{STP} + \beta_4 \text{PL} + \beta_5 (\text{CIR*PL}) + \beta_6 (\text{ERM*PL}) + \beta_7 (\text{STP*PL}) + \beta_8 \text{SIZE} + \beta_9 \text{AGE} + \varepsilon_1$$

$$\text{Equation 2: AE} = \alpha_2 + \beta_{10} \text{CIR} + \beta_{11} \text{ERM} + \beta_{12} \text{STP} + \beta_{13} \text{PL} + \beta_{14} (\text{CIR*PL}) + \beta_{15} (\text{ERM*PL}) + \beta_{16} (\text{STP*PL}) + \beta_{17} \text{SIZE} + \beta_{18} \text{AGE} + \varepsilon_2$$

$$\text{Equation 3: CGA} = \alpha_3 + \beta_{19} \text{CIR} + \beta_{20} \text{ERM} + \beta_{21} \text{STP} + \beta_{22} \text{PL} + \beta_{23} (\text{CIR*PL}) +$$

$$\beta_{24} (\text{ERM*PL}) + \beta_{25} (\text{STP*PL}) + \beta_{26} \text{SIZE} + \beta_{27} \text{AGE} + \varepsilon_3$$

$$\text{Equation 4: SAS} = \alpha_4 + \beta_{28} \text{CIR} + \beta_{29} \text{ERM} + \beta_{30} \text{STP} + \beta_{31} \text{SIZE} + \beta_{32} \text{AGE} + \varepsilon_4$$

$$\text{Equation 5: SAS} = \alpha_5 + \beta_{33} \text{FRR} + \beta_{34} \text{AE} + \beta_{35} \text{CGA} + \beta_{36} \text{SIZE} + \beta_{37} \text{AGE} + \varepsilon_5$$

$$\text{Equation 6: AE} = \alpha_6 + \beta_{38} \text{FRR} + \beta_{39} \text{SIZE} + \beta_{40} \text{AGE} + \varepsilon_6$$

$$\text{Equation 7: CGA} = \alpha_7 + \beta_{41} \text{AE} + \beta_{42} \text{SIZE} + \beta_{43} \text{AGE} + \varepsilon_7$$

5. Research Results and Discussion

5.1 Respondent Characteristics and Descriptive Statistics

The details of respondent characteristics of Listed Companies in SET are described in Table 2 below:

Table 2 Respondents Characteristics

Characteristics	N	Percentage
1. Industrial category		
Agro and Food Industry	7	5.15
Consumer Products	12	8.82
Financials	23	16.91
Industrials	20	14.71
Property & Construction	15	11.03
Resources	9	6.62
Services	38	27.94
Technology	10	7.35
Other (MAI)	2	1.47
Total	136	100
2. Authorized capital of the company		
Less than 1,000,000,000 Baht	75	55.15
1,000,000,000 - 5,000,000,000 Baht	34	25.00
5,000,000,001 – 10,000,000,000 Baht	8	5.88
More than 10,000,000,000 Baht	19	13.97
Total	136	100
3. Total assets of the company		
Less than 10,000,000,000 Baht	83	61.03
10,000,000,000 - 50,000,000,000 Baht	18	13.24
50,000,000,001 – 100,000,000,000 Baht	6	4.41
More than 100,000,000,000 Baht	29	21.32
Total	136	100
4. Debt to equity ratio		
Less than 2 times	89	65.44
2 - 3 times	28	20.59
4 - 5 times	6	4.41
More than 5 times	13	9.56
Total	136	100

Table 2 Respondents Characteristics (cont.)

Characteristics	N	Percentage
5. The period of time in proceeding business		
Less than 5 years	6	4.41
5-10 years	17	12.50
11-15 years	18	13.24
More than 15 years	95	69.85
Total	136	100
6. The period of time registers in The Stock Exchange of Thailand		
Less than 5 years	23	16.91
5-10 years	35	25.74
11-15 years	19	13.97
More than 15 years	59	43.38
Total	136	100

Table 2 presents the demographic characteristics of the 136 company respondents. Services (27.94%) represented the majority company in the industrial category of respondents. In addition, approximately 55.15% of company respondents have an authorized capital of less than 1,000,000,000 Baht. A large number of company respondents have total assets of less than 10,000,000,000 Baht (61.03%). Furthermore, most company respondents have a debt to equity ratio of less than 2 times (65.44%). The length of time in business by company respondents is more than 15 years (69.85%) and the length of time

registered with The Stock Exchange of Thailand is more than 15 years (43.38%).

5.2 Hypotheses Testing and Results

Descriptive statistics and the correlation matrix for all variables is shown in Table 3. Correlation coefficients of independent variables range from 0.273-0.723. With regard to potential problems relating to multicollinearity, variance inflation factors (VIFs) are used to test the intercorrelations between independent variables. The VIFs range from 2.547-3.258, well below the cut-off value of 10 (Hair et al., 2006: 239). Consequently, there are no significant multicollinearity problems in this study.

Table 3 Descriptive Statistics and Correlation Matrix

Variables	CIR	ERM	STP	FRR	AE	CGA	SAS	PL	FS	FA
Mean	3.956	4.041	4.034	4.029	4.188	3.850	4.106	3.859	4.103	4.103
S.D.	.621	.519	.540	.532	.508	.670	.535	.643	.628	.628
CIR	1.000									
ERM	.511**	1.000								
STP	.549**	.723**	1.000							
FRR	.526**	.623**	.687**	1.000						
AE	.522**	.668**	.718**	.579**	1.000					
CGA	.547**	.603**	.675**	.583**	.621**	1.000				
SAS	.618**	.606*	.631**	.618**	.680**	.615**	1.000			
PL	.718**	.634**	.688**	.595**	.621**	.710**	.680**	1.000		
FS	.426**	.580*	.492**	.449**	.638*	.553*	.576*	.494**	1.000	
FA	.273**	.284*	.286**	.365**	.277*	.314*	.494**	.478**	.298**	1.000

*P<.10, **P<.05

Table 4 presents the results of OLS regression analysis of the relationships between internal audit outsourcing on financial reporting reliability, audit effectiveness, corporate governance achievement and sustainable audit success (Hypotheses 1-3) that follow from equations 1-4. Internal audit outsourcing predicted that they would have a positive influence on operational effectiveness and sustainable audit success. Accordingly, the evidence indicates that creating information richness has a significant positive effect on financial reporting reliability (Model 1: $b_1 = 0.417$, $p < 0.05$), audit effectiveness (Model 2: $b_{10} = 0.362$, $p < 0.05$), corporate governance achievement (Model 3: $b_{19} = 0.380$, $p < 0.05$),

and sustainable audit success (Model 4: $b_{28} = 0.254$, $p < 0.05$). These findings support the concept that if internal auditor outsourcing is used to assess the overall situation and to look around, the audit work evaluation will be a success (Sarens, Beelde, and Everaert, 2009: 93). Similar to Chaney and Kim (2007), outsourced internal auditors creating higher usage information richness can improve the financial reporting reliability of their firm. Use of creative information richness helps internal auditors reduce internal audit time, cost, and workload and have more integrated compliance views, fewer risks and increased quality of work. Therefore, hypotheses 1a-d was supported.

For efficiency risk management, the results provide evidence that it has a significant positive influence on financial reporting reliability (Model 1: $b_2 = 0.314$, $p < 0.05$), audit effectiveness (Model 2: $b_{11} = 0.264$, $p < 0.05$), corporate governance achievement (Model 3: $b_{20} = 0.273$, $p < 0.05$), and sustainable audit success (Model 4: $b_{29} = 0.309$, $p < 0.05$). As a result, efficiency risk management helps the outsourced internal auditor to gain an understanding of management's strategies, business processes, and controls in order to moderate the risks of the organization, which leads to a sustainable firm. These results are consistent with Sarens, Beelde, and Everaert (2009: 96) who state that higher levels of efficiency risk management can provide indications of risks to identify areas in which to conduct audit activity, and provide a framework to reduce the impact of risk by reducing risk to an acceptable level. Therefore, hypotheses 2a-d was supported.

Accordingly, the results show that sophisticated technical proficiency has a positive significant effect on financial reporting reliability (Model 1: $b_3 = 0.252$, $p < 0.05$), and audit effectiveness (Model 2: $b_{12} = 0.127$, $p < 0.10$), but it is not significantly related to achievement of corporate governance (Model 3: $b_{21} = 0.033$, $p > 0.05$), and sustainable audit success (Model 4: $b_{30} = 0.018$, $p > 0.05$). According to the result, it implies that

sophisticated technical proficiency should be used to assist in the completion of an audit in order to achieve the auditing goal. Regarding the results, Curtis and Payne, (2008: 108) recommend that the outsourced internal auditors should understand each part of the audit program system, such as data acquisition, data transmission, data storage and data processing, which require a high level of technique and computer proficiency. Therefore, hypotheses 3a-b were supported, but hypotheses 3c-d were not.

In summary, internal audit outsourcing will contribute significantly to the quality of internal control and more proactive value added to operative effectiveness (Hermanson, Ivancevich, and Inancevich, 2008: 26). In addition, the results emphasized that internal audit outsourcing is an essential process in an organization to ensure that a higher audit performance is achieved. Thus, the firms with higher internal audit outsourcing of the internal audit function have a greater organizational operation efficiency and sustainable audit success.

Table 4 also shows the impact between operational effectiveness on sustainable audit success (equation 5). The results indicated that financial reporting reliability ($b_{33} = 0.402$, $p < 0.05$), audit effectiveness ($b_{34} = 0.354$, $p < 0.05$), and corporate governance achievement ($b_{35} = 0.360$, $p < 0.05$) have significant positive

effects on sustainable audit success. These results are consistent with Schneider (2009: 76) who states that firms with higher levels of organization better process improvement in management and best audit practices in audit tasks are more likely to have greater audit success. Moreover, if the company has improved corporate governance, the company receives strategic focus and shareholder wealth protection. Consequently, the company's objective and goal are toward stability (Wonglorsaichon, 2011: 118) Thus, hypotheses 4-6 were supported.

Equation 6 investigates the influence of financial reporting reliability on audit effectiveness. The result shows that financial

reporting reliability is significant and positive with audit effectiveness ($b_{38} = 0.211, p < 0.10$), therefore hypothesis 7 was supported. Reliability regarding financial reporting provides relevant information for audit management, which leads to decision-making. (Boritz, 2005). Moreover, equation 7 investigates the effect of audit effectiveness on corporate governance achievement. The result shows a significant and positive with corporate governance achievement ($b_{41} = 0.232, p < 0.10$), therefore, hypothesis H8 was supported. Consequently, Curtis and Payne (2008: 115) found that an experienced auditor to be equipped with the skills and knowledge that are associated with the internal audit performance.

Table 4 OLS Regression Results of Effect on Internal Audit Outsourcing on Operational Effectiveness and Sustainable Audit Success ^a

Independent Variables Equation	Dependent Variables					
	FRR (1)	AE (2)	CGA (3)	SAS (4)(5)	AE (6)	CGA (7)
CIR	.417** (.096)	.362** (.120)	.380** (.133)	.254** (.099)		
ERM	.314** (.101)	.264** (.126)	.273** (.140)	.309** (.118)		
STP	.252** (.093)	.127* (.116)	.033 (.129)	.018 (.092)		
PL	.329** (.093)	.339** (.116)	.474** (.129)			
CIR*PL	-.034 (.094)	.172 (.117)	-.092 (.130)			
ERM*PL	.158 (.128)	-.205* (.159)	.041 (.177)			
STP*PL	-.112 (.141)	.081 (.176)	-.187 (.196)			
FRR				.402** (.118)	.211* (.108)	
AE				.354** (.124)		.232* (.104)
CGA				.360** (.114)		
Firm Size	.110 (.176)	.104 (.178)	.102 (.177)	-.097 (.175)	.063 (.181)	-.082 (.180)
Firm Age	.006 (.166)	.037 (.094)	.150 (.148)	.033 (.174)	-.094 (.139)	-.035 (.189)
Adjusted R ²	.385	.431	.505	.380	.388	.273
Maximum VIF	3.258	3.258	3.258	2.547	2.651	2.651

*p<0.1, **p<0.05, ^aBeta coefficients with standard error in parentheses

Moreover, in Table 4, we test the influence of professional learning as a moderating effect on the relationship between internal audit outsourcing and operational effectiveness (hypotheses 9-11) that follow from equation 1-3. The results provide evidence that the coefficients of professional learning that are positively and significantly associated with operational effectiveness are financial reporting reliability (Model 1: $b_4 = 0.329$, $p < 0.05$), audit effectiveness (Model 2: $b_{13} = 0.339$, $p < 0.05$), and corporate governance achievement (Model 3: $b_{22} = 0.474$, $p < 0.05$). More interestingly, interaction on audit effectiveness between efficiency risk management and professional learning is negatively significant (Model 2: $b_{15} = -0.205$, $p < 0.10$). As a result, this study cannot provide the evidence that professional learning can moderate the effect on internal audit outsourcing on financial reporting reliability, audit effectiveness, and corporate governance achievement. Therefore, hypotheses H9-11 were not supported.

6. Conclusion

Internal audit outsourcing is specifically for firm capabilities. When a firm reaches the level for an internal audit function and controlling, it will lead to greater organizational outcomes that lead to a sustainable audit success. Internal audit outsourcing consists of three dimensions, namely creating information richness, efficiency risk management, and

sophisticated technical proficiency therefore should be integrated to gain a higher effect of operational effectiveness. The overall results show the significant positive relationship between internal audit outsourcing and operational effectiveness. Moreover, the findings also indicate that operational effectiveness certainly affects the relationship between internal audit outsourcing and sustainable audit success. In addition, this study tests professional learning as the moderating effect on the relationship between internal audit outsourcing and operational effectiveness. Surprisingly, the moderating effect of professional learning did occur in the relationship.

Accordingly, this evidence will provide the directions and suggestions for Listed Companies, professional institutions and organizational relations to improve internal audit function in the organization for value added to the organization. Finally, internal audit outsourcing is responsible for the results of the audit work, to enhance the quality of their control environment by obtaining the services with the knowledge and skills to critically assess, and add more technical expertise to their internal control systems. Accordingly, the results of internal audit outsourcing has usefulness to provide guidance, and help in managing the valuable information, understand the operation and bring about changes for value-added that supports and improves

sustainable audit success and stability of the firm.

7. Limitations and Suggestions for Future Research

This study has many limitations that can be mentioned for future research. First, the research is limited by the fact that it is based strictly on self-reported data. Future studies should include longitudinal data and information to provide a broad perspective of the dynamism of internal audit outsourcing for organizational survival. Second, although the non-response rate in this study was disappointing, the small response rate is more likely to be biased, and thus, less likely to describe the population. Future studies should include a concern for sample size and response rate. A response rate of less than 50 percent is more likely to make the response biased and a potentially bigger threat than the sample size. Third, this study could not capture the moderating effect of professional learning but the results show the strong direct effect of professional learning in all three variables. Future study should be concerned with this variable or reveal this variable by another statistical technique such as path analysis. Likewise, future research should focus on collecting data from other auditing professions in Thailand, such as tax auditors (TAs) and governmental auditors (GAs) in order to increase the level of reliable results.

8. Implications of Research

To sustain the growth of a firm, the internal audit outsourcing for the purpose of organizational processes is essential. Because the aim of internal audit outsourcing seeks to improve risk management, internal controls, and governance the stakeholders' value is preserved. Consequently, it is a significantly powerful tool for organizational success, enhancing efficiency and effectiveness of the organization, achievement in audit performance, growth and long-term sustainability.

This research provides the empirical evidence, which may be a useful guide to the internal audit function concerning internal audit proficiency in an internal audit. Examples are continuous internal control assessment, integrative internal audit planning, best internal audit practice, and excellent internal audit reporting. Consequently, it becomes a significant key driver for determining and explaining sustainable audit success and the firm's goal achievement in the present and future auditing profession.

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