

**INTERNAL AUDIT TRANSPARENCY AND FIRM GOAL  
ACHIEVEMENT: AN EMPIRICAL INVESTIGATION  
OF FINANCIAL BUSINESSES IN THAILAND**

**VARIPIN MONGKOLSAMAI**

**A dissertation submitted in partial fulfillment of the requirements for  
the degree of Doctor of Philosophy in Accounting  
at Maharakham University**

**March 2015**

**All rights reserved by Maharakham University**



**INTERNAL AUDIT TRANSPARENCY AND FIRM GOAL  
ACHIEVEMENT: AN EMPIRICAL INVESTIGATION  
OF FINANCIAL BUSINESSES IN THAILAND**

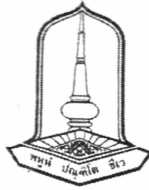
**VARIPIN MONGKOLSAMAI**

**A dissertation submitted in partial fulfillment of the requirements for  
the degree of Doctor of Philosophy in Accounting  
at Maharakham University**

**March 2015**

**All rights reserved by Maharakham University**





The examining committee has unanimously approved this dissertation, submitted by Mrs.Varipin Mongkolsamai, as a partial fulfillment of the requirements for the degree of the Doctor of Philosophy in Accounting at Maharakham University.

Examining Committee

.....  
(Dr.Jindarat Peemane) Chairman  
(Faculty graduate committee)

.....  
(Assoc.Prof.Dr.Phaprukbaramee Ussahawanitchakit) Committee  
(Advisor)

.....  
(Dr.Sutana Boonlua) Committee  
(Co-advisor)

.....  
(Asst.Prof. Dr.Buavaroon Srichaikul) Committee  
(Faculty graduate committee)

.....  
(Asst.Prof. Dr.Kanchana Sukant'hasirikul) Committee  
(External expert)

Maharakham University has granted approval to accept this dissertation as a partial fulfillment of the requirements for the Doctor of Philosophy degree in Accounting.

.....  
(Assoc.Prof.Dr.Phaprukbaramee Ussahawanitchakit)  
Dean of Maharakham Business School

.....  
(Prof.Dr.Pradit Terdtoon)  
Dean of Graduate School  
..... March 30, 2015



**This dissertation was funded by Chiangmai Rajabhat University, Chiangmai  
Rajabhat University Scholarship,  
Academic Year 2014  
And  
Mahasarakham Business School, Mahasarakham University, Thailand**



## ACKNOWLEDGEMENTS

This dissertation has been accomplished by the support of several people. I would like to express special thank to all people who help me to complete it. First of all, I am most grateful to my advisor, Associate Professor Dr.Phaprukbaramee Ussahawanitchakit for all his very helpful suggestions and encouragement. I couldn't have done this dissertation without his persistent advice and support.

I am very thankful to all members of my dissertation committee for all their valuable guidance to improve this dissertation. Moreover, I really appreciate all my instructors in the Ph.D. program. My special thanks go to my friends for all their warm friendship and inspiration to guide me through the entire doctoral program at Mahasarakham University. Many thanks go to the financial business firms in Thailand who kindly provided the primary data. Furthermore, special thanks to Chiangmai Rajabhat University for their financial support throughout the period of my studies.

Most of all, I wish to thank my mother and my father for their affection and moral support. Their good wishes and blessing have made me successful as a graduate student. And, the hearts of two members in my little family, my husband, Arm, and my daughter, Mint, for their love, patience, and understanding. My thanks also go to my relatives for their direct and indirect support.

Varipin Mongkolsamai



**TITLE** Internal Audit Transparency and Firm Goal Achievement:  
An Empirical Investigation of Financial Businesses in Thailand

**AUTHOR** Mrs.Varipin Mongkolsamai

**ADVISORS** Assoc.Prof.Dr.Phaprukbaramee Ussahawanitchakit and  
Dr.Sutana Boonlua

**DEGREE** Ph.D. **MAJOR** Accounting

**UNIVERSITY** Mahasarakham University **DATE** 2015

### **ABSTRACT**

The political unrest in Thailand has affected the economy and the confidence of investors. However, when the financial report is supported by an internal audit transparency process, the numbers are more creditable.

The primary objective of this research is to examine the effects of internal audit transparency impact on firm goal achievement of Thai-financial business firms. Moreover, the effects of internal audit transparency on internal audit reliability, internal audit quality, internal audit usefulness, information value, and best decision-making are investigated. Additionally, this research tests the effects of governance awareness, internal audit professional, internal audit ethics, regulation force, and environment uncertainty on internal audit transparency. Finally, the moderating role of morality climate and internal audit learning are also examined. The conceptual model is proposed by drawing on the agency theory and contingency theory. The data were collected by a questionnaire survey from 81 Thai-financial business firms in the Bank of Thailand and the Office of Insurance Commission. Internal audit directors or internal audit managers of each firms is the key informant of this research. Indeed, the descriptive, correlation, and Ordinary Least Square regression analysis is operated to test the postulated hypotheses.

The results indicate that internal audit process openness positively relate to internal audit quality and best decision-making. While, internal audit practice clarity has a significant positive relationship with internal audit quality, information value, and best decision-making. Also, internal audit communication visibility has a significant positive relationship with internal audit reliability, internal audit usefulness, and information



value. Moreover, internal audit reliability and internal audit usefulness have a significant positive effect on information value. Also, information value has a significant positive influence on best decision-making and firm goal achievement. Similarly, best decision-making has a significant positive effect on firm goal achievement. For the antecedents of internal audit transparency, the findings assert that the governance awareness has a significant positive impact on internal audit method trust and internal audit practice clarity. While, internal audit ethics has a significant positive effect on internal audit practice clarity and internal audit communication visibility. Additionally, regulation force has a significant positive effect on internal audit process openness, internal audit method trust, and internal audit communication visibility. Besides, internal audit learning moderates these relationships: internal audit process openness and information value, internal audit practice clarity and internal audit usefulness, internal audit practice clarity and information value, internal audit practice clarity and best decision-making. Also, the moderating role of morality climate has a significant positive effect among internal audit professional and internal audit process openness.

In order to contribute more theoretically to internal audit transparency, future research should be considering other moderating variables to enhance the relationships among variables. Moreover, future research could be conducted on different samples and on a larger scale to widen the generalizability of its findings.



## CONTENT

CHAPTER	PAGE
I INTRODUCTION .....	1
Overview .....	1
Purposes of the Research .....	5
Research Questions .....	6
Scope of the Research .....	7
Organization of the Dissertation .....	10
II LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK .....	11
Theoretical Foundations .....	11
Relevant Literature Review and Research Hypotheses Development .....	14
Summary .....	91
III RESEARCH METHODS .....	102
Population and Sample Selection .....	102
Data Collection Procedure .....	104
Measurements .....	106
Methods .....	112
Summary .....	121
IV RESULTS AND DISCUSSION .....	130
Respondent Characteristics and Descriptive Statistics .....	130
Hypotheses Testing and Results .....	133
Summary .....	157
Additional Analysis .....	172
V CONCLUSION .....	177
Theoretical and Managerial Contributions .....	183
Limitations and Future Research Directions .....	186





<b>CHAPTER</b>	<b>PAGE</b>
BIBLIOGRAPHY .....	188
APPENDICES .....	206
APPENDICES A The Original Items .....	207
APPENDICES B Test of Non-Response Bias .....	213
APPENDICES C Respondent Characteristics .....	215
APPENDICES D Financial Business Characteristics .....	217
APPENDICES E Item Factor Loadings and Reliability Analyses in Sample .....	220
APPENDICES F Test of the Assumption of Regression Analysis .....	224
APPENDICES G Cover Letters and Questionnaire: English Version .....	241
APPENDICES H Cover Letters and Questionnaire: Thai Version .....	253
VITA .....	265



## LIST OF TABLE

TABLE	PAGE
1 Summary of Key Literature Reviews on Internal Audit Transparency .....	21
2 Summary of Hypothesized Relationships .....	93
3 The Details of Questionnaire Mailing .....	105
4 Results of Measure Validation and Reliability (n=30) .....	114
5 Definitions and Operational Variables of Constructs .....	123
6 Descriptive Statistics and Correlation Matrix of Internal Audit Transparency and all Constructs .....	132
7 Correlation Matrix of Internal Audit Transparency on Its Consequences ...	134
8 Results of Regression Analysis for the Effects of Each Dimension of Internal Audit Transparency on Its Consequential Constructs .....	135
9 Correlation Matrix of Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making and Firm Goal Achievement .....	140
10 Results of Regression Analysis for the Effects of Internal Audit Reliability Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making and Firm Goal Achievement .....	141
11 Correlation Matrix of Antecedents and Each Dimension of Internal Audit Transparency .....	145
12 Results of Regression Analysis for Effects of Antecedents on Each Dimension of Internal Audit Transparency .....	146
13 Correlation Matrix of Antecedents, Each Dimension of Internal Audit Transparency and Moderating Role of Morality Climate .....	150
14 Results of Regression Analysis for Effects of Antecedents on Each Dimension of Internal Audit Transparency and Moderating Role of Morality Climate .....	151



<b>TABLE</b>	<b>PAGE</b>
15 Correlation Matrix of Each Dimension of Internal Audit Transparency, Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making, Firm Goal Achievement and Moderating Role of Internal Audit Learning .....	153
16 Results of Regression Analysis for Effects of Each Dimension of Internal Audit Transparency on Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making, Firm Goal Achievement, and Moderating Role of Internal Audit Learning .....	154
17 Summary of the Results of Hypotheses Testing .....	158
18 Results of the Additional Analysis on the Effect of Internal Audit Transparency and Its Consequences via Internal Audit Learning as Moderator .....	174
19 Results of the Additional Analysis of the Antecedents on Internal Audit Transparency and Moderating Role of Morality Climate .....	176
20 Summary of Results in All Research Questions .....	180
1A Original Items in Scales .....	208
1B Test of Non-Response Bias .....	214
1C Demographic Characteristics of Respondents .....	216
1D Demographic Characteristics of Financial Businesses in Thailand .....	218
1E Item Factor Loadings and Reliability Analyses in Sample .....	221
1F The Results of the Independence of Error Terms .....	231



## LIST OF FIGURE

FIGURE	PAGE
1	Conceptual Model of Internal Audit Transparency and Firm Goal Achievement: An Empirical Investigation of Financial Businesses in Thailand ..... 16
2	The Effect of Internal Audit Transparency on Internal Audit Reliability, Internal Audit Quality and Internal Audit Usefulness ..... 31
3	The Effect of Internal Audit Transparency on Information Value ..... 45
4	The Effect of Internal Audit Transparency on Best Decision - Making ..... 49
5	The Effect of Internal Audit Transparency on Firm Goal Achievement ..... 51
6	The Relationships among Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making and Firm Goal Achievement ..... 54
7	The Effect of Governance Awareness, Internal Audit Professional, Internal Audit Ethics, Regulation Force and Environment Uncertainty on Internal Audit Transparency ..... 64
8	The Moderating Effect of Morality Climate ..... 77
9	The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Internal Audit Reliability, Internal Audit Quality and Internal Audit Usefulness ..... 83
10	The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Information Value ..... 88
11	The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Best Decision-Making ..... 89
12	The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Firm Goal Achievement ..... 90
13	Summary of the Results of the Hypotheses Testing ..... 184



# CHAPTER I

## INTRODUCTION

### Overview

The political unrest in Thailand has affected the economy and the confidence of investors. Moreover, stock market bubbles or inefficient capital markets are damaging to economies (Penman, 2003). The capital market is a national treasure which is essential to the success of the economy (Sutton, 2002). In addition, business is conducted simultaneously in various countries and with many people; thus, the market is no longer limited by time zone boundaries. Therefore, many reforms have been undertaken to restore user confidence, including the role of internal auditor in restoring user confidence (Octavia, 2013; James, 2003). The internal audit function should be prepared, not only to explain how it affects market value, but also to show an increase in value (Octavia, 2013). From a capital market perspective, transparent reporting is important for both the allocation and institutional efficiency of the capital market (Burkhardt and Strausz, 2009; Pott, Mock and Watrin, 2008). Most investors make a decision by the numbers in the financial status and report. When the financial report is supported by an internal audit transparency process, the numbers are more creditable. The investors will be more confident in investing, which results in an effective economy.

The Eighteenth Century industrial revolution stimulated the formation of capital markets and the separation of owners and managers, which came with the potential for opportunistic management behavior (Imhoff, 2003). Sisaye (1999) notes that crisis creates the condition for organizational change to survive and remain competitive. Managers usually prefer high stock prices and high returns for the firms they manage because high prices and returns can increase the value of their stock options and stock holdings, increase cash compensation and improve their chances of retaining their current jobs or landing positions with other firms (Bloomfield, 2002). In addition, a weak internal control environment facilitates earnings management and opportunistic behavior and reduces the reliability of financial reporting (Jiang, Rupley



and Wu, 2010). Recent high-profile corporate collapses have focused attention on corporate governance and have also emphasized internal auditing as an important part of the governance process (Coram, Ferguson and Moroney, 2008). Some prior research has used an agency cost framework to illustrate the value relevance of the internal audit function framework (Salehi, Arianpoor and Salehi, 2013; Ho and Hutchinson, 2010; Lee and Ismail, 2010; Sarens, Beelde and Everaert, 2009; Archambeault, DeZoort and Holt, 2008; Coram, Ferguson and Moroney, 2008).

In today's turbulent economy with recent accounting scandals and legislation, it is clear that internal auditors have to face difficult challenges, one of them being proving their relevance and necessity within the organization (Boța-Avram Cristina and Palfi Cristina, 2012; Archambeault, DeZoort and Holt, 2008). Furthermore, the current context of economic, social and technical development of the society decides the appearance of new risks, leading to the adaptation of the audit structure, thereby enhancing the methods and techniques used to analyze the risks and increasing the internal audit performance (Munteanu, Zuca and Țiță, 2010 ; Sfetcu, 2013). There are several clarifications of the internal audit's roles. Internal audit plays an increasingly important role in the improvement of the functioning of an organization, enhancement of corporate governance, protecting stakeholders and in an organization's assets (Octavia, 2013; Steinbart et al., 2013; Sobel and Kapoor, 2012; Pajak, 2012; Archambeault, DeZoort and Holt, 2008). In addition, the internal audit is seen worldwide as a profession, searching to constantly meet the continuously changing needs of organizations (Watson, 2007; Flostoiu, 2012).

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. There are several aspects that will significantly mark internal audit in the 21st century and the organizations that will take account of these issues will have an internal audit service that will truly bring them added value (Mihăilescu and Ducu, 2011). Internal audit focused on accounting problems at its beginnings, but now it has become a powerful tool to detect the main risks of organizations (Munteanua and Zahariab, 2014). The main issues that limit the effectiveness of internal audit actions have been identified, such as: indifference of the board of directors towards the internal audit activity; impediments to the information flow; connections of inappropriate interest; personal characteristics;



insufficient control procedures and practices (Cortesi, Tettamanzi and Corno, 2009). Large companies have increased their interest in internal audit, which requires creating departments and services for internal audit, independent from other internal control departments of companies (Alsharayri, 2012). In addition, internal auditing is a professional service those, to serve, not just management, but the whole organization (Cortesi, Tettamanzi and Corno, 2009). Internal auditors should develop mechanisms through which they can obtain insights as to whether those in their organizations (e.g., management, audit committee members, etc.) perceive the internal audit function as effective and adding value (Gramling and Hemanson, 2007).

The breadth of the scope of internal auditing has been emphasized by several authors. Sisaye (1999) notes that internal auditing constitutes an important aspect of administrative process innovations that result in significantly better business performance. On the other hand, auditing not only identifies quality processes in organizations; it locates problems, needs and delivers information to develop action plans for better results. A fairly consistent finding across more recent studies is that internal audit function can have a positive influence on corporate governance, including reporting quality and firm performance (Gramling et al., 2004). Moreover, the standards of performance bring together the efficiency and effectiveness of internal audit, contributes to improved risk management and creates additional value (Alsharayri, 2012).

Poor corporate governance can lead to major failures, with adverse consequences for the banking system, due to the impact of deposits insurance system, payment system and especially the contamination risk (Mihăilescu and Ducu, 2011). Furthermore, potential weakness in the perception of the professionalism of internal auditing is the tendency in many organizations, particularly in the private sector, for the internal auditing department to serve as a stepping-stone to other positions in an organization (O'Regan, 2001). The important task of internal audit is to evaluate the capacity of the credit institution to cope with those risks that have been identified and, although they were identified, underestimated the impact on the organization or the probability that those risks affect the credit institution (Mihăilescu and Ducu, 2011). Chutter and Swanger (2000) investigate a profile of the internal audit function within the financial services industry. The most surprising finding in their study is that some



institutions still have no internal audit function at all. Okike (2004) notes that there is additional legislation for financial institutions and insurance companies. Recent high-profile corporate collapses have focused attention on corporate governance and also emphasized internal auditing as an important part of the governance process (Coram, Ferguson and Moroney, 2008).

Transparency can be adopted as an attractive first step during initial stages in development of an environmental norm, when acceptance of and commitment to a new norm preclude political agreement on more ambitious regulatory strategies (Mitchell, 2011). Also, the internal audit function helps the company in achieving its objectives and adds value and transparency, assisting at the same time, the manager, to enable it to better manages their activities (Botez, 2012). Moreover, the internal audit helps management establish stronger controls over financial reporting (Wan-Hussin and Bamahros, 2013). The greater level of trust and reliance the external can place on the internal and the further the authority will move towards a self-regulated model of monitoring (Bowerman. and Hawksworth, 1999).

Internal audit transparency contributes to stakeholders for increasing firm goal achievement. This research is an attempt to propose the impact of internal audit transparency (internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility) on firm goal achievement.

Internal audit transparency examined in this research provides both theoretical and managerial contributions. The theoretical contributions describe that there is little internal audit research looking into the transparency of internal audit function; thus, this research expands the literature of the transparency theme in the internal audit literature. Furthermore, it provides a new dimension of internal audit transparency. The managerial contribution is probably that the findings of this research provide the empirical evidence verifying internal audit transparency which may improve internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement. The executive of a business can use this evidence to facilitate careful consideration for improvement or to establish internal audit transparency in their organization for increased firm goal achievement.





## Purposes of the Research

The main purpose of this research is to examine the relationships among Internal audit transparency (internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility) that have an influence on firm goal achievement. The following explains the specific research purposes:

1. To study the effects of each dimension of internal audit transparency on internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement,
2. To study the effects of internal audit quality on internal audit reliability and internal audit usefulness,
3. To examine the relationships between internal audit reliability, internal audit quality, internal audit usefulness and information value,
4. To examine the relationships between internal audit reliability, internal audit quality, internal audit usefulness and best decision-making,
5. To investigate the effects of information value on best decision-making and firm goal achievement,
6. To investigate the effects of best decision-making on firm goal achievement,
7. To explore the impact of governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty on each dimension of internal audit transparency,
8. To investigate the influence of morality climate as a moderating effect on the relationships between a) governance awareness, b) internal audit professional, c) internal audit ethics, d) regulation force, e) environment uncertainty and each dimension of internal audit transparency, and
9. To test the moderating effect of internal audit learning on each dimension of internal audit transparency and; a) internal audit reliability, b) internal audit quality, c) internal audit usefulness, d) information value, e) best decision-making, f) and firm goal achievement.



## Research Questions

The key research question is how internal audit transparency (internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility) affects firm goal achievement. The specific research questions are as follows:

1. How does internal audit transparency affect internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement?
2. How does internal audit quality affect internal audit reliability and internal audit usefulness?
3. How do internal audit reliability, internal audit quality and internal audit usefulness relate to information value?
4. How do internal audit reliability, internal audit quality and internal audit usefulness relate to best decision-making?
5. How does information value affect best decision-making and firm goal achievement?
6. How does best decision-making affect firm goal achievement?
7. How do governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty relate to internal audit transparency?
8. How does morality climate moderate the relationships between a) governance awareness, b) internal audit professional, c) internal audit ethics, d) regulation force and e) environment uncertainty and each dimension of internal audit transparency?
9. How does internal audit learning moderate the relationships between each dimension of internal audit transparency and a) internal audit reliability, b) internal audit quality, c) internal audit usefulness, d) information value, e) best decision-making and f) firm goal achievement?



## Scope of the Research

This research concentrates on the effects of internal audit transparency on firm goal achievement in the context of Thai-financial business firms. Internal audit transparency refers to the guideline or platform optimized in the internal audit, appropriate with operational activities in an organization context, which lacks secrecy and can reduce environmentally-harmful behaviors and increase the quality of audit work.

With respect to the research objectives and research questions, there are many variables in the research. Internal audit transparency is an independent variable consist of five dimensions: a) internal audit legitimacy compliance refers to the ability of firms to utilize internal audit standards or relevant laws which lead to perform appropriate internal audit work, b) internal audit process openness refers to the ability of firms to prepare and formulate audit plans for which internal auditors must identify and document sufficient information (e.g., audit scope and objectives, risks and controls, audit duration, resources necessary for the performance of the auditing etc.) to achieve the objectives in audit program and audit working papers in a consistent standardized and regulatory manner and which must be disclosed, c) internal audit method trust refers to the ability of firms to prepare and formulate audit programs for which internal auditors must identify and document sufficient information (e.g., specific objectives and instructions, sample size and items to select, identification of audit procedures, dates, expected completion times, manpower and places for audit etc.) to achieve the objectives in audit working papers in a consistent, standardized and regulatory manner; and it must be seen to maintain integrity and independence in the internal audit performance, d) internal audit practice clarity refers to the ability of firms to perform the task identified in the audit program for which internal auditors must document working papers in a consistent, standardized and regulatory manner; and it must be organized, clear and comprehensive and e) internal audit communication visibility refers to the ability of firms to convey the audit outcomes which internal auditors conduct throughout the period of fieldwork in a consistent, standardized and regulatory manner; and must not filter nor keep emotional uncertainly from creating more positive actions.



Internal audit transparency consist of five outcomes: a) internal audit reliability refers to the ability of firms to perform the internal audit service independently, clearly and completely by achieving information without error or bias, b) internal audit quality refers to the ability of firms to efficiently perform the internal audit which is properly executed and communicated by achieving the objectives and goals of internal audit to add value and improve an organization's operations, c) internal audit usefulness refers to the ability of firms to perform internal audit operational information which all users can use for correct and timely decision-making, d) best decision-making refers to the best choice between many alternative ways to help a company achieve its objectives or goal set in a correct and timely manner and e) information value refers to the utility of information which all users can use for correctly and timely decision-making. Firm goal achievement is the dependent variable of this research. It refers to the operational outcome that shows performance of firms, both financial and non-financial, that arises from an ability of firms which are properly operated to achieve their goals.

Moreover, moderators in this research include morality climate and internal audit learning. Morality climate refers to the workplace environment that focuses on the ambiguity people perceive when judging whether behaviors are right or wrong. Internal audit learning refers to the ability of firms in which internal auditors acquire an intimate knowledge of all the organization's activities, new technologies and broaden their organizational capabilities.

Five variables are assumed to become the antecedents of internal audit transparency including a) governance awareness refers to the realization in the workplace environment (formulated from the interaction of employees in an organization) that is focused and compliant with corporate governance, b) internal audit professional refers to the ability of firms to work with widely - accepted internal audit standards which are properly planned and executed, achieving the confidence of internal audit quality, c) internal audit ethics refers to the ability of firms to work with a widely - accepted code of internal audit ethics which increases neutrality, free - from - bias practices and relevant information disclosure, d) regulation force refers to the current regulations that firms must obey and comply, in order to improve appropriate operational trends and e) environment uncertainty refers to the relevant characteristics



of the business environment in which technologies, regulations and stakeholder expectations are evolving.

The conceptual framework of this research is drawn from the agency theory and the contingency theory. Firstly, the agency theory examines the relationships between two units, one of which is acting for the other (Huang, 1995). The manager frequently has more information than the other parties to the firm (Watts, 2003). Moreover, in absence of verification requirements, the manager can estimate biases of future upward cash flows, producing large payments under earnings-based compensation plans and possibly leading to negative net present value investments by the firm. Companies with high levels of agency conflict or previous occurrences of fraud could benefit from telling users about the improved processes being implemented (James, 2003). Agency theory assumes that employees and employers have different goals, act in a self-interested manner and are willing to assume varying degrees of risk (Johnson and Droege, 2004). The proprietorship perspective is at the heart of the contracting perspective of accounting: between shareholders and bondholders, between shareholders and management and between shareholders and auditors (Penman, 2003).

Finally, the contingency theory, originated by Otley (1980), explains the contingency theory as a framework of an organization control package dependent on contingent factors such as uncontrollable factors and the firm's objective. Additionally, the basic premise found in this theory is that a proper fit of contingency characteristics and control will result in superior performance (Agbejule and Jokipii, 2009). Internal audit is one of the operation systems of the organization. The appropriateness of internal audit system depends on the ability of the organization to adapt to this system when there is a change in external circumstances or internal factors. Therefore, this theory has been used to explain both the antecedents and consequences of internal audit transparency.

The population of this research is 238 financial business firms in Thailand (<http://www.bot.or.th> and <http://www.oic.or.th>), as of January 11, 2014) because these businesses are in high risk business operations and they involve many stakeholders. Therefore, they require value added service by the internal audit more than other business sectors in Thailand. The database is drawn from the Bank of Thailand on its website and the Office of Insurance Commission on its website. The instrument of data



collection is a questionnaire mailed directly to the key informants who are the internal audit directors or internal audit managers of financial business firms. To test the hypotheses, the multiple regression analysis will be used.

### **Organization of the Dissertation**

This research is organized into five chapters. Chapter one presents an overview of the research, purposes of the research, research questions, scope of the research and organization of the dissertation. Then, chapter two reviews the relevant literature on internal audit transparency, explains the theoretical framework to describe the conceptual model and the relationships among the different variables and develops the related hypotheses for testing. Chapter three explains the empirical examination of the research methods, including the sample selection and data collection procedures, the variable measurements of each construct, the instrumental verification, the statistics and equations to test the hypotheses and the summary table definitions and operational variables of constructs. Chapter four exhibits the empirical results and discussion. The chapter also compares and explains the differences between previous studies and empirical results for this empirical research. Finally, chapter five purposes the conclusion, theoretical and managerial contributions, limitations and future research directions.



## CHAPTER II

### LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Chapter one describes the overview of internal audit transparency and the research motivation, the purposes of the research, the key research questions and the scope of the research. This chapter elaborates to better understand internal audit transparency which emphasizes the theoretical foundation, the conceptual model, the relevant literature review and the research hypotheses development. The key construct of the conceptual model of this research is internal audit transparency. This research will provide empirical evidence so that internal audit transparency may enhance firm goal achievement with regards to the antecedents and the consequences of internal audit transparency. The agency theory is applied in this research to explain how internal audit transparency affects firm goal achievement through internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and internal audit learning. Furthermore, the contingency theory is useful to give an explanation of the linkage between the antecedent variables and morality climate and internal audit transparency. The literature review is conducted to provide an understanding of all constructs in the proposed conceptual model and to develop the research hypotheses for testing.

The organization of this chapter is structured into three sections. The first section describes the theoretical foundations which are used to explain the conceptual model. The second section provides the relevant literature review, the definition of all constructs in the conceptual framework and the hypotheses development. The final section summarizes the hypotheses relationships and descriptions.

#### **Theoretical Foundations**

The relationships among internal audit transparency, its consequences, firm goal achievement and internal audit learning are explained by the agency theory. Moreover, the contingency perspective is used to describe the linkage between internal audit transparency and its antecedents and morality climate.



### Agency Theory

Jensen and Meckling (1976) note that the agency theory describes the problems of emerging situations where information asymmetry exists. Moreover, it examines the relationships between two units, one of which is acting for the other (Huang, 1995). The manager frequently has more information than the other parties to the firm who lack verification requirements (Krause and Bruton, 2014; Jiang, Rupley and Wu, 2010). As a result, the manager can estimate biases of future upward cash flows, producing large payments under earnings-based compensation plans and possibly leading to negative net present value investments by the firm (Watts, 2003). Companies with high levels of agency conflict or previous occurrences of fraud could benefit from telling users about the improved processes being implemented (James, 2003). Agency theory assumes that employees and employers have different goals, act in a self-interested manner and are willing to assume varying degrees of risk (Johnson and Droege, 2004). The proprietorship perspective is at the heart of the contracting perspective of accounting: between shareholders and bondholders, between shareholders and management and between shareholders and auditors (Penman, 2003).

Agency theory contends that internal auditing, in common with other intervention mechanisms like financial reporting and external audit, helps to maintain cost-efficient contracting between owners and managers (Adams, 1994). In addition, Fadzil, Haron and Jantan (2005) show the existence of agency theory postulated and its influence on the extent of internal auditing practices and its effect on the firm's internal control system. Moreover, internal audit can help principals to overcome the information asymmetry problem (Adams, 1994). Christopher, Sarens and Leung (2009) draw on both agency and institutional theory to examine the independence of the internal audit function in relationship to the audit committee and management.

Several scholars studying internal audit have employed the agency theory as an explanatory framework (Salehi, Arianpoor and Salehi, 2013; Ho and Hutchinson, 2010; Lee and Ismail, 2010; Sarens, Beelde and Everaert, 2009; Archambeault, DeZoort and Holt, 2008). However, various researchers draw upon the agency theory for incentive-based compensation schemes (Burkhardt and Strausz, 2009; Chong and Eggleton, 2007; Conyon and He, 2004). Furthermore, Ho and Hutchinson (2010) argue that the agency problem shifts from the manager-shareholder conflict to majority-minority shareholder





conflict. Collier and Gregory (1999) examine the agency costs of equity, proxied by the proportion of shares held by the directors and by shareholder diversity.

This research applies the agency theory to explain internal audit transparency concerning the linkage among internal audit transparency, its consequences and firm goal achievement. The agency theory explains the existence of internal audit transparency in an organization because internal auditors use audit resources efficiently, facilitate transparency and align risk management with business strategy (Sobel and Kapoor, 2012). Moreover, transparency trends to be beneficial when information asymmetries are themselves the cause of inefficiencies in the economy (Crowe and Meade, 2008).

#### Contingency theory

Otley (1980) reveals the contingency theory as a framework of an organization dependent on contingent factors such as uncontrollable factors. Furthermore, a proper fit of contingency characteristics and control will result in superior performance (Agbejule and Jokipii, 2009). A crisis is unexpected and unforeseen and whether real or perceived, creates the condition for organizational change to survive and remain competitive (Altiok, 2011; Sisaye, 1999). Also, the reason for the organization encountering crises is the fact that it falls behind in terms of competition conditions (Altiok, 2011). In the contingency approach, “fit” is understood as signifying a positive impact on performance due to certain combinations of context and structure (Cadez and Guilding, 2008).

Munteanu, Zuca and Țiță (2010) point out that the internal audit is a dynamic process that should evolve together with the society itself. It should be strongly connected with its economic stage. Moreover, Cadez and Guilding (2008) find that contingency theory’s central proposition is organizational performance which depends on the fit between organizational context and structure. In a harsh economic climate, with every business function having to rethink its value proposition, internal audit function might already be a lean, fit unit, capable of some impressive heavy lifting (Baker, 2011).

The contingency theory is used in this research to explain the relationship between internal audit transparency, its antecedents and morality climate. The antecedents include five variables: governance awareness, internal audit professional,



internal audit ethics, regulation force and environment uncertainty. According to the contingency theory, internal audit transparency can be considered as organizational structure within the contingency framework. As discussed earlier, in the contingency approach, organizational performance depends on the fit between organizational context and structure (Cadez and Guilding, 2008). The internal audit transparency trends to be beneficial when it is understood as signifying a positive impact on organizational change to survive and remain competitive.

### **Relevant Literature Review and Research Hypotheses Development**

In regards to the underlying theories, internal audit transparency as the independent variable is the key construct of this research which needs to investigate the influence on firm goal achievement as a dependent variable through the consequences of internal audit transparency including internal audit reliability, internal audit quality, internal audit usefulness, best decision-making and information value. This research proposes five antecedents of internal audit transparency which are governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty, in order to test their impact on internal audit transparency. Finally, morality climate and internal audit learning are proposed as the moderating variables of the research model.

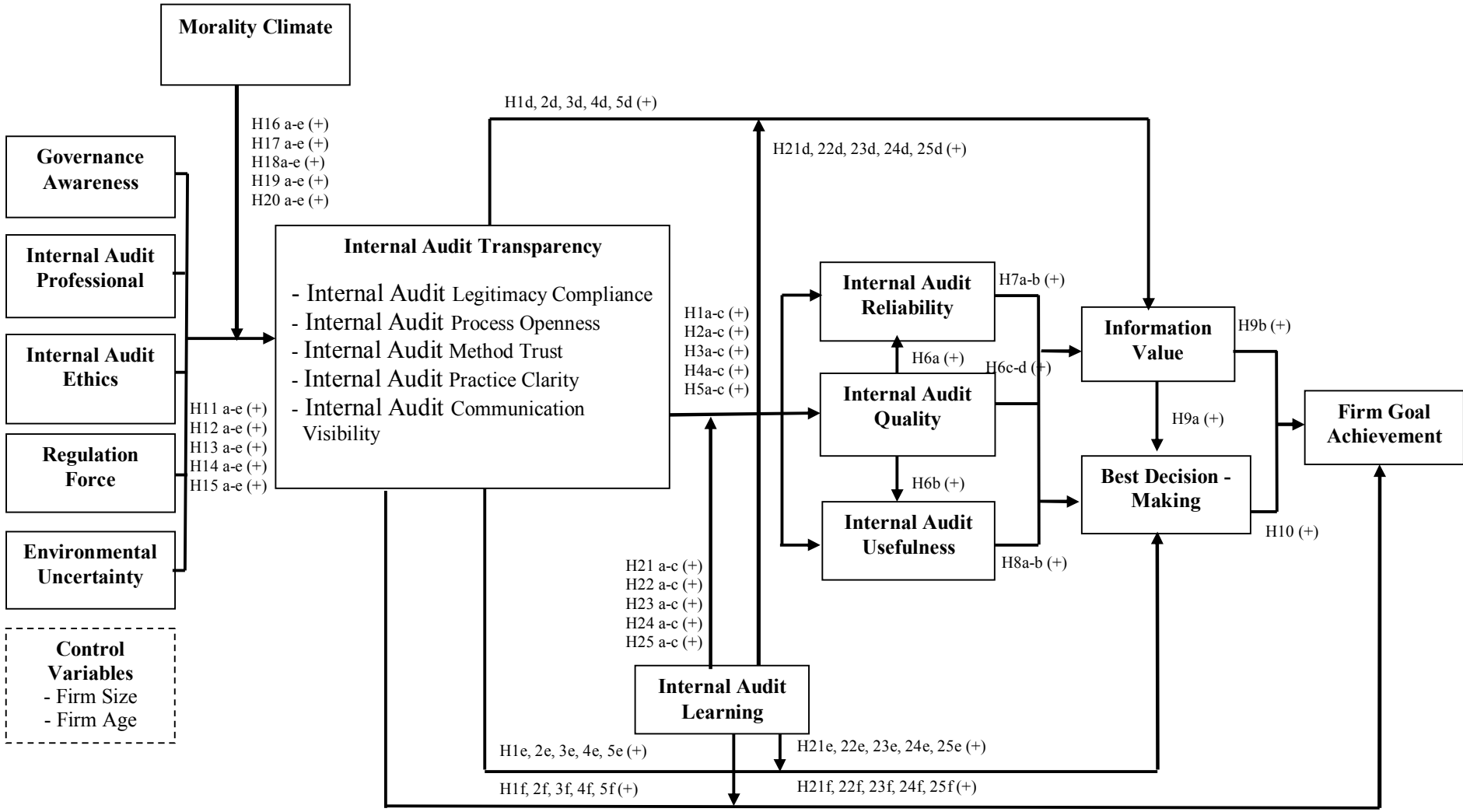
This research hypothesizes that internal audit transparency is positively associated with firm goal achievement. The consequences of internal audit transparency consisting of internal audit reliability, internal audit quality, internal audit usefulness, best decision-making and information value are predicted to have a positive relationship with firm goal achievement. In addition, this research expects that internal audit learning positively moderates the relationships between the consequences of internal audit transparency and firm goal achievement. Moreover, the antecedents, including governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty are hypothesized to have a positive effect on internal audit transparency. Finally, morality climate as the moderator is hypothesized to have a



positive effect on the relationships between internal audit transparency and its antecedents. As discussed above, a conceptual model of this research is shown in Figure 1.



Figure 1: Conceptual Model of Internal Audit Transparency and Firm Goal Achievement: An Empirical Investigation of Financial Businesses in Thailand



### Internal Audit Transparency Background

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. Internal auditors are often described as both a business partner and a policeman because of his work as a business partner with client management and also because he acts as an independent reviewer of management (Fadzil, Haron and Jantan, 2005). The main issues that limit the effectiveness of internal audit actions have been identified, such as: indifference of the board of directors towards the internal audit activity; impediments to the information flow; connections of inappropriate interest; personal characteristics; insufficient control procedures and practices (Cortesi, Tettamanzi and Corno, 2009). Large companies have increased their interest in internal audit, which requires creating departments and services for internal audit, independent from other internal control departments of companies (Al-sharayri, 2012). In addition, internal auditing is a professional service those, to serve, not just management, but the whole organization (Cortesi, Tettamanzi and Corno, 2009). Internal auditors should develop mechanisms through which they can obtain insights as to whether those in their organizations (e.g., management, audit committee members, etc.) perceive the internal audit function as effective and adding value (Gramling and Hemanson, 2007).

The current context of economic, social and technical development of the society decides the appearance of new risks, leading to the adaptation of the audit structure, thereby enhancing the methods and techniques used to analyze the risks and increasing the internal audit performance (Munteanu, Zuca and Țință, 2010 ; Sfetcu, 2013). There are several clarifications of the internal audit's roles. Internal audit plays an increasingly important role in the improvement of the functioning of an organization, enhancement of corporate governance, protecting stakeholders and in an organization's assets (Octavia, 2013; Steinbart et al., 2013; Sobel and Kapoor, 2012; Pajak, 2012; Archambeault, DeZoort and Holt, 2008). In addition, the internal audit is seen worldwide as a profession, searching to constantly meet the continuously changing needs of organizations (Watson, 2007; Flostoiu, 2012). Furthermore, the internal audit adds value through improving the control and monitoring environment within organizations to detect and self-report fraud (Coram, Ferguson and Moroney, 2008). Moreover, the internal audit assignments aim at the assessment of the financial



management, financial reporting process and control system for the executives requiring the respective reports (Arel, Beaudoin and Cianci, 2012; Ho and Hutchinson, 2010; Emil, 2008). Also, the internal audit gives assurances that all good internal control measures have been taken and such organization has achieved the organizational goals of increased profitability and shareholder wealth (Nickell and Roberts, 2013; Vasile and Croitoru, 2012; Burch, 2011; Sfetcu, 2013).

The audit methodology should define the overall audit cycle along with policies and procedures for planning the engagement, performing audit work and communicating audit results (Burch, 2011). In addition, the internal auditors should review the internal audit process, including the risk assessment and audit plan, a representative sample of working papers, audit reports, audit committee and executive reporting (Dixon and Goodall, 2007).

The breadth of the scope of internal auditing has been emphasized by several authors. Sisaye (1999) notes that internal auditing constitutes an important aspect of administrative process innovations that result in significantly better business performance. On the other hand, auditing not only identifies quality processes in organizations; it locates problems, needs and delivers information to develop action plans for better results. A fairly consistent finding across more recent studies is that internal audit function can have a positive influence on corporate governance, including reporting quality and firm performance (Gramling et al., 2004). The procedures that internal auditors put in practice regarding the whistle-blowing policy are recommended to be formalized in a code of ethics (Susmanschi, 2012). Management's integrity is the critical element in determining if an independent auditor can rely on the oral and written representations made by management during the auditing process (Love and Manisero, 2011). In Italy the internal audit function is not regulated by law (Cortesi, Tettamanzi and Corno, 2009). Also, in Malaysia, 25% of construction listed companies did not have internal audit function and relied on outsourced services (Lee and Ismail, 2010). Al-sharayri (2012) reveals that standards of performance bring together the efficiency and effectiveness of internal audit, contributes to improved risk management and creates additional value for Islamic banks operating in Jordan. Sarens, Beelde and Everaert (2009) found that the overall level of comfort for the audit committee can be enhanced via collaboration between internal and external auditing.



The financial and banking system as we know at this point is based on trust rather than on any other argument (Mihăilescu and Ducu, 2011). In banking systems, the risk is a permanent companion for any transaction or process developed by the credit institutions and the internal audit has become compulsory by law, an instrument by means of which banking systems can be monitorized. Any infringement of regulations can be immediately notified, analyzed and monitorized until solved (Aurelia et al., 2008). At the heart of banking, all other departments are linked with the internal audit department (Salehi, Arianpoor and Salehi, 2013). The lack of transparency and mistrust were generated by the deficient corporate governance policies and procedures that did not regard a prudent management of risks, a judicious administration of the assets and concentration on medium and long term objectives of banking institutions, which preferred large and immediate profits, accompanied by huge risks at the expense of some prudent policies (Mihăilescu and Ducu, 2011). Chutter and Swanger (2000) investigate a profile of the internal audit function within the financial services industry. The most surprising finding in their study is that some institutions still have no internal audit function at all. Moreover, Guiral, Ruiz and Choi (2014) suggest that loan officers view a qualified audit report as a first-order mechanism/filter that acts as an early warning system.

Transparency is defined as a lack of secrecy and openness to public scrutiny (Meijer, 2009). It is used as a tool for global environmental governance, including that of inducing targeted actors to reduce environmentally-harmful behaviors (Mitchell, 2011). It has become an increasingly important element of governance at all levels of society, from global to local. In addition, Sampattikorn and Ussahawanitchakit (2011) note that accounting transparency refers to the accounting practices that follow the rules specified to disclose information to make it easy to understand, be clear, straightforward and include an opportunity for all parties to be checked.

Burkhardt and Strausz (2009) point out that transparency reduces the asymmetry of information between the firm and the market. As a result, this reduction in asymmetric information increases the liquidity of assets and enables the firm's shareholders to sell and therefore, substitute assets more easily. Moreover, transparency trends to be beneficial when information asymmetries are themselves the cause of inefficiencies in the economy (Crowe and Meade, 2008).



DeBoskey and Gillett (2013) examine the impact of corporate transparency on US firms, which is conceived in the broadest sense and not limited to financial reporting. They find that corporate transparency is neither a unitary concept nor merely an ambiguous term for multiple distinct concepts: the factor analysis of ten corporate transparency variables identifies four independent underlying dimensions: public disclosure information, intermediary information, earnings quality information and insider information.

Internal audit focused on accounting problems at its beginnings, but now it has become a powerful tool to detect the main risks of organizations (Munteanua and Zahariab, 2014). In the wake of recent corporate failures, many reforms are undertaken to restore user confidence, including the role of internal auditor in restoring user confidence (James, 2003). Moreover, the current context of economical, social and technical development of the nowadays society, decide the appearance of new risks, leading to the adaptation of the audit structure, by enhancing the methods and techniques of used to analyze the risks and by increasing the internal audit performance (Sfetcu, 2013).

Internal audit transparency refers to the ability of firms to optimize in the internal audit, appropriate with operational activities in an organization context, which lacks secrecy and can reduce environmentally-harmful behaviors and increase the quality of audit work. It contributes to stakeholders for increasing firm goal achievement. Therefore, this research consolidates prior researches for five new dimensions of internal audit transparency that come from the internal audit practices, including internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility. Moreover, a summary of key relevant literature reviews of internal audit transparency is presented in Table 1.





Table 1: Summary of Key Literature Reviews on Internal Audit Transparency

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
Ostapski and Isaacs (1992)	Corporate Moral Responsibility and the Moral Audit: Challenges for Refuse Relief Inc.	-	-	The implementation of a moral audit, as a corporate self-appraisal activity, demonstrates a commitment to eliminate all harm caused by the corporation. This endeavor to go beyond the letter of the law is the acceptance of corporate moral responsibility.
James (2003)	The effects of internal audit structure on perceived financial statement fraud prevention	- insourced-report to senior management - insourced-report to audit committee - outsourced-same firm - outsourced-different firm	- perceived likelihood of deterrence - perceived likelihood of detection - perceived likelihood of reporting	The increases in perceived audit expertise may occur with outsourcing, but such increases may not significantly enhance user confidence in the internal audit function because users perceive outsourced teams to have less in-depth knowledge of the company than in-house internal audit departments.
Gramling et al. (2004)	The role of the internal audit function in corporate governance: A synthesis of the extant internal auditing literature and directions for future research	-	-	The internal audit function has a unique opportunity to serve an important role in acting as a resource to the other parties charged with monitoring, maintaining and enhancing the quality of an entity's corporate governance.

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
Gelderen, Sluis and Jansen (2005)	Learning Opportunities and Learning Behaviors of Small Business Starters: Relations with Goal Achievement, Skill Development and Satisfaction	<ul style="list-style-type: none"> <li>- transitions</li> <li>- task-related characteristics</li> <li>- obstacles</li> <li>- support</li> <li>- external parties</li> <li>- meaning oriented</li> <li>- instruction oriented</li> <li>- planned learning</li> <li>- emergent learning</li> </ul>	<ul style="list-style-type: none"> <li>- skill development</li> <li>- goal achievement</li> <li>- satisfaction</li> </ul>	This study's findings underline the importance of doing research on the influence of learning opportunities and learning behaviors on entrepreneurial success. It indicates that entrepreneurs can influence their entrepreneurial career by managing their learning behavior and by paying attention to contextual factors. The same conclusion applies to people who are responsible for entrepreneurial education. The research outcomes are useful starting-points for improving entrepreneurial learning and success.
Gramling and Hemanson (2007)	The IIA's research on the state of the internal auditing profession	-	-	The IIA (Institute of Internal Auditors) study and its future iterations should provide the IIA and internal auditors with an ongoing assessment of the state of the internal auditing profession around the world. The demand for internal auditors will continue to grow on a global level and that the role of internal audit will continue to evolve.
Mihret and Yismaw (2007)	Internal audit effectiveness: an Ethiopian public sector case study	-	-	The internal audit effectiveness is strongly influenced by internal audit quality and management support, whereas

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
				organizational setting and auditee attributes do not have a strong impact on audit effectiveness.
Watson (2007)	Internal Audit Five Best Practices for Oversight	-	-	In recent years, audit committees have been a focal point of corporate governance reform globally, including their critical oversight role of internal audit. The enhancements in audit oversight and internal audit have been most prominent in large, multi-national corporations, which have far-flung operations and diverse risks. Such firms are commonplace in the Irish economy.
Archambeault, DeZoort and Holt (2008)	The need for an internal auditor report to external stakeholders to improve governance transparency	-	-	An internal auditor report has potential to complement existing governance disclosures, increase stakeholder confidence in governance quality and motivate internal audit diligence.
Aurelia et al. (2008)	Tridimensional approaches of the internal audit, private public and banking system	-	-	This research explains the tridimensional approach of the concept of internal audit and identifies the elements that emphasize, in a tridimensional way, the internal audit. The steps of the research take into consideration a synthesis of the materials published by the national and international accounting standards, by professional bodies, papers on this

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
				theme proposed for debate, as well as materials of the economic entities.
Haat, Rahman, and Mahenthiran (2008)	Corporate governance, transparency and performance of Malaysian companies	-	-	Corporate governance factors have a strong predicting power on company performance, mainly due to debt monitoring and foreign ownership. However, there is a significant negative relation between audit quality and performance. The results find that performance is not associated with the level of disclosure and timely reporting. The results indicate that disclosure and timeliness are not significant contributing factors in the relationship between corporate governance and market performance.
Arnold (2009)	Informing the audit committee: Information and reports provided by internal audit	-	-	Internal auditors provide useful information to assist audit committee members in their corporate governance roles. Both audit committee members and internal auditors can gain a better understanding of their capabilities and responsibilities in corporate governance.
Mejjer (2009)	Understanding modern transparency	-	-	This article enhances the understanding of transparency by presenting three perspectives: a pre-modern, modern and post-modern perspective and analyzing the basic

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
				assumptions of these perspectives about transparency. On the basis of this analysis, the author argues for diversity in systems of transparency to maximize effects on societal trust.
Robert, Dennis and Hung (2009)	Individual Swift Trust and Knowledge-Based Trust in Face-to-Face and Virtual Team Members	<ul style="list-style-type: none"> <li>- Disposition to trust</li> <li>- In-group bias</li> <li>- Ability</li> <li>- Benevolence</li> <li>- Integrity</li> </ul>	<ul style="list-style-type: none"> <li>- Trust belief</li> <li>- Trust intention</li> <li>- Perceived risk</li> </ul>	Category-based processing of team member characteristics and an individual's own disposition to trust dominated the initial formation of swift trust. Once individuals accumulated sufficient information to assess a team member's trustworthiness, the effects of swift trust declined and knowledge-based trust formed using team members' behaviors (perceived ability, integrity and benevolence) became dominant. The use of information and communication technologies increased perceived risk of team failure, which reduced the likelihood that team members would engage in future trusting behaviors.
Ho and Hutchinson (2010)	Internal audit department characteristics / activities and audit fees: Some evidence from Hong Kong firms	-	-	The external auditor of firms in Hong Kong relies on the internal audit function and subsequently charges a lower fee.

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
Bechervaise and Benjamin (2011)	Visionary or criminal: From profit through morality to socially sustainable entrepreneurship	-	-	From pirates and warlords to accountants and corporate raiders, successful business practice has always incorporated a degree of volatility. At the same time, business leaders have too frequently neglected social responsibility in their pursuit of expanded reach, market advantage and, ultimately, increased profit. In a climate of immediate economic uncertainty, the need for responsible practice has become central to recovery from an ongoing global recession.
Burch (2011)	Building an internal audit function	-	-	Establishing or transforming an internal audit function is time intensive, but the payoff is high. A collaborative, risk-based internal audit function adds value to the organization by focusing on those business risks that may prevent or deter the company from achieving its goals.
Crumpton (2011)	The value of transparency	-	-	The development of leadership skills related to transparency can lead to improved effectiveness as a leader.
Lopez-Gamero (2011)	Environmental uncertainty and environmental management perception: A multiple case study	-	-	The environmental uncertainty is inherent in managerial decisions in two ways: in the changes that managers identify in the business environment; and in the changes that the

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
				managers themselves produce as a result of the initiatives they undertake in response to the business environment. The paper finishes with some recommendations for managers.
Mitchell (2011)	Transparency for governance: The mechanisms and effectiveness of disclosure-based and education-based transparency policies	-	-	Understanding the differences in the mechanisms by which disclosure-based and education-based transparency policies operate suggests that both scholars and practitioners should use caution in understanding why and predicting when, such policies will work.
Paliszkievicz (2011)	Trust Management: Literature Review	-	-	The dividends of high trust can also be quantified, enabling leaders to make a compelling business case for building trust, even making the building of trust an explicit objective. Like any other goal, building trust should be focused on, measured and tracked for improvement. It must be clear that trust matters to managers and leaders, that it is the right thing to do and the smart economic thing to do. One way to do this is to make an initial baseline measurement of trust and then to track improvements over time.

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
Radu Florea and Ramona Florea (2011)	Audit techniques and audit evidence	-	-	The audit procedures is to offer detailed audit steps which are to be performed during the audit fieldwork and which will achieve the explicit audit objectives. These procedures are to be developed by the auditor and approved by audit management and in the case of a decision of not performing a procedure, a comment with the reason for that decision needs to be included in the audit procedures.
Idiab, Haron, and Ahmad (2012)	Standards of professional practice and professional conduct of internal audit	-	-	The importance of this study stems from the importance of standards of professional practice and professional conduct of the internal auditing. It includes international standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Audit in the United States of America; which is regarded as the pioneer and leader professional for internal auditors in the areas of classification, education, research, applied evidence, and international standards for the professional practice of internal auditing.
Sobel and Kapoor (2012)	Step Up to the Plate	-	-	It is time for auditors to step up to the plate and prove their value to the organization by evolving internal audit and



Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

Authors	Title	Independent Variables	Dependent Variables	Results
				leveraging it to support the organization, thereby enabling it to move forward into a new era of profitability.
Nickell and Roberts (2013)	Organizational legitimacy, conflict and hypocrisy: An alternative view of the role of internal auditing	-	-	Organizational hypocrisy may isolate sub-groups in an organization so they are better able to cope with the moral aspects of their particular role. However, the internal auditing profession's focus on internal auditing as both a compliance monitor and a strategic consultant stretch the level of organized hypocrisy society is willing to excuse.
Schaubroeck, Peng and Hannah (2013)	Developing trust with peers and leaders: Impacts on organizational identification and performance during entry	<ul style="list-style-type: none"> <li>- cognition-based trust in peers</li> <li>- affect-based trust in peers</li> <li>- cognition-based trust in the leader</li> <li>- affect-based trust in the leader</li> </ul>	<ul style="list-style-type: none"> <li>- relational identity</li> <li>- organizational identification</li> <li>- role-related performance</li> </ul>	There is value to organizations in finding ways to help organizational newcomers to develop high-quality peer and leader relationships. When insiders demonstrate benevolence and provide newcomers with valuable information and resources, rather than treating them condescendingly as "greenhorns," this may create bonds of trust that facilitate more effective socialization. Effective socialization is not only a function of particular practices and structures as is often emphasized; it also depends on developing attributes in leaders and peer insiders that that make them trustworthy, just as newcomers must learn to

Table 1: Summary of Key Literature Reviews on Internal Audit Transparency (Continued)

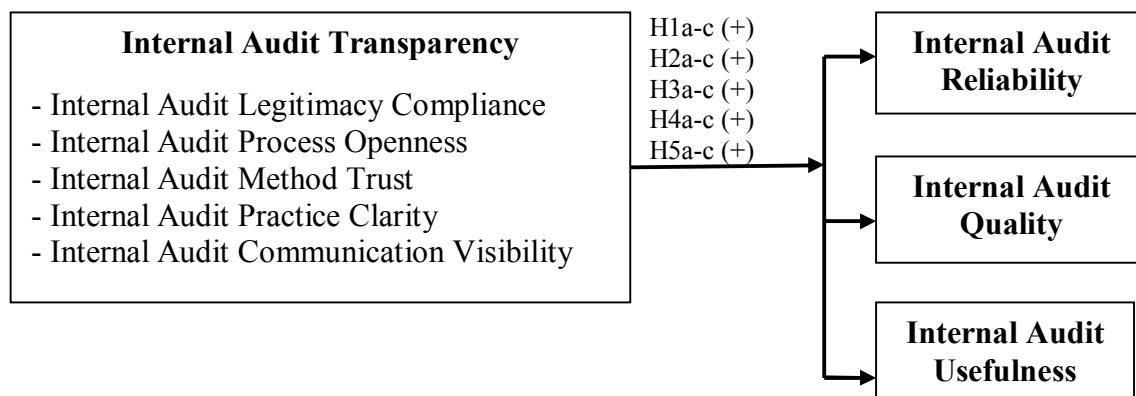
<b>Authors</b>	<b>Title</b>	<b>Independent Variables</b>	<b>Dependent Variables</b>	<b>Results</b>
				develop personal reputations for trustworthiness with their peers and leaders.
Sherchan, Nepal and Paris (2013)	A Survey of Trust in Social Networks	-	-	The most significant aspect of a social network is its social capital, which refers to the collective value associated with the social network. Social capital can be harnessed to cultivate trust in social networks. The trust models for social networks should cover two aspects of trust: sociological and computational. The sociological aspect of trust includes emotion, behavior, attitude and experience of the members. The computational aspect should provide a notion of capturing and computing these sociological values.

### Internal Audit Transparency and Its Consequences

This research on internal audit transparency is the ability of firms to optimize in the internal audit, appropriate with operational activities in an organization context, which lacks secrecy and can reduce environmentally-harmful behaviors and increase the quality of audit work. Financial businesses have high risk of business operations (Ninlaphay and Ussahawanitchakit, 2012). Moreover, the risk is a permanent companion for any transaction or process developed by the credit institutions, with negative consequences upon them by impairing the quality of affairs, diminishing the profit or even registration of losses leading to the alteration of the institution functioning. Thus, the internal audit has become compulsory by law, instrument by means of which the banking system can be monitorized and any infringement of regulations can be immediately notified, analyzed and monitorized till their solving (Aurelia et al., 2008). Drawing on the internal audit literature review, prior research (Boonmunewai and Ussahawanitchakit, 2010; Sampattikorn and Ussahawanitchakit, 2012; DeBoskey and Gillett, 2013) uses the internal audit practices to conceptualize a construct at the organizational level.

As described earlier, internal audit transparency consists of five dimensions: internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility. Thus, to easily understand the relationships between operational environment analysis and its consequences, the first sub-model is shown in Figure 2.

Figure 2: The Effect of Internal Audit Transparency on Internal Audit Reliability, Internal Audit Quality and Internal Audit Usefulness



### *Internal Audit Legitimacy Compliance*

Transparency may make actors aware of new alternatives regarding the legitimacy of particular goals or means, or clarify the consequences for engaging in certain behaviors (Mitchell, 2011; McDonnell, 2005). Because of the number of high-profile corporate failures in recent years, corporate fraud has been of significant public and regulatory interest. The penalties for fraudulent financial reporting have significantly increased in response to society's view of this type of behavior (Coram, Ferguson and Moroney, 2008). Therefore, business must comply with environmental regulations or face the threat of regulators legal action, penalties and fines (Sarkis, Gonzalez-Torre and Adenso-Diaz, 2010; Boritz, 2005).

The stakeholders are able to rely on and trust corporate social and environmental accounts because of the efficacy, sincerity and legitimacy of accountability processes (Dando and Swift, 2003). Moreover, business organizations are expected to generate high profits, meet analyst expectations, satisfy regulators and create jobs while simultaneously protecting the interests of shareholders, creditors, the natural environment and other affected parties (Nickell and Roberts, 2013). On the other hand, regulators who propose the inclusion of capitalized unverifiable future cash flows in financial reports should consider the costs generated by their proposal's effect on managerial behavior (Watts, 2003).

Munteanu, Zuca and Țîntă (2010) strongly believe that it is necessary to analyze the possibilities of finding optimal ways with a view to increasing the management awareness towards the internal audit role seen as a component of the accounting financial audit, for the benefit of the activity of the entity, including the use of clear and coherent regulations that can be easily applied. Furthermore, the internal audit function can now largely be regarded as serving two purposes within an organization: 1) ensuring compliance with current laws and regulations, particularly regarding internal controls and financial reporting and 2) consulting with management to accomplish objectives, managing risk and strengthening corporate governance (Nickell and Roberts, 2013). Also, Al-Laith (2012) suggests the need to control and supervise the banks' compliance with banking sector legislation or regulations to improve the reliability of financial statements issued by those banks.



The implementation of accounting standards is an incentive to both producers and users of accounting (Benston et al., 2007). In addition, changes resulting from the new auditing standard may influence the timing of audit procedures, the timing of required communications and the degree and extent of involvement that internal auditors and other company personnel may have in connection with the independent auditor's performance of the financial statement and internal control over financial reporting (Daugherty, 2013).

Current regulatory standards and professional best practices indicate that objectivity increases as the oversight of the internal audit function by the audit committee increases, relative to management oversight (Abbott, Parker and Peters, 2012). Also, audit quality is an important area of concern for regulators because credible financial reporting is considered to be essential for the well functioning of the capital market (Deumes et al., 2012). Sobel and Kapoor (2012) note that stakeholders rely on internal auditors to ensure that the risks taken are within the risk appetite and that compliance with policies, procedures and standards is up to the mark.

If regulatory requirements are to be mandated for internal control reports, it is important to examine the use fullness and benefits associated with such reports to financial statement users (O'Reilly-Allen and McMullen, 2002). Moreover, external auditors will incorporate the pertinent regulatory guidance and assess the organizational status of the internal audit function when making decisions on the degree of reliance on internal audit function assistance (Abbott, Parker and Peters, 2012).

The internal auditors should ascertain the extent of compliance with laws and regulations, which could have a significant impact on the company's operations and safeguarding assets (Fadzil, Haron and Jantan, 2005). In addition, internal auditors effectively serve audit committees by being their eyes and ears and by providing assurance regarding compliance with laws and regulations (Everett and Tremblay, 2014). Internal audit function involves a company internal audit department independently developing a separate management structure, which aims to ensure that, at all levels of organization, efficiency standards are met and the ethical and economic entity that acts responsibly in its relationships with other members of the economic environment (Botez, 2012). Regulation leads to more reliable financial statements (Nagy, 2010).



Internal auditors must produce real benefits for the entity through a systematic evaluation, based on the auditing standards (Munteanua and Zahariab, 2014). Standards establish a basis for consistently measuring the quality of internal audit operations, unifying internal auditing throughout the world (Al-Twaijry, Brierley and Gwilliam, 2003). Regulatory engages in image management and the promotion of audit quality (Holma and Zamanb, 2012). The attribute standards address the attributes of organizations and individuals performing internal audit services while the performance standards describe the nature of internal audit services and provide quality criteria against which performance of these services can be measured (Fadzil, Haron and Jantan, 2005). Therefore, internal auditors have benefited greatly from the legislation as management looked to them for evaluation on the adequacy of the internal control structure (Ziegenfuss and Singhapakdi, 1994).

However, Mitchell (2011) states that transparency can best be viewed as a weak cause of behavioral change; it may be hijacked by the usual problems of regulatory capture. Also, Ninlaphay and Ussahawanitchakit (2012) note that compliance with laws and regulations have no effect on financial information reliability and internal audit quality.

In this research, internal audit legitimacy compliance refers to the ability of firms to utilize internal audit standards or relevant laws which lead to perform appropriate internal audit work. In summary, this research believes that internal audit transparency can result in higher internal audit legitimacy compliance that tends to provide higher internal audit reliability, while adding to internal audit quality and internal audit usefulness. Therefore, the hypotheses are posited as follows:

***Hypothesis 1a: The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit reliability.***

***Hypothesis 1b: The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit quality.***

***Hypothesis 1c: The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit usefulness.***



### *Internal Audit Process Openness*

An internal audit process is central to an effective compliance program (Mast, 1998). Florea and Florea (2011) note that there are broad guidelines concerning auditor qualifications and conduct, evidence accumulation and reporting (including auditing standards and conduct).

Internal audit functions should be carefully planned to reduce mistakes and cut costs (Rezaee, 1996). An organization's internal audit plan can aid in the acquisition of a new company, the launch of new products and services, or the modification of a business' organizational structure to achieve operational excellence (Kapoor and Brozzetti, 2012). If internal audit develops annual audit plans tailored to fall the business objectives, then such plans do not fulfill the needs of management (Rickard, 1994). A poor work process causes poor work quality (Rezaee, 1996). Audit quality is a central issue relating to the expertise of individuals involved in the audit process (Holma and Zamanb, 2012). The needs of the internal audit personnel and the goals of the internal audit department should also be examined to improve the quality of job performance, which begins with the work process (Rezaee, 1996). If the internal audit has failed to perform planning, then the reliance on quantitative performance indicators and service standards is meaningless (Rickard, 1994).

Adequate supervision of the process of information gathering, analysis, interpretation and documentation should be included putting an emphasis on achieving the objectives of the audit (Idiab, Haron and Ahmad, 2012). Furthermore, auditors must ensure that when planning and performing audit procedures, they believe that these procedures are adequate enough in order to obtain sufficient and appropriate audit evidence (Florea and Florea, 2011). Also, processes need to evolve continually if internal audit is to improve efficiency and drive value for the business while cutting costs (Sobel and Kapoor, 2012).

Internal audit should have an independent view on risks, recognizing that its view may differ legitimately from other functions' perspectives in devising its audit plan (Watson, 2007). Anderson et al. (2012) examine a mix of activities common to internal audit functions, including: operational auditing, financial auditing, Information Technology (IT) auditing, change controls, privacy and security compliance and governance. However, the audit plan should be devised with a holistic view as to the



nature and significance of risks facing the business, rather than focus solely on financial reporting risks. The risk assessment should take a broad view of risks, to include, but not be limited to: reputational, operational, financial and legal information technology and compliance risks (Watson, 2007).

Most important, determination in an internal audit process, including targets for auditing in the scope of work and background for the activities that will be audited, satisfy the audit objectives, detection risk of errors in financial statements, operating effectiveness of internal controls, importance of audit issue and resources necessary for the performance of the auditing, nature, timing, or other planned audit procedures (Elder et al., 2013; Boța-Avram Cristina and Palfi Cristina, 2012; Idiab, Haron and Ahmad, 2012; Love and Manisero, 2011; Florea and Florea, 2011).

Openness seems to have greater utility for selecting employees who are likely to perform well over the long term (Minbashian, Earl and Bright, 2013). In addition, recent meta-analysis showed that entrepreneurs scored higher than managers on openness to experience (Shane et al., 2010). Mitchell (2011) reveals that disclosures policies can reframe, document, reinforce and strengthen social norms that would illegitimately otherwise are environmentally-harmful behaviors. Also, information is centered to many organizational processes, crucial for effective decision-making and is increasingly important for competitive success (Dunk, 2004). However, design efforts centre on process improvement must look for ways to improve processes through automation and choose technology that supports the new processes (McDonnell, 2005).

However, Rezaee (1996) states that a poor work process causes poor work quality, so internal audit functions should be carefully planned to reduce mistakes and cut costs. Moreover, Sampattikorn and Ussahawanitchakit (2012) reveal that internal audit planning comprehension awareness cannot increase the benefit of financial information and organization value.

In this research, internal audit process openness refers to the ability of firms to prepare and formulate audit plans for which internal auditors must identify and document sufficient information (e.g., audit scope and objectives, risks and controls, audit duration, resources necessary for the performance of the auditing etc.) to achieve the objectives in audit program and audit working papers in a consistent standardized and regulatory manner and which must be disclosed. In summary, this research believes





that internal audit transparency can result in higher internal audit process openness that tends to provide a higher internal audit reliability, while adding to internal audit quality and internal audit usefulness. Therefore, the hypotheses are posited as follows:

***Hypothesis 2a: The higher internal audit process openness is, the more likely that firms will gain greater internal audit reliability.***

***Hypothesis 2b: The higher internal audit process openness is, the more likely that firms will gain greater internal audit quality.***

***Hypothesis 2c: The higher internal audit process openness is, the more likely that firms will gain greater internal audit usefulness.***

#### *Internal Audit Method Trust*

Action is necessary to change organizational practice and realize benefits from any internal audit program (Hyland and Beckett, 2002). Florea and Florea (2011) reveal that most internal audit work is affected by an auditor who obtains and evaluates evidence, using various procedures (e.g., inspection, observation, investigation, recalculation, re-performance, etc.). Moreover, the selection of the auditing procedures must include the choices of the auditing and the statistical sampling methods used in advance (Idiab, Haron and Ahmad, 2012). There are specific instructions for the accumulation of types of evidence including physical examination, documentation, analytical procedures, inquiries of the staff, sample size and items to select (Florea and Florea, 2011).

The issue of trust and the importance of developing and maintaining trusting relationships is another important reason why transparency can be so important (Crumpton, 2011). Paliszkiewicz (2011) notes that trust has been a topic of research in many disciplines for many years. Streams of research on trust can be found in the fields of philosophy, sociology, psychology, management, marketing, ergonomics, human-computer interaction, industrial psychology and electronic commerce. Also, trust is both a mechanism in the production of particular outcomes in many social phenomena and an outcome in its own right (Avgerou, 2013).



Trust is seen to reduce individuals' uncertainty in relationships and thus to enhance the quality of social exchanges in ways that better enable workers to acquire information, support and other resources (Schaubroeck, Peng and Hannah, 2013). It has often been argued that trust is essentially important for successful cooperation and effectiveness in organizations (Paliszkiewicz, 2011). In addition, trust developed during negative events or activities has long - term benefits, both of increased effectiveness of that leader in leading the organization successfully through the adversity and also the productivity impact on the remaining organization members who now respect and trust such leaders at higher levels (Crumpton, 2011).

Due to the business environment, staff has to be continuously trained in how to do their job, so they can be trusted (Hawkes and Adams, 1994). Moreover, trust is presumptively formed, using simple category-based information processing of individual characteristics because there is insufficient knowledge of individual behaviors (Robert, Dennis and Hung, 2009). Crumpton (2011) reveals that to maintain the staff's trust, leaders must be transparent in how information gathering and decisions are made. Newcomers and insiders joining new work teams must quickly develop cognition-based trust in their peers and leaders to perform effectively on interdependent tasks (Schaubroeck, Peng and Hannah, 2013).

There are many definitions of trust, most of which treat trust as a state, belief, or positive expectation (Paliszkiewicz, 2011). Robert, Dennis and Hung (2009) note that trust develops gradually over time, based on an individual's cognitive assessment of the other person's behavior. In general, trust is a measure of confidence that an entity or entities will behave in an expected manner (Sherchan, Nepal and Paris, 2013). Also, the notion of trust is understood to refer to a relationship between two parties: the trustor and the trustee (Avgerou, 2013).

Internal auditors are in a position of trust and must be seen to maintain integrity and independence in their performance (Leung and Perera, 2011). In order to gain trust, instead of just trying to convince people of a point of view, they must maintain transparency in planning and actions in order to have leadership influence over stakeholders or followers (Crumpton, 2011). Dalton and Spiller (2012) note that people execute planned actions in goal-relevant situations and ultimately achieve their goals.



The standardize audit processes and methodologies provide consistency in work quality (Kapoor and Brozzetti, 2012). Moreover, the level of auditors' qualifications will guarantee not only proper selection of tasks, activities, but also detailed methods and techniques in the process of the internal audit execution (Bielińska-Dusza, 2011). There is a positive impact on the control environment of the quality of the internal control systems since the senior management will demonstrate a higher climate of trust with better performance of the audit work (Fadzil, Haron and Jantan, 2005). The purpose, subject and scope of a particular audit task will show specific tendencies concerning the selection of methods and techniques (Bielińska-Dusza, 2011).

However, Srichanapun and Ussahawanitchakit (2012) state that internal audit planning has no positive effect on financial reporting reliability. Moreover, Chopset and Ussahawanitchakit (2013) note that internal audit planning efficiency has no influence on goal achievement.

In this research, internal audit method trust refers to the ability of firms to prepare and formulate audit programs for which internal auditors must identify and document sufficient information (e.g., specific objectives and instructions, sample size and items to select, identification of audit procedures, dates, expected completion times, manpower and places for audit etc.) to achieve the objectives in audit working papers in a consistent, standardized and regulatory manner; and it must be seen to maintain integrity and independence in the internal audit performance. In summary, this research believes that internal audit transparency can result in higher internal audit method trust that tends to provide a higher internal audit reliability, while adding to internal audit quality and internal audit usefulness. Therefore, the hypotheses are posited as follows:

***Hypothesis 3a: The higher internal audit method trust is, the more likely that firms will gain greater internal audit reliability.***

***Hypothesis 3b: The higher internal audit method trust is, the more likely that firms will gain greater internal audit quality.***



***Hypothesis 3c: The higher internal audit method trust is, the more likely that firms will gain greater internal audit usefulness.***

#### *Internal Audit Practice Clarity*

Fieldwork involves performing the tasks identified in the audit programs to collect evidence for assessment of the auditee's current operations considering identified audit criteria (Mihret and Yismaw, 2007). Moreover, it should be recorded in audit working papers in a consistent and standardized manner. Buchman (1983) notes that the internal auditors' working papers are at least as reliable as those of independent auditors. Also, documentation refers to the working papers prepared or obtained by the auditors and retained by them, in connection with the performance of the audit (Florea and Florea, 2011).

Clarity is the characteristic focus on the understandability, organization and comprehension of the information (Jonas and Blanchet, 2000). Furthermore, it is presented in an organized, clear and concise fashion, appropriately balancing brevity with sufficiency. A number of theorists and researchers have suggested that role clarity may be a condition for greater innovation (Ivancevich and Donnelly, 1974). Miles and Petty (1975) note that role clarity are highly correlated for persons in both supervisory and nonsupervisory roles as well as for those individuals who have a high or low need for clarity. Also, clarity about roles in a social system helps employees to decide which tasks can be better achieved with support, relative to tasks that can be achieved without allocating the resource of support (Parker et al., 2013).

Clarity on the internal audit's role in operational risk and pre-implementation control-development matters is required of an internal consultant (Watson, 2007). In addition, the auditor should retain the working papers for a period of time, sufficient to meet the needs of his practice and satisfy any pertinent legal or professional requirements of records retention (Florea and Florea, 2011).

Internal auditors must produce real benefits for the entity through a systematic evaluation, based on the auditing good practice in the field (Munteanua and Zahariab, 2014). Proper working practices contribute to audit quality (Holma and Zamanb, 2012). Internal auditor, being on the payroll of a company with a particular management, could not be said to be truly independent, since impartiality relates to



objectivity rather than independence (Vinten, 1999). The stakeholder perspective clearly signals the challenge for internal audit to become more relevant and valuable to the organization (Lenz and Sarens, 2012). Moreover, the management of internal audit department, performance of audit work, audit program and audit reporting significantly influences the internal control system (Fadzil, Haron and Jantan, 2005). However, Pongsatitpat and Ussahawanitchakit (2013) note that audit value increase has no relationships to financial information usefulness.

In this research, internal audit practice clarity refers to the ability of firms to perform the task identified in the audit program for which internal auditors must document working papers in a consistent, standardized and regulatory manner; and it must be organized, clear and comprehensive. In summary, this research believes that internal audit transparency can result in higher internal audit practice clarity that tends to provide a higher internal audit reliability, while adding to internal audit quality and internal audit usefulness. Therefore, the hypotheses are posited as follows:

***Hypothesis 4a: The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit reliability.***

***Hypothesis 4b: The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit quality.***

***Hypothesis 4c: The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit usefulness.***

#### *Internal Audit Communication Visibility*

Transparent communication can keep emotional uncertainty from creating more negative actions (Crumpton, 2011). Deepen et al. (2008) reveal that communication directly supports cooperation and indirectly, proactive improvement through cooperation. Moreover, decisions and communications interact such that communication gives rise to action and action gives rise to information to be communicated (Chenhall, 2005).



Clearly communication is provided in a report on internal control (O'Reilly-Allen and McMullen, 2002). Also, organizations need to evaluate and improve communication, especially under increasingly difficult economic pressures (Ruck and Welch, 2012). Companies must maintain open lines of communication with the public for the clarification of any issue and concerning any aspect of their operations which create controversy (Ostapski and Isaacs, 1992).

The audit reports refer to the identified risks or issues observed during the audit and proposed recommendations to improve business (Botez, 2012). The internal auditors should have direct access and report regularly to the organization's board of directors, the audit committee, or the owner-manager (Ziegenfuss and Singhapakdi, 1994). Unlike their external counterparts, who typically report to an entity's principals (i.e., shareholders), internal auditors typically report to individuals more closely associated with its agents (i.e., audit committee members) (Everett and Tremblay, 2014). The chief audit executive should then communicate that overall judgment about the organization's system of controls to the senior management and the audit committee (Fadzil, Haron and Jantan, 2005). Reports users will want to be confident about the quality of the systems, processes and competencies that deliver the information in the report and underpin the organization's performance and commitments (Deepen et al., 2008; Dando and Swift, 2003). Daugherty (2013) notes that the internal auditors should communicate accounting policies, management estimates and uncorrected misstatements. Also, auditors should report the effectiveness of internal control (Elder et al., 2013). Gramling and Hemanson (2007) reveal that internal auditors can provide objective information to directors; that is, information that is not filtered.

Audit results should be communicated to stakeholders (Mast, 1998). The focal point of internal audit work is the regular report provided to the audit committee, executive management, top management and boards (Sobel and Kapoor, 2012; Arnold, 2009; Dixon and Goodall, 2007). Dando and Swift (2003) point out that stakeholders need to know that the information in a report provides a complete, accurate, relevant and balanced representation of the organization's performance.

The internal auditors will determine not only whether the reports can be relied upon but also whether they are needed at all (Sawyer, 1993). If the reporting is to a low level in the hierarchy, there will be a tendency for the findings to be biased by



opportunistic behavior of the manager overseeing the internal audit unit (Sprackman, 1997). The chief internal auditor should have the right of reporting without editing under his own name (Vinten, 1999). Furthermore, the internal auditors must be free from potential influence or interference by management, so they distribute their efforts and report their findings to either top management (often the chief financial officer) or the audit committee (Norman, Rose and Rose, 2010). Also, the internal auditors should form and express an opinion in the audit report uninfluenced by personal bias (Vinten, 1999). In addition, the director of the internal audit department should have direct communication with the board of directors to ensure that the department is independent (Al-Twaijry, Brierley and Gwilliam, 2003).

Information overload may lead to poor decision-making because individuals stop paying close attention to details when presented with too much information (Archambeault, DeZoort and Holt, 2008). Kroeger (1993) notes that reports must also be short enough to be readable but long enough to be complete for each reading population.

Internal auditors communicate valuable information in several formats including oral communication, more formally through written audit reports, questionnaires and flowcharts (Arnold, 2009; Bierstaker, Janvrin and Lowe, 2008). Moreover, many chief audit executives utilize multiple communication channels to stakeholders including presentations, web sites, e-mail and newsletters (Head, 2009; Jonas and Blanchet, 2000; Mast, 1998).

Internal communication involves processes and volumes of information sent and received (Ruck and Welch, 2012). In addition, the internal audit function's visibility conveys openness of communication to stakeholders including: timeliness of reports, ranking of reports, reports which focus on the alignment of planned audits to corporate strategies, reports which focus on how internal audit has adapted the annual audit plan based on changes throughout the year, an emphasis on two-way communication and a balance between written and oral communications, direct access to employees across the organization unhindered by the chief executive officer or other executives and frequent communications between the audit committee members outside of the official committee meeting process (Daugherty, 2013; Head, 2009; Watson, 2007).



However, a reflection of the lack of detail about the ultimate form of best value, or the absence of any mention of a role for internal audit. Such lack of clarity is in itself important as it indicates that internal auditors, as potential key players in helping to monitor and ensure delivery of best value, do not have a vision of the likely role of external audit in this important initiative (Bowerman. and Hawksworth, 1999). A 1992 survey in the USA asks chief financial officers of Fortune 1,000 companies to determine what they expect from an audit and whether their expectations are being met. Respondents are consistent in stating that they expect value added from an audit and are not receiving it (Rickard, 1994).

In this research, internal audit communication visibility refers to the ability of firms to convey the audit outcomes which internal auditors conduct throughout the period of fieldwork in a consistent, standardized and regulatory manner; and must not filter nor keep emotional uncertainty from creating more positive actions. In summary, this research believes that internal audit transparency can result in higher internal audit communication visibility that tends to provide a higher internal audit reliability, while adding to internal audit quality and internal audit usefulness. Therefore, the hypotheses are posited as follows:

***Hypothesis 5a: The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit reliability.***

***Hypothesis 5b: The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit quality.***

***Hypothesis 5c: The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit usefulness.***

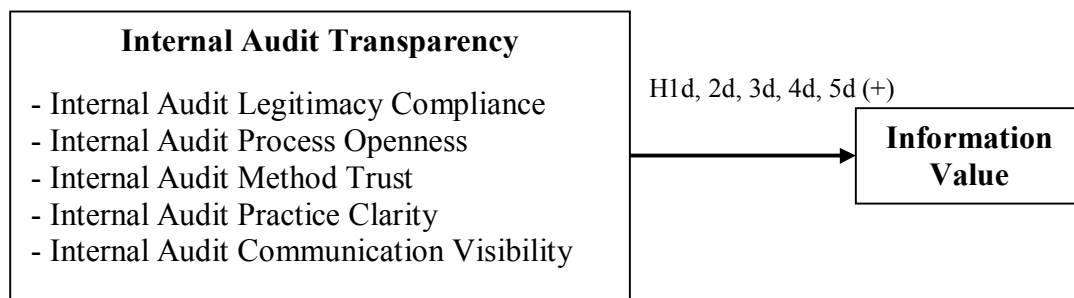
#### Internal Audit Transparency and Information Value

This section considers the effects of internal audit transparency on information value as shown in Figure 3.





Figure 3: The Effect of Internal Audit Transparency on Information Value



### *Information Value*

Information is central to many organizational processes, crucial for effective decision-making and is increasingly important for competitive success (Dunk, 2004). Also, the requirement for information consistency and accuracy needs to be a single, consistent version of the truth, both for compliance purposes and for ongoing credibility with the investor community (McDonnell, 2005). Moreover, relevant and timely information helps staff to improve systems and to serve customers better (Hawkes and Adams, 1994).

Stakeholders want information that is reliable, accurate and credible to on which to base their decisions (Vasile and Croitoru, 2012; Marx and Els, 2009; Ostapski and Pressley, 1992). However, information overload may lead to poor decision-making because individuals stop paying close attention to details when presented with too much information (Archanbeault, DeZoort and Holt, 2008).

Information is useful for making investment, credit and similar decisions (Jonas and Blanchet, 2000). Furthermore, line-of-business leaders are requesting information to support planning and operational decision-making (McDonnell, 2005). Also, information systems are used within agribusiness firms to reduce operating costs, increase profits, enhance management's ability to solve problems, establish a competitive advantage and improve the decision-making process (Kagan, 2000). Moreover, companies with high levels of agency conflict or previous occurrences of fraud could benefit from telling users about the improved processes being implemented (James, 2003).

An action plan identifying how value-for-money improvements can be achieved will play a prominent role in any best value regime (Bowerman and



Hawksworth, 1999). The internal audit should add value with every task it undertakes and its audit plan should complement the business plan of management (Rickard, 1994). Moreover, the internal auditors' working papers and reports are considered confidential and proprietary information (Ziegenfuss and Singhapakdi, 1994). Senior management and the audit committee normally expect that the chief audit executive will perform sufficient audit work and gather other available information during the year so as to form a judgment about the adequacy and effectiveness of the control processes (Fadzil, Haron and Jantan, 2005). As a result, the information from multiple audits can be aggregated and easily plotted on maps or graphs to track audit trends (Kapoor and Brozzetti, 2012).

The internal auditors should examine information systems and determine whether financial and operating records and reports contain accurate, reliable, timely, complete and useful information and controls over record keeping and reporting are adequate and effective (Fadzil, Haron and Jantan, 2005). So, the auditors enhance the value of the financial information by lending credibility to the financial statements of corporate enterprises (Okike, 2004). Moreover, the parties interested in the developments of the activities performed by an entity (shareholders, investors, employees, public institutions, etc.) require information on how management decisions determine the results of the entity and are interested to hold insurances concerning the quality of the management process (Munteanua and Zahariab, 2014). Also, the internal audit provides managers with useful information for cost economizing (Sprakman, 1997).

The internal audit is much easier than quantifying the benefits, especially when some benefits include the value of preventing bad things from happening (Gramling and Hemanson, 2007). Furthermore, information value is disclosed fairly and inappropriate amounts (Florea and Florea, 2011). The internal audit adds value through improving the control and monitoring environment within organizations to detect and self-report fraud (Muqattash, 2011). Other aspects that auditors need to consider are relevance and reliability of the information to be used as audit evidence (Florea and Florea, 2011).

A reflection of the lack of detail about the ultimate form of best value, or the absence of any mention of a role for internal audit. Such lack of clarity is in itself



important as it indicates that internal auditors, as potential key players in helping to monitor and ensure delivery of best value, did not have a vision of the likely role of external audit in this important initiative (Bowerman. and Hawksworth, 1999). A 1992 survey in the USA asked chief financial officers of Fortune 1000 companies to determine what they expected from an audit and whether their expectations were being met. Respondents were consistent in stating that they expected value added from an audit and were not receiving it (Rickard, 1994).

The internal audit function within the economic entity is essential because it helps the company in achieving its objectives and adds value and transparency, assisting at the same time, the manager, to enable it to better manages their activities (Botez, 2012). The transparency of all financial-accounting information plays an important role in the efficient administration of entities, leading ultimately to the increase of their market value (Mihăilescu and Ducu, 2011). Internal auditors must collaborate with management and the board of directors to ensure that an organization's goals align with its purpose and values (Kapoor and Brozzetti, 2012). Moreover, the internal audit will provide value to improve business-unit performance (Anderson and Svare, 2013).

In order to add value to an organization, internal auditors need to share information and intelligence with the right people at the right time is absolutely critical in decision making (Kapoor and Brozzetti, 2012). The value of internal audit is advising management on effective ways to minimize and manage risk (Vinten, 1999). The internal auditors provide managers with the bases for judgment and action, helping managers by reporting weaknesses in control and performance and in recommending improvements, providing counsel to managers and boards of directors on the solutions of business problems and supplying information that is timely, reliable and useful to all levels of management (Fadzil, Haron and Jantan, 2005).

The information is a valuable data processing that provides a basis for making decisions (Sori, 2009). The internal audit can do and assist in providing useful information for strategic decision making (Rickard, 1994). Furthermore, the internal auditors have wider and more diverse objectives than external auditors, which give internal auditors more flexibility in terms of internal audit areas that need to be audited according to the needs of decision and specific reporting needs (Otetea, Tita and Aristotel, 2013). However, the decisions do not generally have a right and wrong



answer, rather, there is uncertainty involved, which precludes the decision-maker from drawing on existing knowledge to quickly and confidently solve the problem (O'Donnell and David, 2000).

Internal audit information value drives benefits for many stakeholders, including management, audit committees and firms (Sobel and Kapoor, 2012; Baker, 2011; Arnold, 2009). Ho and Hutchinson (2010) provide preliminary support for the notion that internal audit function assists in reducing external audit effort and fees. In addition, internal audit provides periodic feedback concerning the effectiveness of those activities along with suggestions for improvement (Steinbart et al., 2012). However, Laonamtha and Ussahawanitchakit (2012) reveal that accounting information quality has no effect on decision making success.

In this research, information value refers to the utility of information which all users can use for correctly and timely decision-making. In summary, this research believes that internal audit transparency tends to provide higher information value. Therefore, the hypotheses are posited as follows:

***Hypothesis 1d: The higher internal audit legitimacy compliance is, the more likely that firms will gain greater information value.***

***Hypothesis 2d: The higher internal audit process openness is, the more likely that firms will gain greater information value.***

***Hypothesis 3d: The higher internal audit method trust is, the more likely that firms will gain greater information value.***

***Hypothesis 4d: The higher internal audit practice clarity is, the more likely that firms will gain greater information value.***

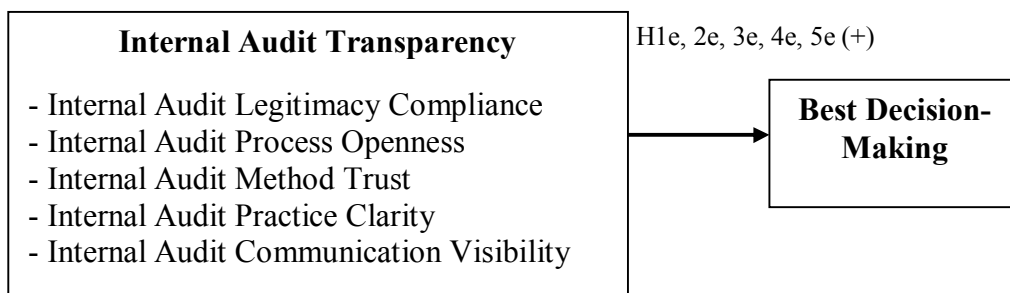
***Hypothesis 5d: The higher internal audit communication visibility is, the more likely that firms will gain greater information value.***



### Internal Audit Transparency and Best Decision-Making

This section considers the effects of internal audit transparency on best decision-making as shown in Figure 4.

Figure 4: The Effect of Internal Audit Transparency on Best Decision - Making



#### *Best Decision-Making*

Decision-making should have more data to be captured and entered (Poston and Grabski, 2000). In addition, internal stakeholders (e.g., management, shareholders, employees, etc.) and external stakeholders (e.g., investors, creditors, analysts, customers, suppliers, etc.) should have access to detailed internal audit information (Archambeault, DeZoort and Holt, 2008; Hill and Booker, 2007).

Stakeholders and boards of directors are increasingly relying on internal auditors to provide enterprise wide risk intelligence and insights that can be leveraged to proactively mitigate risks, assure regulatory compliance, and, ultimately, protect stakeholders and customers. Internal auditors have become a major presence in the boardroom (Sobel and Kapoor, 2012). Moreover, there are many key persons to assist the boards of directors, including the chief executive officer, chief financial officer, chief operating officer, president, chief ethics officer, chief compliance officer, corporate legal counsel, chief risk officer and business unit leaders. (Burch, 2011).

Internal auditing is an independent professional service, to serve not just management but the whole organization (Cortesi, Tettamanzi and Corno, 2009). Also, an internal audit function can provide value in that the assessment can serve as a signal of quality to the potential users of internal audit services such as: external auditors, audit



committee members and other functions within the organization (Gramling and Hemanson, 2007; Venter and Bruyn, 2002; Buchman, 1983).

The internal auditing helps to ensure that business decisions and management operations remain consistent with an organization's mission, strategies and goals (Kapoor and Brozzetti, 2012). Furthermore, the internal auditors are keen to provide useful information to management for planning and decision making purposes (Rickard, 1994). The internal auditors can help managers in decision making by pointing up problems in meeting goals (Sawyer, 1993). The internal audit will focus more on providing advice on best practices and corporate governance structures (Mihăilescu and Ducu, 2011). Also, the internal auditors should report directly to the Board of Directors of the company or Audit Committee (Botez, 2012). The presenting accounting information effect on decision making (O'Donnell and David, 2000).

Ninlaphay and Ussahawanitchakit (2012) reveal that decision-making capability refers to the success of choice between many alternative ways to help a company achieve its objectives or goal set, which decision-making capability involves intelligence, design alternatives and choices between these alternatives. In this research, best decision-making refers to the best choice between many alternative ways to help a company achieve its objectives or goal set in a correct and timely manner. In summary, this research believes that internal audit transparency tends to provide a higher best decision-making. Therefore, the hypotheses are posited as follows:

***Hypothesis 1e: The higher internal audit legitimacy compliance is, the more likely that firms will gain greater best decision-making.***

***Hypothesis 2e: The higher internal audit process openness is, the more likely that firms will gain greater best decision-making.***

***Hypothesis 3e: The higher internal audit method trust is, the more likely that firms will gain greater best decision-making.***

***Hypothesis 4e: The higher internal audit practice clarity is, the more likely that firms will gain greater best decision-making.***

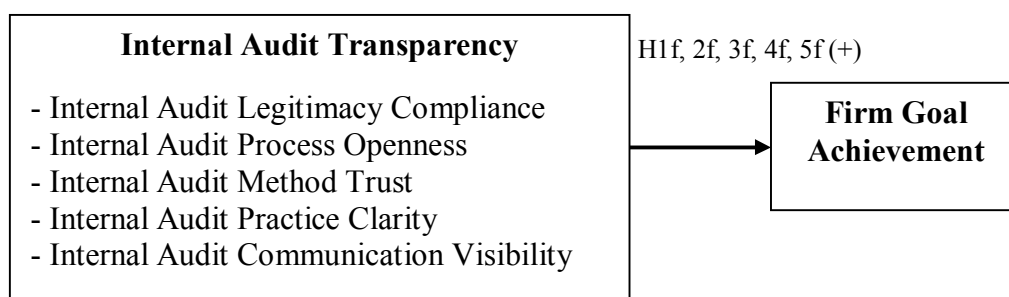


***Hypothesis 5e: The higher internal audit communication visibility is, the more likely that firms will gain greater best decision-making.***

### Internal Audit Transparency and Firm Goal Achievement

This section considers the effects of internal audit transparency on firm goal achievement as shown in Figure 5.

Figure 5: The Effect of Internal Audit Transparency on Firm Goal Achievement



### *Firm Goal Achievement*

Auditing not only identifies quality processes in organizations; it locates problems, needs and delivers information to develop action plans for better results (Sisaye, 1999). Moreover, the internal audit has its contributes or to the achievement of this goal (Aurelia et al., 2008).

Chrisman et al. (2013) observe that the meta-themes—the unique goals, governance and resources of family firms—are not only primary sources of heterogeneity but key determinants of outcomes such as the continuation of family involvement, firm survival and renewal and financial performance. Moreover, cooperation and proactive improvement combine to influence goal achievement (Deepen et al., 2008). Also, the effect of having an organizational vision for company performance increases profit ratios on a consistent level (Altiok, 2011).

Now is an exciting time to be an internal auditor. No longer is the role limited to financial reporting oversight. It is time for auditors to step up to the plate and prove their value to the organization by evolving internal audit and leveraging it to support the organization, thereby enabling it to move forward into a new era of



profitability (Sobel and Kapoor, 2012). Internal audit departments engage in a wider review of the economy, efficiency and effectiveness of the organization's activities and their effect on organizational performance (Al-Twaijry, Brierley and Gwilliam, 2003).

Internal audit can achieve the objectives of the organization if the system of internal control is well organized, formalized and made up of professional standards and rules (Munteanua and Zahariab, 2014). The successful company will be proactive in anticipating the direction of legislation so as to avoid the cost of unplanned set-up (Vinten, 1998). The internal auditors review operations or programs to ascertain whether results are consistent with established objectives and goals and whether the operations or programs are being carried out as planned (Fadzil, Haron and Jantan, 2005). Also, the internal audit through the carried out activities adds value both by evaluating the internal control system and risk analysis associated with auditable activities and the recommendations recorded in the reports prepared and submitted for the purpose of achieving the objectives of the organization (Munteanua and Zahariab, 2014). Moreover, the motivation for internal auditors to report deficiencies is internal auditors view themselves as adding value to their organizations (Schneider, 2009). The reasonable and meaningful findings and recommendations contained in the audit report are symbols of their contribution, which result in improvements to the organization as a whole (Fadzil, Haron and Jantan, 2005).

There are several aspects that will significantly mark internal audit and the organizations that will take account of these issues will have an internal audit service that will truly bring them added value (Mihăilescu and Ducu, 2011). The internal auditors are responsible for testing internal controls and must closely monitor opportunity risks to prevent control failures that could be attributed to poor performance by internal audit (Norman, Rose and Rose, 2010). The internal audit, an independent objective assurance and business advisory, intended to add value and lead to business improvement organization (Botez, 2012). The importance of internal audit in the current economic environment has become increasingly large. Public Internal Audit has the chance not only to prevent future catastrophes like this, but to make the entities to operate more efficiently (Otetea, Tita and Aristotel, 2013). In addition, the internal auditing has undergone dramatic changes that have expanded its scope in a way





that allows it to make greater contributions to the organization it serves (Fadzil, Haron and Jantan, 2005).

An internal audit is a key area which provides the positive performance outcomes (Rickard, 1994). In addition to financial auditing and compliance auditing, much of internal audit work involves operational auditing where the focus is on the effectiveness and efficiency of the organization's operating activities (Schneider, 2009). Internal auditors also help run a company more efficiently and effectively to increase shareholders' value (Fadzil, Haron and Jantan, 2005). Also, the bank internal audit is the main goal to contribute to the banking objectives in order to improve their activity (Mihăilescu and Ducu, 2011).

The ultimate goal, the creation of wealth, remains the same, but the small-business owners are followers of the principle of satisfying behavior, rather than the maximization principle of the homo - economics approach (Fassin, Rossem and Buelens, 2011). Furthermore, performance is a pattern of actions taken to achieve goals that are measured on the basis of a comparison with different standards (Octavia, 2013). Sampattikorn and Ussahawanitchakit (2012) reveal that goal achievement sustainability refers to the operational outcome that shows performance of a firm, both financial and non-financial, that arises from an ability of the firm to plan and operate for continuously achieving goals over the long term. However, Chopset and Ussahawanitchakit (2013) note that financial report quality has no influence on goal achievement.

In this research, firm goal achievement refers to the operational outcome that shows performance of firms, both financial and non-financial, that arises from an ability of firms which are properly operated to achieve their goals. In summary, this research believes that internal audit transparency tends to provide a higher firm goal achievement. Therefore, the hypotheses are posited as follows:

***Hypothesis 1f: The higher internal audit legitimacy compliance is, the more likely that firms will gain greater firm goal achievement.***

***Hypothesis 2f: The higher internal audit process openness is, the more likely that firms will gain greater firm goal achievement.***



***Hypothesis 3f: The higher internal audit method trust is, the more likely that firms will gain greater firm goal achievement.***

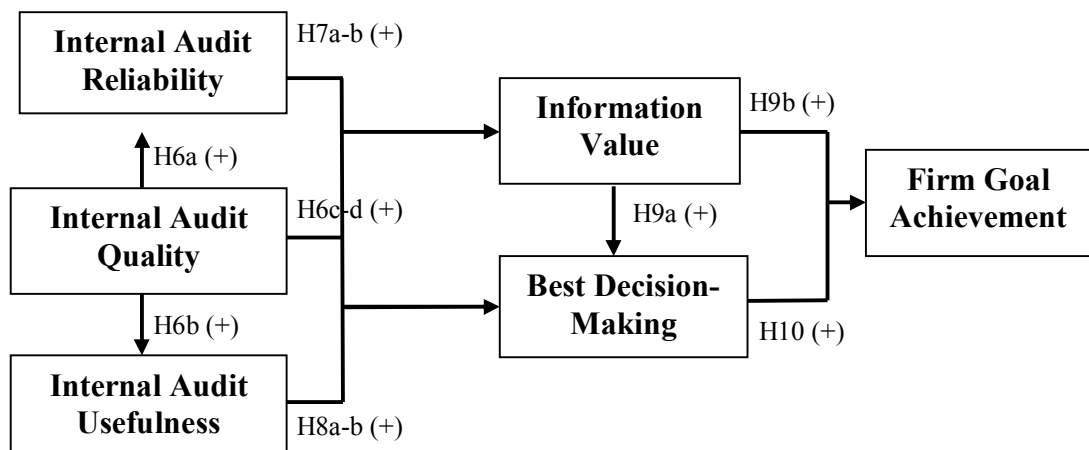
***Hypothesis 4f: The higher internal audit practice clarity is, the more likely that firms will gain greater firm goal achievement.***

***Hypothesis 5f: The higher internal audit communication visibility is, the more likely that firms will gain greater firm goal achievement.***

#### Consequences of Internal Audit Transparency

A simplified view of those relationships between internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement is as shown in Figure 6.

Figure 6: The Relationships among Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making and Firm Goal Achievement



#### *Internal Audit Reliability*

Reliability is the ability to perform the promised service dependably and accurately (Gunawardane, 2011; Dunk, 2004). Furthermore, reliability represents the extent to which the information is unbiased, free from error and faithfully represented



(Maines and Wahlen, 2006). Moreover, reliability appropriates for management to operate the entity and to exercise financial and reporting responsibilities (Boritz, 2005). Also, reliability is an essential characteristic for accounting information to be useful for decision-making (Maines and Wahlen, 2006).

For information to be useful to users, it must be reliable (Jonas and Blanchet, 2000). In addition, users must have confidence that a company's financial reporting is reliable for that company to have access to capital markets at a low cost of capital (James, 2003). Al-Laith (2012) suggests that the need to control and supervise the banks' compliance with banking sector legislation or regulation improves the reliability of financial statements issued by those banks. Also, the more objective and competent the internal audit function is perceived, the more an external auditor can rely on its work (Arel, 2010).

The corporate scandals which provoked world-wide concern with corporate governance, focused new attention on internal audit, as one of the mechanisms designed to secure accountability (Arena, 2013). The theory of motivation-based reasoning indicates that judgment can be both intentionally and unintentionally biased when a decision maker is motivated to achieve a decision outcome that provides personal benefits or protection from personal harm, so internal auditors are susceptible to biased judgment in the face of conflicting incentives (Norman, Rose and Rose, 2010). Therefore, the greater level of trust and reliance the external can place on the internal and the further the authority will move towards a self-regulated model of monitoring (Bowerman and Hawksworth, 1999). Also, the freedom from bias is a function of the organizational status of the internal auditors (Ziegenfuss and Singhapakdi, 1994). The internal audit department must be granted the license to carry out its responsibilities freely and objectively and also their judgments reached must be unbiased (Fadzil, Haron and Jantan, 2005).

Modern internal auditors provide the reliable and trustworthy data to assisting managers (Sawyer, 1993). If internal audit is to be valuable and effective, then it must have sufficient status and independence to ensure that its views and recommendations are given proper consideration (Vinten, 1999). Furthermore, the internal audit's recommendations reliance by the external auditors on the internal audits activity (Schneider, 2009). The external auditor is expected to place the maximum



possible reliance on internal audit (Bowerman and Hawksworth, 1999). Also, the internal auditors will be perceived as the most able persons to provide valuable advice to the board of managers and to executive management. Internal auditors become part of the company's management and they are forced to act as business partners and not be perceived as those that are guilty or deal only with the identification of mistakes (Mihăilescu and Ducu, 2011). Boards of directors need internal auditors to carry out their responsibilities, desperately reach out for reliable information (Sawyer, 1993).

The internal auditors should have full rights of access to records, assets and personnel and should receive such information and explanations as they consider necessary for the performance of their duties (Vinten, 1999). Moreover, the internal audit function provides the expanded accountability requirements of stakeholders, like the board and management (Christopher, Sarens and Leung, 2009). Statements on reliability deal with issues related to the extent of assurance provided by an audit, the accounting policies used in the financial statements, the extent of assurance provided by the auditor that the audited financial statements give a true and fair view, the audited report's effectiveness in communicating the extent of the audit work performed and fraud within the audited entity (Pourheydari and Abousaiedi, 2011).

The internal auditor has the authority to investigate the company's operations at all levels while being independent of management, whose role is primarily to promote business efficiency (Botez, 2012). Also, the internal auditors should present information and discoveries in a way that allows decision makers to make good choices (Kapoor and Brozzetti, 2012). Stakeholders rely on the internal auditors' work; the improvement of the coordination of internal audit with the external audit will lead to an increase in internal audit trend (Mihăilescu and Ducu, 2011).

The internal auditors can serve their true purpose of making management more effective, more responsive to events and more accountable (Sawyer, 1993). However, the authority of a chief executive officer or audit committee member might cause internal auditors to devote more audit effort to a potential problem area than would result from a self-assessment pertains to the reliability of the information (Schneider, 2009). On the other hand, Gramling et al. (2004) argue that when the audit procedure reliability is low, the work performance is not contingent on the level of internal audit function competence or objectivity.



In this research, internal audit reliability refers to the ability of firms to perform the internal audit service independently, clearly and completely by achieving information without error or bias. In summary, this research believes that internal audit reliability tends to provide a higher information value and best decision-making. Also, the more objective and competent the internal audit function is perceived, the more an external auditor can rely on its work. For information to be useful to users, it must be reliable.

#### *Internal Audit Quality*

The audit has no value without public trust in the quality of the audit (Deumes et al., 2012). Dixon and Goodall (2007) note that poor internal quality control leads to inefficiencies and a loss of confidence in conclusions and recommendations.

Audit quality is a function of the level of staff expertise, the scope of services provided and the extent to which audits are properly planned, executed and communicated (Mihret and Yismaw, 2007). Also, reliability is identified as a dimension of internal service quality (Gunawardane, 2011). The internal audit quality characteristics consist of competence (e.g., educational level, certification, etc.), objectivity (e.g., reporting relationship, partly responsible for internal audit employment decisions, etc.) and quality of work performance (e.g., adequacy of audit programs, scope of work performed, etc.) (Gramling and Vandervelde, 2006). Moreover, internal audit quality, which provides useful findings and recommendations, is central to audit effectiveness (Mihret and Yismaw, 2007).

Much of the internal audit quality literature studies the internal auditors' judgments and decisions (Gramling et al., 2004). Ho and Hutchinson (2010) develop a survey questionnaire and use a portion of the internal audit staff having professional accounting/auditing qualifications to measure internal audit staff qualifications. Anderson et al. (2012) develop a web-based survey instrument to test a conceptual model articulating factors associated with internal audit function size.

The internal auditors' responsibilities have expanded significantly to quality audits (Kapoor and Brozzetti, 2012). Therefore, the internal auditors change their role in focus involves a move away from financial auditing and internal control compliance checks to a primary focus on quality systems reviews (Hawkes and Adams, 1995). To increase the quality of the results of internal audit one should pay an increased attention



to assess the nature, extension, quality of control processes and procedures (Mihăilescu and Ducu, 2011). The specifies certain procedures which should be applied on all audits for effective and efficient quality control include instructions concerning the form and content of working papers, the construction and use of audit programmers, covering statutory disclosure requirements (Ratliff, Jenson and Flagg, 1993). Also, the internal audit effectiveness is strongly influenced by the internal audit quality (Arena, 2013). The performance of audit work of the internal auditing practices positively influences the information and communication aspect of the quality of the internal control system (Fadzil, Haron and Jantan, 2005). When properly designed, internal audit activities can significantly improve the business as a whole (Kapoor and Brozzetti, 2012).

An improved quality of the internal audit function is essential to the success of internal auditors (Rezaee, 1996). Since, the stakeholder's expectations become higher, which will mean significantly greater efforts for auditors (Otetea, Tita and Aristotel, 2013). The internal auditors deploy resources so that the most relevant and significant risks are addressed for consistency in work quality (Kapoor and Brozzetti, 2012). Furthermore, the role of internal audit existence is justified by the added value that is obtained by reducing or even eliminating risks within the entities (Otetea, Tita and Aristotel, 2013).

Internal auditors provide alerts and warnings for risks that require attention and track corrective actions (Kapoor and Brozzetti, 2012). A greater the internal audit function quality signifies a reduction in control risk, which prompts the external auditor to reduce the audit effort (Wan-Hussin and Bamahros, 2013). The internal auditors should report to an officer of the organization of sufficient status to ensure broad audit coverage and adequate consideration of and action on, their findings and recommendations (Ziegenfuss and Singhapakdi, 1994).

The audit structures are independent. Therefore, internal auditors should be reported to a higher authority level, as top management (Otetea, Tita and Aristotel, 2013). The drivers of audit quality include the reliability and usefulness of audit reporting (Holma and Zamanb, 2012). The level of auditors' qualifications will contribute to ensuring the personal credibility of an auditor in a company (Bielińska-Dusza, 2011). The administrative level to which the head of the internal auditing department reports and the level of the organizational independence of the internal



auditing staff are the main important factors that affect the judgments made by external auditors (Sawalqa1 and Qtish, 2012). The executive management and the audit committee will be eligible for assistance and recommendations to strengthen its internal audit from the internal audit (Mihăilescu and Ducu, 2011). A broader range of internal audit inquires can result in the availability of high quality services and reported to management with qualitative information (Rickard, 1994). However, Mihret and Yismaw (2007) note that audit findings would not serve much purpose unless management is committed to implement audit quality.

Ninlaphay and Ussahawanitchakit (2012) reveal that internal audit quality refers to the operational efficiency of internal audit by achieving the objectives and goals of internal audit to add value and improve an organization's operations. In this research, internal audit quality refers to the ability of firms to efficiently perform the internal audit which is properly executed and communicated by achieving the objectives and goals of internal audit to add value and improve an organization's operations. In summary, if firms have higher internal audit quality, it results in tending to provide the higher internal audit reliability and internal audit usefulness.

#### *Internal Audit Usefulness*

Information is useful for making decisions in investment, credit and for other similar decisions (Jonas and Blanchet, 2000). Furthermore, internal auditing is an independent professional service, to serve not just management, but the whole organization (Cortesi, Tettamanzi and Corno, 2009). Also, an internal audit function can provide value in that the assessment can serve as a signal of quality to the potential users of internal audit services such as: external auditors, audit committee members and other functions within the organization (Gramling and Hemanson, 2007; Venter and Bruyn, 2002; Buchman, 1983).

Informed by the Public Companies Accounting Oversight Board or PCOB (2007), Arel (2010), Gramling and Vandervelde (2006) and Agbejule and Jokipii (2009 ) note that the strategy is thought to explicitly encourages external auditors to rely on the work of internal auditors, especially in areas of low risk, to increase the efficiency and effectiveness of an integrated audit. Internal auditors are taking a position as part of the overall organization team participating with management in decision-making and problem solving functions (Rezaee, 1996). The internal auditor is able to



identify areas within organizations which are inefficient, costly, ineffective or dysfunctional and thus facilitate management action (Hassall, Dunlop and Lewis, 1996). Moreover, the internal auditors can efficiently organize audit data to support their recommendations and enable audit progress for timely execution (Kapoor and Brozzetti, 2012). Auditors can add value to the company through reducing shareholder apathy and preventing and discovering fraud (Vinten, 1999). An internal audit plays a vital role in the entities functioning by contributing to economic credibility (Otetea, Tita and Aristotel, 2013). The three statements on usefulness pertain to the use of audited financial statements in decision making, performance monitoring and assessing whether the entity is well managed (Pourheydari and Abousaiedi, 2011).

The internal auditors are now providing management with a far broader range of information concerning the organization's financial, operational and compliance activities (Rezaee, 1996). Also, the internal auditors audit to ensure the unbiased judgments essential to its proper conduct and impartial advice to management (Vinten, 1999). An internal audit can vie with management for the implementation of business plans, so it is a valuable and unique, untapped source of sound advice (Rickard, 1994). Best value would therefore appear to have the potential to affect internal auditors in two ways. It may necessitate more cooperation with external auditors and inspectors as best value takes off and second, internal auditors are clear contenders to take the lead in developing their authority's capacity for self-assessment (Bowerman and Hawksworth, 1999). An internal audit finding, high in usefulness, is one for which a decision maker believes in the existence of a positive use-performance relationship (Spraakman, 1997).

It is not enough for the credit institutions and companies in general, to declare that they organized the internal audit activity, as stakeholders will seek confirmation that the internal audit is conducted on a truly professional framework regarding the role of consultant, insurance advisor and provider (Mihăilescu and Ducu, 2011). The internal auditors have in gathering insightful and important information which they can examine all operations and systems and pursue formal and informal ways to gather crucial information on the organization and its activities (Spraakman, 1997). In order to maximize the usefulness and contribution of internal auditors, top and senior managers, internal audit can develop creative new ways for evaluating





performance in the organization (Rickard, 1994). The internal audit function is in an excellent position to bring sanity to the financial markets and reports (Muqattash, 2011).

The internal audit department could play in preventing fraudulent financial reporting (Ziegenfuss and Singhapakdi, 1994). Since the internal audit ethical action, no one is hurt (thus, there is no fraud) (Dittenhofer and Sennetti, 1995). In many organizations, internal auditors are accountable to both the chief executive officer and the audit committee (Schneider, 2009). The internal audit helps the organization to know the key risks it must face and to ensure that there are existing mechanisms to manage those risks when they occur (Mihăilescu and Ducu, 2011). The internal audit function helps the company in achieving its objectives and adds value and transparency, assisting at the same time, the manager, to enable it to better manages their activities (Botez, 2012). Norman, Rose and Rose (2010) examine the effects of internal audit reporting lines on fraud risk assessments made by internal auditors when the level of fraud risk varies. The findings indicate that the greater perceived threats associated with reporting high levels of fraud risk to the audit committee lead internal auditors to reduce assessed levels of fraud risk when reporting to the audit committee relative to reporting to management.

The management and the auditors should recognize the internal audit function as a value-adding function to the organization (Al-Twajjry, Brierley and Gwilliam, 2003). Furthermore, the internal auditors improve the manager's ability and help the organization (Sawyer, 1993). The internal auditors will be better placed to assist operatives and managers to find collectively the source of a problem and develop a solution which addresses the cause of the problem, rather than just suppressing the symptoms (Hawkes and Adams, 1995). The internal audit function helps management establish stronger controls over financial reporting. With reduced incidence of control deficiencies, external auditors are more likely to reduce evidence gathering, which permits speedier completion of the audit work (Wan-Hussin and Bamahros, 2013). Moreover, the internal auditors assist management in ensuring that operations are conducted in a responsible manner and provide feedback on who is not doing job (Rickard, 1994). The internal audit became an efficient management tool, aiming at improvement of the institution under the conditions of turbulent and unpredictable environment (Bielińska-Dusza, 2011). Therefore, the internal auditors can offer new



services to management at all levels and for divisions within the organization (Rezaee, 1996).

In this research, internal audit usefulness refers to the ability of firms to perform internal audit operational information which all users can use for correct and timely decision-making. In summary, this research believes that internal audit reliability, internal audit quality and internal audit usefulness tend to provide a higher information value and best decision-making. Stakeholders and boards of directors increasingly are relying on internal auditors to provide enterprise wide - risk intelligence and insights that can be leveraged to proactively mitigate risks, assure regulatory compliance, and, ultimately, protect stakeholders and customers. In addition, this leads to added organizational value and creates more advantage. As a result, the firm can achieve its goals. Therefore, the hypotheses are posited as follows:

***Hypothesis 6a: The higher internal audit quality is, the more likely that firms will gain greater internal audit reliability.***

***Hypothesis 6b: The higher internal audit quality is, the more likely that firms will gain greater internal audit usefulness.***

***Hypothesis 6c: The higher internal audit quality is, the more likely that firms will gain greater information value.***

***Hypothesis 6d: The higher internal audit quality is, the more likely that firms will gain greater best decision-making.***

***Hypothesis 7a: The higher internal audit reliability is, the more likely that firms will gain greater information value.***

***Hypothesis 7b: The higher internal audit reliability is, the more likely that firms will gain greater best decision-making.***



*Hypothesis 8a: The higher internal audit usefulness is, the more likely that firms will gain greater information value.*

*Hypothesis 8b: The higher internal audit usefulness is, the more likely that firms will gain greater best decision-making.*

*Hypothesis 9a: The higher information value is, the more likely that firms will gain greater best decision-making.*

*Hypothesis 9b: The higher information value is, the more likely that firms will gain greater firm goal achievement.*

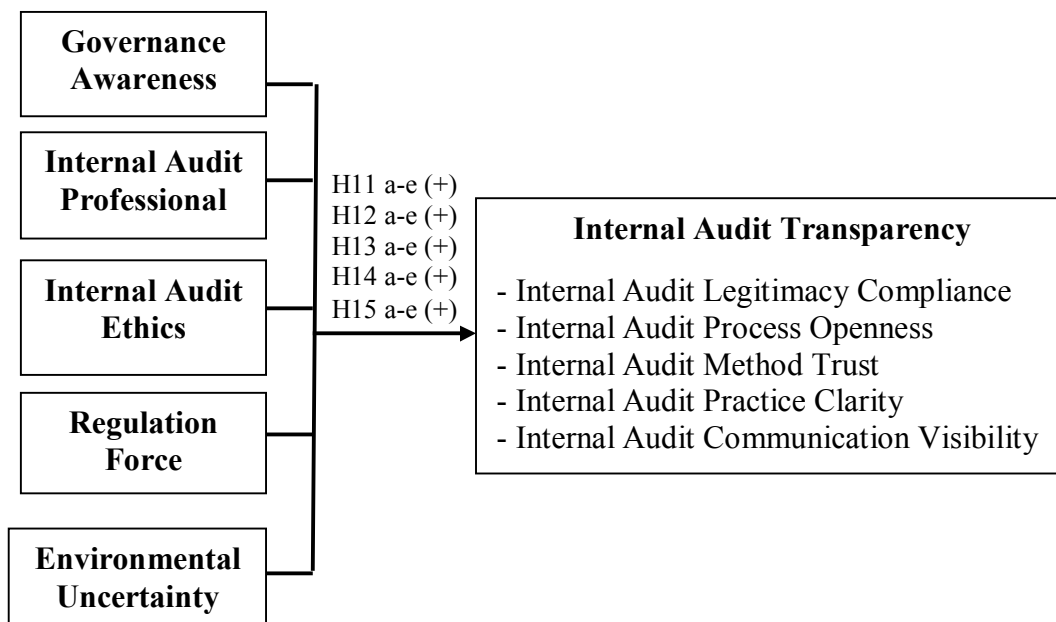
*Hypothesis 10: The higher best decision-making is, the more likely that firms will gain greater firm goal achievement.*

#### The Antecedents Effect of Internal Audit Transparency

A simplified view of those relationships between internal audit transparency and its antecedents, including governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty is as shown in Figure 7.



Figure 7: The Effect of Governance Awareness, Internal Audit Professional, Internal Audit Ethics, Regulation Force and Environment Uncertainty on Internal Audit Transparency



#### *Governance Awareness*

It has been shown that most corporate failures, including Enron and Worldcom, can be caused by the lack of good corporate governance (Haat, Rahman and Mahenthiran, 2008). The idea that democratic governments should be open, accessible and transparent to the governed is receiving renewed emphasis through the combination of government reform efforts (Dawes, 2010). Moreover, corporate governance comprises the procedures and activities employed by the representatives of an organization's stakeholders to provide oversight of risk and control processes administered by management (Gramling et al., 2004).

Corporate governance refers to the distribution of rights and obligations between different categories of participants in the company activity, namely: the board of managers, the executives, the shareholders and other stakeholders, noting how decisions are made, strategies and strategic objectives are established, means are met, as well as the financial monitoring system (Mihăilescu and Ducu, 2011). Also, the corporate governance defines the whole concept of corporate governance principles,



rules and regulations which provide for administration and management by managers of enterprises, in the interests of current and potential investors in those entities (Botez, 2012).

The goal of corporate communication is to tell the truth under all circumstances (Ostapski and Isaacs, 1992). Corporate governance has recently been the subject of significant measures to try to restore confidence among investors by encouraging information and communication transparency (Cortesi, Tettamanzi and Corno, 2009). However, Haat, Rahman and Mahenthiran (2008) point out that corporate governance mechanisms do not lead to greater corporate transparency. There is also no evidence that transparency contributes to better firm performance.

Good governance mechanisms include systems which ensure integrity of information flow, adequacy of risk assessment and management processes, organizational communication and approval, effective deployment of resources, management of financial reporting procedures, timeliness of reporting and compliance with relevant legislation and standards (Leung and Perera, 2011). With the implementation of good governance, the public and stakeholders will assess whether incentives or penalties. Incentives are in the form of trust while penalties are form damage there are to the company image or reputation for the quality of the implementation of Good Governance (Octavia, 2013).

Internal auditors are in the best position to add value, prevent problems and contribute to effective governance (Susmanschi, 2012; Coram, Ferguson and Moroney, 2008; Gramling and Hemanson, 2007; Watson, 2007). The evolution of internal auditing in the last period is a very dynamic one, while the potential roles of the internal audit function should be more involved in corporate governance (Boța-Avram Cristina and Palfi Cristina, 2012; Gramling et al., 2004; Verschoor, 2002). The internal audit function plays an increasingly important role in the financial reporting process and corporate governance landscape (Wan-Hussin and Bamahros, 2013). Moreover, the internal audit function could be viewed as a first line defense against inadequate corporate governance and financial reporting (Muqattash, 2011). The role of internal audit regards as a core principle of good corporate governance (Lenz and Sarens, 2012). The internal audit has enjoyed a high profile because of its prominence under corporate governance (Bowerman and Hawksworth, 1999).



Traditionally, internal auditors carried out an independent assessment of the level of compliance with the internal control procedures, accounting practices and systems within the bank. Still, the latest trends in the internal audit activity describe its role as being one to provide assurance regarding risk management processes, control systems and not least the bank's corporate governance (Mihăilescu and Ducu, 2011). Today, internal auditors are not only asked to assess financial controls, but also to enhance governance within an organization (Kapoor and Brozzetti, 2012). The internal auditors have increased their focus on governance processes (Anderson and Svare, 2013). The effective corporate governance attributes are: relevant and reliable public reporting, to avoid the excessive concentration of power on top of the organization, a strong and independent board of managers and the existence of effective risk control and assessment systems, strong internal and external audit processes (Mihăilescu and Ducu, 2011).

There has been an increasing awareness of the role within organizations of systems of corporate governance, a fact which inevitably has an impact on the internal audit (Hassall, Dunlop and Lewis, 1996). The role of the financial audit is central to the functioning of the capital markets and for corporate governance more generally (Carrington, 2010). O'Regan (2001) notes that corporate governance has contributed to a high profile for internal audit. The increased importance of the internal audit function in enhancing corporate governance also has been reinforced indirectly through legislation (Christopher, Sarens and Leung, 2009). The internal audit often happens in response to corporate governance scandals (Arena, 2013). Corporate governance reviews ranks top on the list of activities internal auditors expect to perform in the next five years (Lenz and Sarens, 2012). Also, the internal audit activity is based on a flexible frame of reference, widely accept, in compliance with the rules governing the various sectors of activity (Munteanua and Zahariab, 2014).

In the aftermath of the large corporate failures (such as Enron and WorldCom), regulators have taken steps to ensure that companies have internal auditing (Carcello, Hermanson and Raghunandan, 2005). The increasing complexity of compliance laws and regulations has prompted internal auditors to help track regulatory changes and compliance issues (Kapoor and Brozzetti, 2012). The internal auditors are key players in day-to-day corporate integrity, sound reporting and anti-fraud activities



(Norman, Rose and Rose, 2010). If the recommendations of a standard are not practical or cannot be applied, the internal auditor has the freedom of an alternative, provided that it is rigorously justified (Munteanua and Zahariab, 2014). However, Sampattikorn and Ussahawanitchakit (2012) state that corporate governance climate has no significant influence on audit planning comprehension awareness and internal audit report value.

In this research, governance awareness refers to the realization in the workplace environment (formulated from the interaction of employees in an organization) that is focused and compliant with corporate governance. In summary, this research believes that governance awareness tends to provide a higher internal audit transparency. Therefore, the hypotheses are posited as follows:

***Hypothesis 11a: The higher governance awareness is, the more likely that firms will gain greater internal audit legitimacy compliance.***

***Hypothesis 11b: The higher governance awareness is, the more likely that firms will gain greater internal audit process openness.***

***Hypothesis 11c: The higher governance awareness is, the more likely that firms will gain greater internal audit method trust.***

***Hypothesis 11d: The higher governance awareness is, the more likely that firms will gain greater internal audit practice clarity.***

***Hypothesis 11e: The higher governance awareness is, the more likely that firms will gain greater internal audit communication visibility.***

#### *Internal Audit Professional*

The standards of professional practices and professional conduct of the internal audit has become one of the most important qualities and features that are characterized by contemporary internal auditing (Idiab, Haron and Ahmad, 2012). Furthermore, a primary attribute of a profession is having widely - accepted standards



of performance. For a field as diverse as internal auditing, it is challenging to develop and promote such standards (Gramling and Hemanson, 2007).

Professions are now, more than ever before, subject to major internal and external pressures, resulting in constant and often fast-paced change (Hassall, Dunlop and Lewis, 1996). Okike (2004) notes that the recent collapse of Enron and revelations of unethical behavior by members of the board of large corporations in the USA have reopened the debate about the credibility of the auditing profession and their usefulness in establishing confidence in the capital markets. The importance of a professional appearance does not however mean a complete disregard for audit process (Carrington, 2010). O'Regan (2001) defines a profession as an occupation based on advanced, complex, or esoteric knowledge, backed by a social legitimacy.

The internal audit, as a profession, has been redefined over the years and it has constantly complied with the changing needs of entities (Munteanua and Zahariab, 2014). Understanding the relationship of the external variables (e.g., compliance, image, social influence, etc.) within internal audit professionals and establishing the correct balance of external variables is essential to further technology acceptance of internal auditors and foster a progressive atmosphere in the internal audit profession (Kim, Mannino and Nieschwietz, 2009). Potential weakness in the perception of the professionalism of internal auditing is the tendency in many organizations, particularly in the private sector, for the internal auditing department to serve as a stepping-stone to other positions in an organization (O'Regan, 2001). Many, especially employers, view the certified internal auditor as a symbol of professionalism and credibility for internal audit (Brody and Frank, 2000).

The professional must meet standards of performance set by a professional body (Sawyer, 1993). A key element of the professional's code must be both legitimate and ethical to warrant the internal auditor's respect (Everett and Tremblay, 2014). Moreover, the internal audit supports for professional development consists primarily of works (Munteanua and Zahariab, 2014). The standards and guidelines for the professional practice of internal auditing cover areas such as independence, scope of internal audit work (O'Regan, 2001). The nature of professional competence must be seen to be important for the assessment processes of internal auditors (Hassall, Dunlop and Lewis, 1996). Also, the audit planning stage helps auditors to achieve all the





necessary work in effective way to meet the needs of financial statement users and to comply with audit professional standards (Sawalqa1 and Qtish, 2012).

Over the years, internal auditing has evolved into a highly professional activity that extends to the appraisal of the efficiency and effectiveness of all phases of a company's operations, both financial and non-financial (Muqattash, 2011). Keeping a professional appearance and pertaining the status of the profession more generally is thus important for the auditor (Carrington, 2010). Also, written standards may be considered an essential attribute of a profession (O'Regan, 2001). There is no doubt that audit competencies and skills will continue to be in high demand and accepted profession around the world (Kapoor and Brozzetti, 2012). Moreover, the internal audit profession would be expected to legitimate internal auditing activities (Al-Twaijry, Brierley and Gwilliam, 2003).

Institute of Internal Auditors standards for professional practice of internal auditors consider the organization as the primary beneficiary of internal auditors' services (Rezaee, 1996). The internal audit profession should consider clarifying both the perspective and the purpose of internal audit that is, determining to whom internal audit should be accountable and clarifying the internal audit's service offering (Lenz and Sarens, 2012). The participants need the professional standards of work that they can trust (Sawyer, 1993). The profession possesses high levels of trust (Everett and Tremblay, 2014). The internal audit department is competently managed in accordance with professional standards (Vinten, 1999). Conflict of interest is a situation in which an internal auditor, who is in a position of trust, has a competing professional or personal interest (Muqattash, 2011). The internal auditing profession also walks a tightrope between serving as a management consultant and an independent professional (Fadzil, Haron and Jantan, 2005). However, keeping a professional appearance and pertaining the status of the profession more generally is important for the auditor (Carrington, 2010).

In this research, internal audit professional refers to the ability of firms to work with widely - accepted internal audit standards which are properly planned and executed, achieving the confidence of internal audit quality. In summary, this research believes that internal audit professional tends to provide a higher internal audit transparency. Therefore, the hypotheses are posited as follows:



*Hypothesis 12a: The higher internal audit professional is, the more likely that firms will gain greater internal audit legitimacy compliance.*

*Hypothesis 12b: The higher internal audit professional is, the more likely that firms will gain greater internal audit process openness.*

*Hypothesis 12c: The higher internal audit professional is, the more likely that firms will gain greater internal audit method trust.*

*Hypothesis 12d: The higher internal audit professional is, the more likely that firms will gain greater internal audit practice clarity.*

*Hypothesis 12e: The higher internal audit professional is, the more likely that firms will gain greater internal audit communication visibility.*

#### *Internal Audit Ethics*

There is a growing realization that the current upward trend in levels of disclosure of social, ethical and environmental performance by corporations and other organizations is not being accompanied by simultaneous greater levels of public trust (Wiltermuth and Flynn, 2013; Dando and Swift, 2003). Doing business ethically and in a responsible manner will not only contribute to the short-term profitability of a business, but may also ensure its long-term survival (Marx and Els, 2009). Dando and Swift (2003) argue that there is need for a universal standard for the provision of social assurance, ethical and environmental reporting and indeed for the credibility of the assurance providers themselves.

Organizations which are unethical and try to cover up, may fall prey to a whistleblower that could damage reputation and revenue (Vinten, 1998). Interestingly enough, the reception is not always a unanimous attitude about what is ethical and not ethical: but a spirited discussion usually results, especially when ethical conduct leads to a costly course of action and when managers or directors must choose that direction at the expense of the organization's shareholders (Dittenhofer and Sennetti, 1995). Ethical audit is, after all, merely an extension of existing legal and regulatory requirements



(Vinten, 1998). The concept of right or wrong-ethical or unethical relates to that which is best for humans and inevitably for business and government, for their ultimate objective in services for the good of humans (Dittenhofer and Sennetti, 1995).

The internal auditors are being called upon to help maintain a high standard of ethical behavior in their organizations by handling of reported violations and subsequent disciplinary actions, when warranted (Kapoor and Brozzetti, 2012). Okike (2004) notes that the recent collapse of Enron and revelations of unethical behavior by members of the board of large corporations in the USA have reopened the debate about the credibility of the auditors and their usefulness in establishing confidence in the capital markets. The internal auditors' code of ethics includes the principles of integrity, competence, objectivity and confidentiality, which must be followed by internal auditors (Kapoor and Brozzetti, 2012).

The general knowledge structure shows that an ethical code and organization's ethical climate are positioned close to business ethics and are seen as a tool for achieving ethical behavior (Boyle, Hermanson and Wilkins, 2011; Fassin, Rossem and Buelens, 2011). Moreover, corporate responsibility and ethical issues have a different width in small and medium-sized enterprises (SMEs) and are likely to be more concentrated than those in large organizations because most ventures have only one or a few key managers (Fassin, Rossem and Buelens, 2011). If properly formulated and implemented, a code of ethics is a useful tool to reinforce corporate moral responsibility, which should spring from within the company (Ostapski and Isaacs, 1992).

The internal auditors must be committed to the values and ethics of work and behavior when dealing with management, accountants and other staff (Idiab, Haron and Ahmad, 2012). Arel, Beaudoin and Cianci (2012) find that moral intensity mediates the interactive effect of the internal audit function and ethical leadership. Ethics is a dynamic element in the internal auditing function of both business and government (Dittenhofer and Sennetti, 1995). Moreover, ethics is a controversial topic and enormous issues of principle are opened by any enquiry into the ethical status of internal auditing (O'Regan, 2001). The subject areas most frequently selected as being important for internal audit practitioners include reasoning, organizations and ethics (Hassall, Dunlop and Lewis, 1996). Internal audit can achieve the objectives of the



organization if the system of internal control is made up of internal audit ethical codes (Munteanua and Zahariab, 2014).

Ethics is one of the key skills or attributes needed by internal auditors (Gramling and Hemanson, 2007). Also, ethical integrity is also an essential skill required of internal auditors, including chief audit executives who must be capable of identifying ethical issues, investigating the full facts, considering such issues in the context of ethical principles and standards and warning management and the board with regard to the risks (Leung and Perera, 2011). The cognitive processes that often occur at a subconscious level, such that even the most ethical and unbiased internal auditors can still subconsciously alter their assessments of fraud risk in order to protect themselves. As a result, the internal auditors will decrease their assessments of fraud risk when reporting to management, relative to when internal audit reports the results of risk assessments directly to the audit committee (Norman, 2010; Rose and Rose, 2010). However, Everett and Tremblay (2014) note that there are different ways of being ethical and this is no less true for internal auditor. Also, auditors can further choose between being more or less light or heavy, or more or less concerned with justice or courage.

In this research, internal audit ethics refers to the ability of firms to work with a widely - accepted code of internal audit ethics which increases neutrality, free - from - bias practices and relevant information disclosure. In summary, this research believes that internal audit ethics tends to provide a higher internal audit transparency. Therefore, the hypotheses are posited as follows:

***Hypothesis 13a: The higher internal audit ethics is, the more likely that firms will gain greater internal audit legitimacy compliance.***

***Hypothesis 13b: The higher internal audit ethics is, the more likely that firms will gain greater internal audit process openness.***

***Hypothesis 13c: The higher internal audit ethics is, the more likely that firms will gain greater internal audit method trust.***



***Hypothesis 13d: The higher internal audit ethics is, the more likely that firms will gain greater internal audit practice clarity.***

***Hypothesis 13e: The higher internal audit ethics is, the more likely that firms will gain greater internal audit communication visibility.***

#### *Regulation Force*

Audit regulation activities have been central to audit practice and scholarship for the past 25 years (Kinney, 2012). Moreover, audit judgments may be influenced by environmental factors, such as regulation, litigation, competition, culture and technology (Elder et al., 2013). Deumes et al. (2012) observe that as a result of legal and regulatory requirements, audit firms in certain jurisdictions have recently started issuing transparency reports containing information on audit firm governance.

The regulatory context is essential to understanding the future of practice and scholarship in audited financial reporting (Kinney, 2012). Al-Laith (2012) suggests that the need to control and supervise the banks' compliance with banking sector legislation or regulations and to improve the reliability of financial statements issued by those banks. In addition, the letter of the law is the acceptance of corporate moral responsibility (Ostapski and Isaacs, 1992). However, failure to yield to regulatory stakeholders also leaves companies vulnerable to individual or class action lawsuits. Such pressures and threats will hurt an organization's public image and customer relations (Sarkis, Gonzalez-Torre and Adenso-Diaz, 2010).

The role for the internal audit function in supporting the organization is to meet the regulatory requirements (Gramling et al., 2004). Also, regulators and stock exchange requirements demand the presence of internal auditing for registrants (Anderson et al., 2012). Legislative enactments and administrative regulations have been significant in the development of auditing (Okike, 2004). The internal audit exists to comply with the influence or regulatory bodies (Rickard, 1994). Moreover, the expectations of management with regard to the internal auditing practices, so the management will expect the internal auditors to perform their internal auditing practices to a certain level that is complying with the Standards for the Professional Practice of Internal Auditors (Fadzil, Haron and Jantan, 2005). Incentives in the form of trust while



penalties form of damage to company image or reputation for the quality of the implementation of Good Governance (Octavia, 2013).

Boonmunewai and Ussahawanitchakit (2010) note that regulation enforcement refers to firms obeying and complying with regulations all about them. In this research, regulation force refers to the current regulations that firms must obey and comply, in order to improve appropriate operational trends. In summary, this research believes that regulation force tends to provide a higher internal audit transparency. Therefore, the hypotheses are posited as follows:

***Hypothesis 14a: The higher regulation force is, the more likely that firms will gain greater internal audit legitimacy compliance.***

***Hypothesis 14b: The higher regulation force is, the more likely that firms will gain greater internal audit process openness.***

***Hypothesis 14c: The higher regulation force is, the more likely that firms will gain greater internal audit method trust.***

***Hypothesis 14d: The higher regulation force is, the more likely that firms will gain greater internal audit practice clarity.***

***Hypothesis 14e: The higher regulation force is, the more likely that firms will gain greater internal audit communication visibility.***

#### *Environment Uncertainty*

In a business environment during periods of economic uncertainty, business leaders are forced to make critical decisions in order to ensure the survival of the organization (Crumpton, 2011). Environmental uncertainty is one of the most relevant characteristics of the business environment in which technologies, regulations and societal expectations are evolving (Lopez-Gamero, Molina-Azorin, and Claver-Cortes, 2011). Moreover, the natural environment is at the center of the broader sustainability



competitiveness argument for organizations and operations (Sarkis, Gonzalez-Torre and Adenso-Diaz, 2010).

Internal auditors are dealing with an unprecedented level of change (Sobel and Kapoor, 2012). The promulgation of various political, social and economic pressures regarding environmental issues over the past few decades has caused companies to take these issues into greater consideration in their strategic and operational outlooks (Sarkis, Gonzalez-Torre and Adenso-Diaz, 2010). Also, the role and skills required of internal auditors has become something important (Octavia, 2013).

The broadened responsibilities of the internal audit function within the environment of a changing business world, coupled with increasing economic competition and globalization, are creating pressure on the internal audit function, (Christopher, Sarens and Leung, 2009). The role of internal audit in the public entities has increased dramatically in the last two decades due to the increasing complexity of activities performed in this environment that is subjected to rapid change (Otetea, Tita and Aristotel, 2013). Also, the internal auditing has transformed significantly from several factors including the increased complexity of a globalized marketplace, high-profile fraud and corruption scandals (Kapoor and Brozzetti, 2012). The pace of economic and political change throughout the world inevitably leads to a requirement for concurrent systems to ensure accountability and probity, thus providing opportunities for internal audit (Hassall, Dunlop and Lewis, 1996). Amid complex and dynamic risks, many internal audit groups update their plans more than once a year (Anderson and Svare, 2013). Moreover, comprise business risk affects audit planning (Sawalqa1 and Qtish, 2012).

In the era of rapid technological advances, changes in the business environment and globalization, the internal auditors' ownership of knowledge in various fields is a mandatory feature of their professional capacity (Mihăilescu and Ducu, 2011). Internal audit is usually spent on technology which helps simplify internal audit processes (Kapoor and Brozzetti, 2012). Also, the auditor must be adaptable and creative because all organizations now operate in dynamically changing environments (Pickett, 2000). The changing environment has created numerous challenges that internal auditors must face while performing their duties (Kapoor and Brozzetti, 2012). Therefore, the size of internal audit departments has increased substantially and the role



of internal auditors has changed dramatically over the past two decades in order to accommodate an ever changing business environment (Rezaee, 1996). However, Sampattikorn and Ussahawanitchakit (2012) state that business competition intensity has not an effect on internal audit report value. Also, Sookaneknun and Ussahawanitchakit (2013) present that environmental uncertainty has no significant effect on management practice transparency.

In this research, environment uncertainty refers to the relevant characteristics of the business environment in which technologies, regulations and stakeholder expectations are evolving. In summary, this research believes that environment uncertainty tends to provide a higher internal audit transparency. Because the firm must perform the organization fit to environment uncertainty. Therefore, the hypotheses are posited as follows:

***Hypothesis 15a: The higher environmental uncertainty is, the more likely that firms will gain greater internal audit legitimacy compliance.***

***Hypothesis 15b: The higher environmental uncertainty is, the more likely that firms will gain greater internal audit process openness.***

***Hypothesis 15c: The higher environmental uncertainty is, the more likely that firms will gain greater internal audit method trust.***

***Hypothesis 15d: The higher environmental uncertainty is, the more likely that firms will gain greater internal audit practice clarity.***

***Hypothesis 15e: The higher environmental uncertainty is, the more likely that firms will gain greater internal audit communication visibility.***

#### The Moderating Effect of Morality Climate

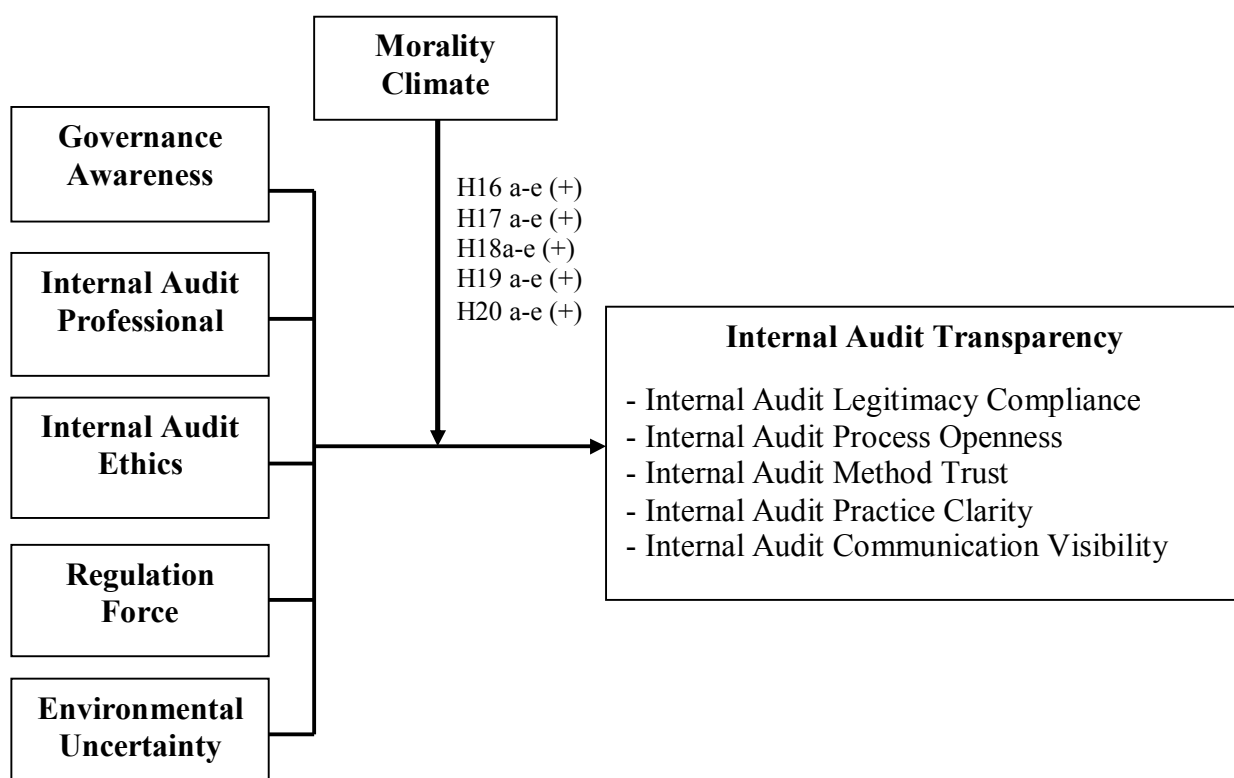
This section emphasizes the moderating effect of morality climate on the relationships between internal audit transparency and its antecedents, including





governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty as shown in Figure 8.

Figure 8: The Moderating Effect of Morality Climate



### *Morality Climate*

The abrogation of moral responsibility emerges increasingly from the international business community and, as national economies falters in the face of global economic uncertainty, public awareness of the entrepreneur as a socially responsible actor has become increasingly sensitive (Bechervaise and Benjamin, 2013). In addition, moral responsibility is the self-imposed or attributable obligation to ensure that actions knowingly and intentionally performed by rational human beings do not cause harm to others (Ostapski and Isaacs, 1992). Also, successful entrepreneurial activity is based on sound moral principles (Bechervaise and Benjamin, 2013).

The central driver for moral entrepreneurship demands an uncomfortable paradigm shift from the quantitative certainty of identifiable profit (and loss) towards a



qualitative intention to increase social well-being, or a social vision (Bechervaise and Benjamin, 2013). It is the responsibility of management to exert a positive influence on the mindset of people through its philosophy and operating style-the demonstration of moral and ethical values (Love and Manisero, 2011).

The concept of moral clarity captures the degree of ambiguity people perceive when judging whether behaviors are right or wrong (Wiltermuth and Flynn, 2013). Arel, Beaudoin and Cianci (2012) note that organizational context can influence employees' perceptions of the moral intensity level of any given issue. Furthermore, moral clarity refers to the belief that ethical judgments are straightforward and clear-cut (Wiltermuth and Flynn, 2013). Nickell and Roberts (2013) discuss the internal auditors as 'moral' actors and propose that the counter-coupling of an organization's primary outputs-talk, decision and action-provides internal auditors with the necessary tools to carry out conflicting ethical roles within the organization.

Over the decades there have been significant regulatory initiatives, particularly through codes of corporate governance, aimed at improving the transparency of companies (Holma and Zamanb, 2012). As to legality, there are certain acts that are not of themselves illegal but certainly do not, in most circumstances, seem to be moral (Dittenhofer and Sennetti, 1995). With corporate scandals involving accountants regularly appearing in news headlines there is good reason to believe that accountants have lost sight of their moral compass (Everett and Tremblay, 2014). The dimension of warmth often encompasses traits associated with sociability (such as being helpful and kind) as well as traits indicating morality (such as honesty and trustworthiness) (Pagliaro et al., 2014).

The professions embody social service and act as "moral communities" (O'Regan, 2001). Also, professionals must subscribe to certain moral values (Sawyer, 1993). Everett and Tremblay (2014) open the black box of the market's morality by considering the auditing profession's role and rectify a situation where in the profession are alleged to be offering ethics instruction that is of highly limited use. Auditors should submit to the directors a report including comparison of achievement with pre-stated objectives and morale (Vinten, 1999). Moreover, the profession needs to appreciate that auditors are actively involved in creating the market's moral order (Everett and Tremblay, 2014).



Several studies have investigated the morals. Wiltermuth and Flynn (2013) ask five questions intended to capture the clarity with which participants viewed the ethicality of the behavior. In addition, moral intensity is measured by obtaining participants' agreements with nine statements. (Arel, Beaudoin and Cianci, 2012). Moreover, computer-mediated transparency can stimulate both ability and morality which, in turn, stimulate public officials to perform better, or prevent them from being corrupt (Meijer, 2009). Ziegenfuss and Singhapakdi (1994) determine the influence of personal moral philosophies and corporate ethical values. The regression analyses results reveal a very weak relationship between moral philosophy and perception of ethical problem. Furthermore, Everett and Tremblay (2014) add to prior discussions of the notion of moral accountability by highlighting the constituent elements of an ethical disposition, including a number of practical virtues.

The Institute of Internal Auditors first developed a code of ethics have provisions that relate to: moral characteristics; conflicts of interest; personal behavior; compliance with professional internal auditing standards (Dittenhofer and Sennetti, 1995). Also, the Institute of Internal Auditors 's code of ethics, in setting out standards of conduct, is an attempt to claim institutional moral authority for the Institute of Internal Auditors and for the internal auditing (O'Regan, 2001). The auditors can play a more active role in keeping a closer eye on their ethics (Everett and Tremblay, 2014).

In all complex organizations such as those in the financial and banking industry, internal auditors cannot act as generalists. They must possess knowledge and expertise, depending on the risks that threaten the entity they belong. Internal auditors should also prove a highly moral attitude and verticality to face the pressure from managers and various business lines of credit institutions (Mihăilescu and Ducu, 2011). Moral may on occasion surmount the internal audit duty regarding to the Institute of Internal Auditors (Vinten, 1999). Internal auditors are currently being asked to embrace a moral (Everett and Tremblay, 2014). However, Pongpanpattana and Ussahawanitchakit (2013) note that internal audit morality awareness is negatively insignificant with financial information reliability and risk management excellence. It may imply that internal audit morality awareness is not enough.

In this research, morality climate refers to the workplace environment that focuses on the ambiguity people perceive when judging whether behaviors are right or



wrong. In summary, this research believes that morality climate is more likely to gain a high level in each dimension of internal audit transparency and antecedent relationships. Because many studies reveal that morality climate can capture the clarity or prevent the firm from being corrupt. Therefore, the hypotheses are posited as follows:

***Hypothesis 16a: Morality climate will positively moderate the governance awareness - internal audit legitimacy compliance relationships.***

***Hypothesis 16b: Morality climate will positively moderate the governance awareness - internal audit process openness relationships.***

***Hypothesis 16c: Morality climate will positively moderate the governance awareness - internal audit method trust relationships.***

***Hypothesis 16d: Morality climate will positively moderate the governance awareness - internal audit practice clarity relationships.***

***Hypothesis 16e: Morality climate will positively moderate the governance awareness - internal audit communication visibility relationships.***

***Hypothesis 17a: Morality climate will positively moderate the internal audit professional- internal audit legitimacy compliance relationships.***

***Hypothesis 17b: Morality climate will positively moderate the internal audit professional - internal audit process openness relationships.***

***Hypothesis 17c: Morality climate will positively moderate the internal audit professional - internal audit method trust relationships.***

***Hypothesis 17d: Morality climate will positively moderate the internal audit professional - internal audit practice clarity relationships.***



*Hypothesis 17e: Morality climate will positively moderate the internal audit professional - internal audit communication visibility relationships.*

*Hypothesis 18a: Morality climate will positively moderate the internal audit ethics - internal audit legitimacy compliance relationships.*

*Hypothesis 18b: Morality climate will positively moderate the internal audit ethics - internal audit process openness relationships.*

*Hypothesis 18c: Morality climate will positively moderate the internal audit ethics - internal audit method trust relationships.*

*Hypothesis 18d: Morality climate will positively moderate the internal audit ethics - internal audit practice clarity relationships.*

*Hypothesis 18e: Morality climate will positively moderate the internal audit ethics - internal audit communication visibility relationships.*

*Hypothesis 19a: Morality climate will positively moderate the regulation force - internal audit legitimacy compliance relationships.*

*Hypothesis 19b: Morality climate will positively moderate the regulation force - internal audit process openness relationships.*

*Hypothesis 19c: Morality climate will positively moderate the regulation force - internal audit method trust relationships.*

*Hypothesis 19d: Morality climate will positively moderate the regulation force - internal audit practice clarity relationships.*

*Hypothesis 19e: Morality climate will positively moderate the regulation force - internal audit communication visibility relationships.*



*Hypothesis 20a: Morality climate will positively moderate the environmental uncertainty - internal audit legitimacy compliance relationships.*

*Hypothesis 20b: Morality climate will positively moderate the environmental uncertainty - internal audit process openness relationships.*

*Hypothesis 20c: Morality climate will positively moderate the environmental uncertainty - internal audit method trust relationships.*

*Hypothesis 20d: Morality climate will positively moderate the environmental uncertainty - internal audit practice clarity relationships.*

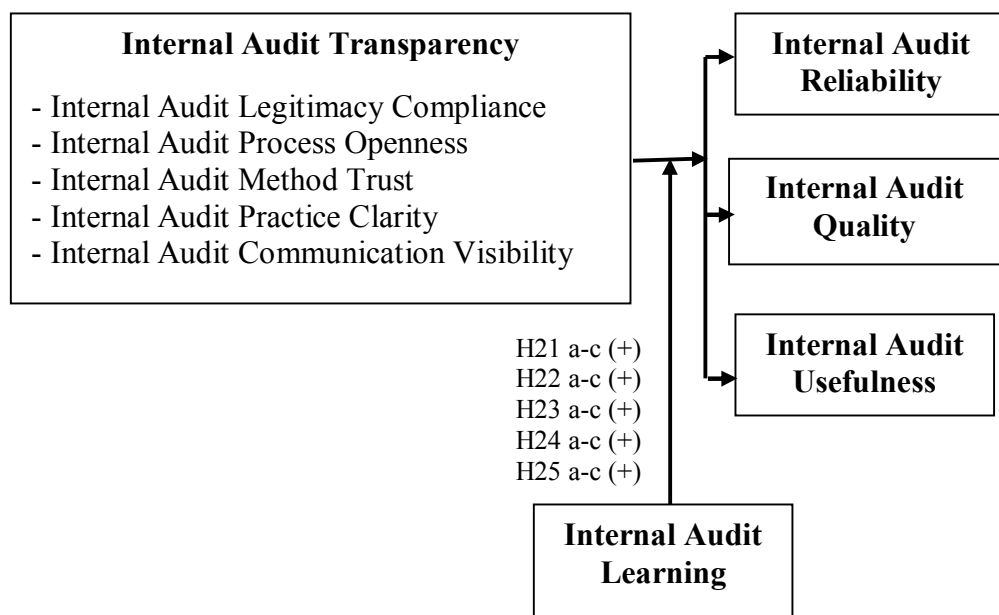
*Hypothesis 20e: Morality climate will positively moderate the environmental uncertainty - internal audit communication visibility relationships.*

The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Internal Audit Reliability, Internal Audit Quality and Internal Audit Usefulness

This section emphasizes the moderating effect of internal audit learning on the relationships between internal audit transparency and internal audit reliability, internal audit quality and internal audit usefulness as shown in Figure 9.



Figure 9: The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Internal Audit Reliability, Internal Audit Quality and Internal Audit Usefulness



### *Internal Audit Learning*

Organizational learning is identified as involving information acquisition, interpretation, distribution and memory (Chenhall, 2005). Moreover, in a favorable environment, one has to learn how to deal successfully with customers, suppliers, employees, financiers, product development, technology and governmental regulation (Gelderen, Sluis and Jansen, 2005; Hawkes and Adams, 1994).

It is becoming increasingly apparent that to remain competitive, organizations need a high rate of internal learning (Hyland and Beckett, 2002). Firms that have a learning orientation are said to have an orientation to learn new skills, to acquire or apply new technologies and to broaden their organizational capabilities (Gelderen, Sluis and Jansen, 2005). In addition, learning organization is based on learning and self-developing of an organizations members during their work (Altiok, 2011). Also, learning is positively related to goal achievement (Gelderen, Sluis and Jansen, 2005).



The new breed of internal audit requires people who have an in-depth knowledge of the products being developed and the business processes (Anderson, 1996). Furthermore, internal auditors have much to be learned from the efforts and experiences of others (Gramling and Hemanson, 2007). Capable, experienced employees with relevant individual qualifications in conducting internal audit should be employed; and in order to provide the required experience for them, service training and continuing their education should be taken into account (Salehi, Arianpoor and Salehi, 2013).

Internal auditors preserve technical rehabilitation through continuing education and access training courses to gain knowledge of all developments in this regard (Idiab, Haron and Ahmad, 2012; Sobel and Kapoor, 2012; Vasile and Croitoru, 2012). Moreover, internal auditors acquire an intimate knowledge of an organization's culture, processes, risks and controls (Sarens, Beelde and Everaert, 2009). Since internal auditors have specific industry knowledge and expertise in systems and operational audits, the total cost of internal and external audit may be less than the perceived cost of external auditing on its own (Ho and Hutchinson, 2010).

Training and development is important to the success of internal audit (Pickett, 2000). The quality of the audit performed by an internal audit organization is related to the education and experience of the internal auditors (Ziegenfuss and Singhapakdi, 1994). The development and training of staff is widely thought to be of key importance to the success of an internal audit department (Al-Twajjry, Brierley and Gwilliam, 2003). The new high profile of internal audit is sending staff to the occasional external seminar is another common approach which can be useful (Pickett, 2000). Internal auditors studying internal auditing at university are likely to increase the profile of internal audit (Al-Twajjry, Brierley and Gwilliam, 2003).

The new objectives and expanded scope of the internal audit function will require a major change in emphasis on internal auditors' skill, training needs and professional education (Hawkes and Adams, 1995). A learning organization is one that continually transforms itself to meet its vision such as establishing audit plan (Pickett, 2000). With trained and competent internal audit staff and better evaluation to achieve the engagement objectives, this will lead to better control activities of the quality of the internal control system (Fadzil, Haron and Jantan, 2005). Effective training needs to go





beyond basic auditing skills to address critical areas such as data mining and analysis (Anderson and Svare, 2013). The new concept of internal audit learning points to a value driven approach such as helping managers understand why procedures do not always work and what can be done about it (Pickett, 2000).

The main prerequisites for adopting business risk audit approach are to create the relevant atmosphere in the company environment by getting good knowledge about all the legislations that control and govern the audit profession (Sawalqa1 and Qtish, 2012). The continuous development activity supports organization's risk management strategy, which is where the audit role fits into adding value to the reliability (Pickett, 2000). Internal audit is seen as offering benefit as a training ground by both management and internal auditors (Cooper, Leung and Mathews, 1994). Given the growing importance of internal audits to the organization, much emphasis is being placed on the skills and qualifications required by auditors, as well as on their development, training and retention (Kapoor and Brozzetti, 2012). The education, training, experience and professional qualifications of the internal auditors influenced the effectiveness of internal audit (Al-Twajiry, Brierley and Gwilliam, 2003).

The modern view of internal audit suggests that it operates in dynamically changing contexts and here we must stress that the rate of learning should be greater than or equal to this rate of change for us to have any chance of success (Pickett, 2000). The internal auditors' need to have multidimensional knowledge vitally adds value to the organization (Mihăilescu and Ducu, 2011). The development of skills, knowledge and attitudes may support the internal audit works and may have in developing best practice (Pickett, 2000).

However, the delivering (and receiving) timely and accurate negative information can be critical for performance improvement and organizational learning (Sussman and Sproull, 1999). Kanchanda and Ussahawanitchakit (2012) note that the moderating effect of marketing learning has a negative effect on the relationship between product innovation concentration and dynamic marketing advantage. Similarly, Chaikambang and Ussahawanitchakit (2012) investigate the moderating effects of best environmental learning, the results show that best environmental learning has no significant relate on relationship between decision making advantage and goal achievement. Furthermore, Sookaneknun and Ussahawanitchakit (2013) state that



organizational learning capability has no significant effect on the relationships between the six dimensions of management governance and the consequences and the relationships between management goal achievement, organizational citizenship behavior, customer acceptance outstanding, market opportunity and firm value. However, a learning organization is one that continually transforms itself to meet its vision such as establishing audit plan (Pickett, 2000).

In this research, internal audit learning refers to the ability of firms in which internal auditors acquire an intimate knowledge of all the organization's activities, new technologies and broaden their organizational capabilities. In summary, this research believes that internal audit learning is more likely to gain a high level in each dimension of internal audit transparency and; internal audit reliability and internal audit quality, internal audit usefulness relationships. Therefore, the hypotheses are posited as follows:

***Hypothesis 21a: Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit reliability relationships.***

***Hypothesis 21b: Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit quality relationships.***

***Hypothesis 21c: Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit usefulness relationships.***

***Hypothesis 22a: Internal audit learning will positively moderate the internal audit process openness - internal audit reliability relationships.***

***Hypothesis 22b: Internal audit learning will positively moderate the internal audit process openness - internal audit quality relationships.***

***Hypothesis 22c: Internal audit learning will positively moderate the internal audit process openness - internal audit usefulness relationships.***



*Hypothesis 23a: Internal audit learning will positively moderate the internal audit method trust - internal audit reliability relationships.*

*Hypothesis 23b: Internal audit learning will positively moderate the internal audit method trust - internal audit quality relationships.*

*Hypothesis 23c: Internal audit learning will positively moderate the internal audit method trust - internal audit usefulness relationships.*

*Hypothesis 24a: Internal audit learning will positively moderate the internal audit practice clarity - internal audit reliability relationships.*

*Hypothesis 24b: Internal audit learning will positively moderate the internal audit practice clarity - internal audit quality relationships.*

*Hypothesis 24c: Internal audit learning will positively moderate the internal audit practice clarity - internal audit usefulness relationships.*

*Hypothesis 25a: Internal audit learning will positively moderate the internal audit communication visibility - internal audit reliability relationships.*

*Hypothesis 25b: Internal audit learning will positively moderate the internal audit communication visibility - internal audit quality relationships.*

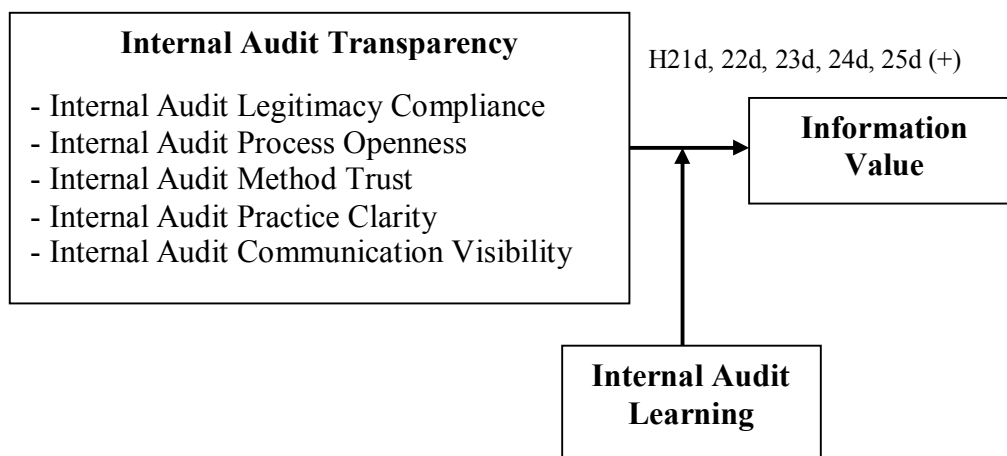
*Hypothesis 25c: Internal audit learning will positively moderate the internal audit communication visibility - internal audit usefulness relationships.*

The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Information Value

This section emphasizes the moderating effect of internal audit learning on the relationships between internal audit transparency and information value as shown in Figure 10.



Figure 10: The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Information Value



This research believes that internal audit learning is more likely to gain a high level in each dimension of internal audit transparency and information value relationships. Therefore, the hypotheses are posited as follows:

***Hypothesis 21d: Internal audit learning will positively moderate the internal audit legitimacy compliance - information value relationships.***

***Hypothesis 22d: Internal audit learning will positively moderate the internal audit process openness - information value relationships.***

***Hypothesis 23d: Internal audit learning will positively moderate the internal audit method trust - information value relationships.***

***Hypothesis 24d: Internal audit learning will positively moderate the internal audit practice clarity - information value relationships.***

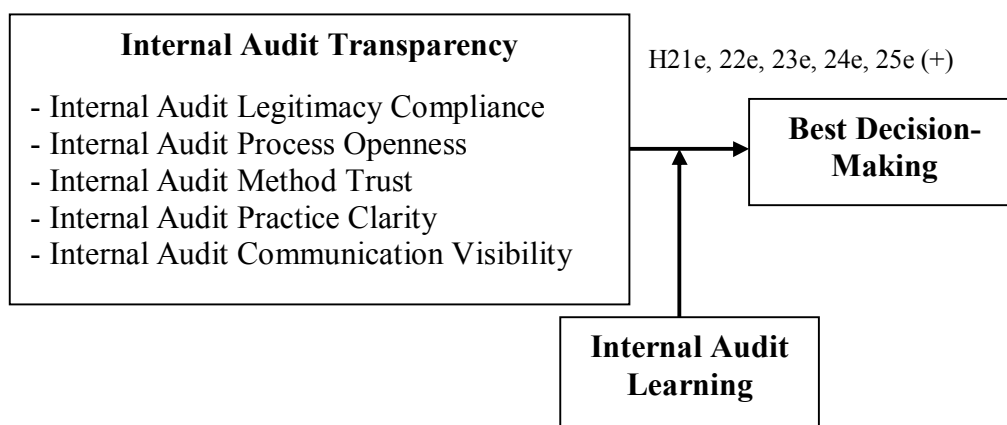
***Hypothesis 25d: Internal audit learning will positively moderate the internal audit communication visibility - information value relationships.***



The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Best Decision-Making

This section emphasizes the moderating effect of internal audit learning on the relationships between internal audit transparency and best decision-making as shown in Figure 11.

Figure 11: The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Best Decision-Making



This research believes that internal audit learning is more likely to result in a high level in each dimension of internal audit transparency and best decision-making relationships. Therefore, the hypotheses are posited as follows:

***Hypothesis 21e: Internal audit learning will positively moderate the internal audit legitimacy compliance – best decision-making relationships.***

***Hypothesis 22e: Internal audit learning will positively moderate the internal audit process openness – best decision-making relationships.***

***Hypothesis 23e: Internal audit learning will positively moderate the internal audit method trust – best decision-making relationships.***



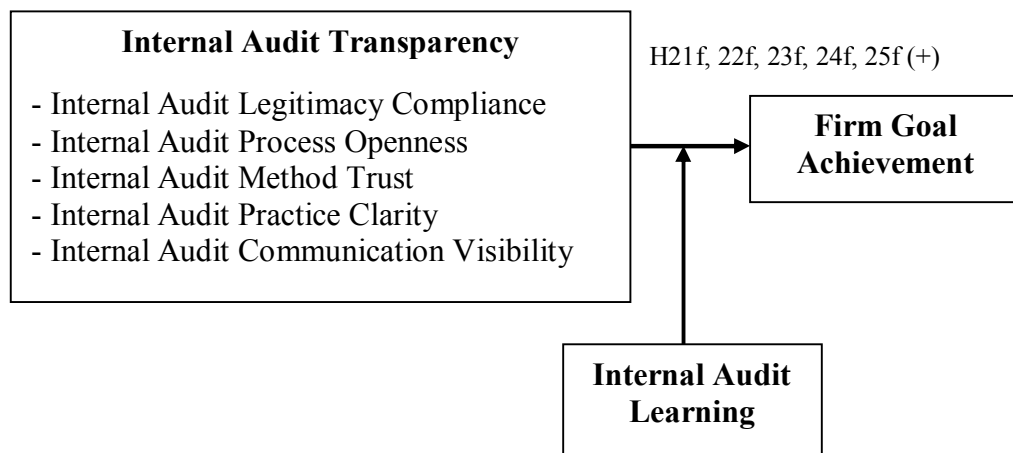
***Hypothesis 24e: Internal audit learning will positively moderate the internal audit practice clarity – best decision-making relationships.***

***Hypothesis 25e: Internal audit learning will positively moderate the internal audit communication visibility – best decision-making relationships.***

The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Firm Goal Achievement

This section emphasizes the moderating effect of internal audit learning on the relationships between internal audit transparency and firm goal achievement as shown in Figure 12.

Figure 12: The Moderating Effect of Internal Audit Learning on the Relationships Between Internal Audit Transparency and Firm Goal Achievement



This research believes that internal audit learning is more likely to result in a high level in each dimension of internal audit transparency and firm goal achievement relationships. Therefore, the hypotheses are posited as follows:



*Hypothesis 21f: Internal audit learning will positively moderate the internal audit legitimacy compliance - firm goal achievement relationships.*

*Hypothesis 22f: Internal audit learning will positively moderate the internal audit process openness - firm goal achievement relationships.*

*Hypothesis 23f: Internal audit learning will positively moderate the internal audit method trust - firm goal achievement relationships.*

*Hypothesis 24f: Internal audit learning will positively moderate the internal audit practice clarity - firm goal achievement relationships.*

*Hypothesis 25f: Internal audit learning will positively moderate the internal audit communication visibility - firm goal achievement relationships.*

## Summary

This chapter describes the conceptual model of internal audit transparency and firm goal achievement which is supported by the theoretical frameworks, including the agency theory and the contingency perspective. In addition, this chapter provides the relevant literature review, hypotheses development and a set of 25 testable hypotheses. Internal audit transparency is the key construct of this research in which the research intends to prove its effect on firm goal achievement through its consequences, including internal audit reliability, internal audit quality, internal audit usefulness, information value and best decision-making. This research also proposes the antecedents of internal audit transparency, including governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty, to test their impact on internal audit transparency. In addition, morality climate is proposed as the moderator to prove its effect on the relationships between its five antecedents and internal audit transparency. Finally, internal audit learning moderates the relationships between each dimension of internal audit transparency and a) internal audit reliability, b) internal



audit quality, c) internal audit usefulness, d) best decision-making, e) information value and f) firm goal achievement. Table 2 shows the summary of all hypothesized relationships.

The next chapter will explain the research method, including the population and sample selection, the data collection procedure, the variable measurement of each construct, the statistics and equations to test the hypotheses and a summary of the definitions and operational variables.





Table 2: Summary of Hypothesized Relationships

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H1a	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit reliability.
H1b	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit quality.
H1c	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit usefulness.
H1d	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater information value.
H1e	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater best decision-making.
H1f	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater firm goal achievement.
H2a	The higher internal audit process openness is, the more likely that firms will gain greater internal audit reliability.
H2b	The higher internal audit process openness is, the more likely that firms will gain greater internal audit quality.
H2c	The higher internal audit process openness is, the more likely that firms will gain greater internal audit usefulness.
H2d	The higher internal audit process openness is, the more likely that firms will gain greater information value.
H2e	The higher internal audit process openness is, the more likely that firms will gain greater best decision-making.
H2f	The higher internal audit process openness is, the more likely that firms will gain greater firm goal achievement.
H3a	The higher internal audit method trust is, the more likely that firms will gain greater internal audit reliability.
H3b	The higher internal audit method trust is, the more likely that firms will gain greater internal audit quality.



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H3c	The higher internal audit method trust is, the more likely that firms will gain greater internal audit usefulness.
H3d	The higher internal audit method trust is, the more likely that firms will gain greater information value.
H3e	The higher internal audit method trust is, the more likely that firms will gain greater best decision-making.
H3f	The higher internal audit method trust is, the more likely that firms will gain greater firm goal achievement.
H4a	The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit reliability.
H4b	The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit quality.
H4c	The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit usefulness.
H4d	The higher internal audit practice clarity is, the more likely that firms will gain greater information value.
H4e	The higher internal audit practice clarity is, the more likely that firms will gain greater best decision-making.
H4f	The higher internal audit practice clarity is, the more likely that firms will gain greater firm goal achievement.
H5a	The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit reliability.
H5b	The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit quality.
H5c	The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit usefulness.
H5d	The higher internal audit communication visibility is, the more likely that firms will gain greater information value.



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H5e	The higher internal audit communication visibility is, the more likely that firms will gain greater best decision-making.
H5f	The higher internal audit communication visibility is, the more likely that firms will gain greater firm goal achievement.
H6a	The higher internal audit quality is, the more likely that firms will gain greater internal audit reliability.
H6b	The higher internal audit quality is, the more likely that firms will gain greater internal audit usefulness.
H6c	The higher internal audit quality is, the more likely that firms will gain greater information value.
H6d	The higher internal audit quality is, the more likely that firms will gain greater best decision-making.
H7a	The higher internal audit reliability is, the more likely that firms will gain greater information value.
H7b	The higher internal audit reliability is, the more likely that firms will gain greater best decision-making.
H8a	The higher internal audit usefulness is, the more likely that firms will gain greater information value.
H8b	The higher internal audit usefulness is, the more likely that firms will gain greater best decision-making.
H9a	The higher information value is, the more likely that firms will gain greater best decision-making.
H9b	The higher information value is, the more likely that firms will gain greater firm goal achievement.
H10	The higher best decision-making is, the more likely that firms will gain greater firm goal achievement.
H11a	The higher governance awareness is, the more likely that firms will gain greater internal audit legitimacy compliance.



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H11b	The higher governance awareness is, the more likely that firms will gain greater internal audit process openness.
H11c	The higher governance awareness is, the more likely that firms will gain greater internal audit method trust.
H11d	The higher governance awareness is, the more likely that firms will gain greater internal audit practice clarity.
H11e	The higher governance awareness is, the more likely that firms will gain greater internal audit communication visibility.
H12a	The higher internal audit professional is, the more likely that firms will gain greater internal audit legitimacy compliance.
H12b	The higher internal audit professional is, the more likely that firms will gain greater internal audit process openness.
H12c	The higher internal audit professional is, the more likely that firms will gain greater internal audit method trust.
H12d	The higher internal audit professional is, the more likely that firms will gain greater internal audit practice clarity.
H12e	The higher internal audit professional is, the more likely that firms will gain greater internal audit communication visibility.
H13a	The higher internal audit ethics is, the more likely that firms will gain greater internal audit legitimacy compliance.
H13b	The higher internal audit ethics is, the more likely that firms will gain greater internal audit process openness.
H13c	The higher internal audit ethics is, the more likely that firms will gain greater internal audit method trust.
H13d	The higher internal audit ethics is, the more likely that firms will gain greater internal audit practice clarity.
H13e	The higher internal audit ethics is, the more likely that firms will gain greater internal audit communication visibility.



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H14a	The higher regulation force is, the more likely that firms will gain greater internal audit legitimacy compliance.
H14b	The higher regulation force is, the more likely that firms will gain greater internal audit process openness.
H14c	The higher regulation force is, the more likely that firms will gain greater internal audit method trust.
H14d	The higher regulation force is, the more likely that firms will gain greater internal audit practice clarity.
H14e	The higher regulation force is, the more likely that firms will gain greater internal audit communication visibility.
H15a	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit legitimacy compliance.
H15b	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit process openness.
H15c	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit method trust.
H15d	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit practice clarity.
H15e	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit communication visibility.
H16a	Morality climate will positively moderate the governance awareness-internal audit legitimacy compliance relationships.
H16b	Morality climate will positively moderate the governance awareness-internal audit process openness relationships.
H16c	Morality climate will positively moderate the governance awareness-internal audit method trust relationships.
H16d	Morality climate will positively moderate the governance awareness-internal audit practice clarity relationships.



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H16e	Morality climate will positively moderate the governance awareness-internal audit communication visibility relationships.
H17a	Morality climate will positively moderate the internal audit professional-internal audit legitimacy compliance relationships.
H17b	Morality climate will positively moderate the internal audit professional-internal audit process openness relationships.
H17c	Morality climate will positively moderate the internal audit professional-internal audit method trust relationships.
H17d	Morality climate will positively moderate the internal audit professional-internal audit practice clarity relationships.
H17e	Morality climate will positively moderate the internal audit professional-internal audit communication visibility relationships.
H18a	Morality climate will positively moderate the internal audit ethics-internal audit legitimacy compliance relationships.
H18b	Morality climate will positively moderate the internal audit ethics - internal audit process openness relationships.
H18c	Morality climate will positively moderate the internal audit ethics - internal audit method trust relationships.
H18d	Morality climate will positively moderate the internal audit ethics - internal audit practice clarity relationships.
H18e	Morality climate will positively moderate the internal audit ethics - internal audit communication visibility relationships.
H19a	Morality climate will positively moderate the regulation force- internal audit legitimacy compliance relationships.
H19b	Morality climate will positively moderate the regulation force - internal audit process openness relationships.
H19c	Morality climate will positively moderate the regulation force - internal audit method trust relationships.



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H19d	Morality climate will positively moderate the regulation force - internal audit practice clarity relationships.
H19e	Morality climate will positively moderate the regulation force - internal audit communication visibility relationships.
H20a	Morality climate will positively moderate the environmental uncertainty-internal audit legitimacy compliance relationships.
H20b	Morality climate will positively moderate the environmental uncertainty - internal audit process openness relationships.
H20c	Morality climate will positively moderate the environmental uncertainty - internal audit method trust relationships.
H20d	Morality climate will positively moderate the environmental uncertainty - internal audit practice clarity relationships.
H20e	Morality climate will positively moderate the environmental uncertainty - internal audit communication visibility relationships.
H21a	Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit reliability relationships.
H21b	Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit quality relationships.
H21c	Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit usefulness relationships.
H21d	Internal audit learning will positively moderate the internal audit legitimacy compliance - information value relationships.
H21e	Internal audit learning will positively moderate the internal audit legitimacy compliance – best decision-making relationships.
H21f	Internal audit learning will positively moderate the internal audit legitimacy compliance - firm goal achievement relationships.
H22a	Internal audit learning will positively moderate the internal audit process openness - internal audit reliability relationships.



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H22b	Internal audit learning will positively moderate the internal audit process openness - internal audit quality relationships.
H22c	Internal audit learning will positively moderate the internal audit process openness - internal audit usefulness relationships.
H22d	Internal audit learning will positively moderate the internal audit process openness - information value relationships.
H22e	Internal audit learning will positively moderate the internal audit process openness – best decision-making relationships.
H22f	Internal audit learning will positively moderate the internal audit process openness - firm goal achievement relationships.
H23a	Internal audit learning will positively moderate the internal audit method trust - internal audit reliability relationships.
H23b	Internal audit learning will positively moderate the internal audit method trust - internal audit quality relationships.
H23c	Internal audit learning will positively moderate the internal audit method trust - internal audit usefulness relationships.
H23d	Internal audit learning will positively moderate the internal audit method trust - information value relationships.
H23e	Internal audit learning will positively moderate the internal audit method trust – best decision-making relationships.
H23f	Internal audit learning will positively moderate the internal audit method trust - firm goal achievement relationships.
H24a	Internal audit learning will positively moderate the internal audit practice clarity - internal audit reliability relationships.
H24b	Internal audit learning will positively moderate the internal audit practice clarity - internal audit quality relationships.
H24c	Internal audit learning will positively moderate the internal audit practice clarity - internal audit usefulness relationships.





## CHAPTER III

### RESEARCH METHODS

The previous chapter provides a theoretical foundation, a literature review and a conceptual framework of internal audit transparency and the hypotheses development. This chapter illustrates the research methods which are organized as follows. Firstly, the population and sample selection are described. Secondly, the data collection procedures explained. Thirdly, the variable measurements are developed. Fourthly, the method of the research, including the test of instrumental validity and reliability and the statistical analyses is explained. Finally, the table of the definitions and the operational variables are presented.

#### **Population and Sample Selection**

The population of this research is the financial businesses in Thailand because the businesses have high risk of business operations (Ninlaphay and Ussahawanitchakit, 2012). Also, the financial and banking system are based on trust rather than on any other argument (Mihăilescu and Ducu, 2011). In addition, the political unrest in Thailand has affected the economy. Therefore, the businesses find it necessary to have an effective internal audit transparency so as to control and reduce risks that may occur. Financial businesses in Thailand consist of 238 firms divided into two categories, including financial institutions and insurance companies. There are 12 types of financial institutions including Thai commercial banks, retail banks, subsidiaries, foreign bank branches, finance companies, credit fanciers, foreign bank representatives, assets management companies (AMC), specialized financial institutions, Thai asset management corporations (TAMC), credit card companies and personal loan companies. The insurance company is divided into two categories, including life insurance and non-life insurance. The database in this research is drawn from the Bank of Thailand on its website: <http://www.bot.or.th> and the Office of Insurance Commission on its website: <http://www.oic.or.th>, as of January 11, 2014. Internal audit directors or internal audit managers are chosen as key participants because they are



directly responsible for monitoring and evaluating the adequacy and effectiveness of the internal audit in the firms. All 238 financial firms were chosen from the database list and they were all subsequently selected as the sample size.

According to Krejcie and Morgan (1970), the required sample size in this research is determined by the formula as follows:

$$S = [\chi^2 NP(1-P)] / [d^2(N-1) + \chi^2 P(1-P)]$$

S = required sample size

$\chi^2$  = the table value of chi-square for one degree of freedom at the desired confidence level (3.841)

N = the population size

P = the population proportion (assumed to be 0.50 since this would provide the maximum sample size)

d = the degree of accuracy expressed as a proportion (0.05)

Following to the above formula, the required sample size of this research is calculated as follows:

$$S = \frac{3.841(238)(0.5)(1-0.5)}{(0.05)^2 (238-1) + 3.841(0.50)(1-0.50)}$$

$$S = 147$$

Based on the formula for determining sample size with 95% confidentiality and a population of 238 financial businesses, a sample size of 147 would be needed to represent the population.

However, a 20% response rate from mail surveys, without an appropriate follow-up procedure is sufficient (Aaker, Kumar and Day, 2001). In addition, some studies with a low response rate, as low as 20%, are able to produce precise results (Morton et al., 2012). To determine the sample size for the initial mail survey, the following shows the procedure of calculation:

$$\text{The required respondents as a 20\% response rate} = 147$$

$$\text{Thus, the sample size as a 100\%} = [147 \times 100] / 20 = 735$$



In this research, 147 required respondents are considered as a 20% response rate, thus the sample size for the mail survey should equal 735. Nevertheless, the number of financial business populations was only 238 firms. Thus, it was necessary to determine the 238 population as the sample size for the mail survey in this research.

### **Data Collection Procedure**

A mail survey was used to collect the data. Internal audit directors or internal audit managers are selected as the key informants, as they were expected to have the best knowledge of internal audit transparency of their organization. An appropriate instrument for data collection is a questionnaire, as this tool allows contact with inaccessible respondents (e.g., internal audit directors or internal audit managers), has the lowest-cost option and has expanded geographic coverage (Cooper and Schindler, 2008). The initial mailing is directly sent by post to the internal audit director or internal audit manager of Thai financial businesses. To increase the initial response rate, a brief cover letter is signed by people with prestigious titles. Furthermore, a stamped return envelope is accompanied with each mail questionnaire. Therefore, each participant will be mailed an initial mailing package which includes a cover letter, questionnaire and postage-paid return envelopes. However, the major problem of a mail survey is the low response rate which can result in a nonresponse bias (Dillman, 1991; Fox, Robinson and Boardley, 1998). The ways of defense against nonresponse bias are the maximization of the response rate and an estimate of possible nonresponse bias (Larson and Chow, 2003). Follow-up mailing is one of many techniques for improving the response rate (Dillman, 1991; Larson and Chow, 2003).

The questionnaire is developed based on prior research and theory. It includes seven parts. Part one asks for personal information of the informant such as gender, age, education, working experience and working position. Part two includes questions of the general information and history of the business such as total assets, number of employees and firm age. Part three involves evaluating each construct in the conceptual model. In part three, the questions relate to the measurement of internal audit transparency, including internal audit legitimacy compliance, internal audit process



openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility. In part four, the dependent variable, firm goal achievement and the consequences of internal audit transparency (including internal audit reliability, internal audit quality, internal audit usefulness, information value and best decision-making) are questioned. In part five, internal factors, including governance awareness, internal audit professional, internal audit ethics, morality climate and internal audit learning are measured. For part six, regulation force and environmental uncertainty, as external factors, are measured. Finally, an open-ended question asking for the informant's suggestions and opinions is included in part seven. The information acquired from the open-ended answer is useful. It can be used to support these research results in situations where there is no previous evidence or is not accompanied by a research report for internal audit contribution.

Table 3: The Details of Questionnaire Mailing

Details	Numbers
Questionnaire Mailing	238
Returned Questionnaire	5
Successful Questionnaire Mailing	233
Usable Questionnaire	81
Response Rate $(81/233) \times 100$	34.76%

The questionnaires were directly distributed to 238 financial institutions, the usable questionnaires included 81 responses. Hence, the response rate is 34.76 percent. According to Aaker et al. (2001), the effective response rate for a mail survey without an appropriate follow-up procedure, should be more than 20 percent. Therefore, the response rate of this research was considered acceptable. The details of the questionnaire sending and the calculated response rate were presented as shown in Table 3.



### Test of Non-Response Bias

A mail survey has to be concerned with a non-response biased problem. The maximization of response rate can avert non-response bias (Larson and Chow, 2003). However, Armstrong and Oventon (1977) argue that it is increasing the rate of return becomes more difficult, expensive and takes too much time. Then, the estimate of the non-response bias could provide the acceptance of results at a lower rate of return. This research verifies the possibility of a non-response bias that shows the difference between the respondents and non-respondents. A t-test comparison of the demographic information of the firm such as the type of the firm, amount of capital, total assets of the firm and the age of the firm between early and late respondents, is used to check the problem of non-response bias. When the results of the t-test show no significant difference between early and late groups, it can imply that there is no non-response bias problem (Armstrong and Oventon, 1977). After verification and finding no problem of non-response bias, this research is able to analyze the statistical results for hypotheses testing.

Table 1B shows the results of non-response bias testing. There are no significant differences between the early and lately responses. Thus, it can be concluded there are no significant differences between responses and non-responses. These results imply that the responses in this research can be regarded as the representative of the whole selected samples.

### **Measurements**

The procedure of measurement development involves the development of multiple-items for measuring each construct in the conceptual model. All constructs are transformed to the operational variables by the adaptation or development from the relevant literature. All variables are measured by a multiple-items scale. The items are designed on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Table 5 provides the definition of each construct, the operational variables, the scale source and a sample of the questions. The variable measurements of the dependent, independent, mediating, antecedent, moderating and control variables in this research are elaborated as follows.



### Dependent Variable

#### *Firm Goal Achievement*

Firm goal achievement refers to the operational outcome that shows performance of firms, both financial and non-financial, that arises from an ability of firms which are properly operated to achieve their goals. It is measured by the firm to be able to create opportunity consistent with increasing profitability, growth rate and market share. This construct is adapted from Sampattikorn and Ussahawanitchakit (2012), including five-items.

### Independent Variables

The independent variable is internal audit transparency. It is a key construct of this research which includes the following: internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility. These five dimensions reflect the internal audit transparency.

#### *Internal Audit Legitimacy Compliance*

Internal audit legitimacy compliance refers to the ability of firms to utilize internal audit standards or relevant laws which lead to perform appropriate internal audit work. It is measured by the acceptance and implementation of professional standards and regulations. This construct is measured by four-items developed as a new scale from its definition and literature.

#### *Internal Audit Process Openness*

Internal audit process openness refers to the ability of firms to prepare and formulate audit plans for which internal auditors must identify and document sufficient information (e.g., audit scope and objectives, risks and controls, audit duration, resources necessary for the performance of the auditing, etc.) to achieve the objectives in audit program and audit working papers in a consistent standardized and regulatory manner and which must be disclosed. It is measured by the capacity to perform an audit plan, disclosing and covering all of the operational activities of the firm. This construct is measured by five-items developed as a new scale from its definition and literature.



#### *Internal Audit Method Trust*

Internal audit method trust refers to the ability of firms to prepare and formulate audit programs for which internal auditors must identify and document sufficient information (e.g., specific objectives and instructions, sample size and items to select, identification of audit procedures, dates, expected completion times, manpower and places for audit. etc.) to achieve the objectives in audit working papers in a consistent, standardized and regulatory manner; and it must be seen to maintain integrity and independence in the internal audit performance. It is measured by the capacity to perform an audit program that maintains integrity and independence in internal audit performance. This construct is measured by five-items developed as a new scale from its definition and literature.

#### *Internal Audit Practice Clarity*

Internal audit practice clarity refers to the ability of firms to perform the task identified in the audit program for which internal auditors must document working papers in a consistent, standardized and regulatory manner; and it must be organized, clear and comprehensive. It is measured by the capacity to perform a task that is organized, clear and comprehensive. This construct is measured by five-items developed as a new scale from its definition and literature.

#### *Internal Audit Communication Visibility*

Internal audit communication visibility refers to the ability of firms to convey the audit outcomes which internal auditors conduct throughout the period of fieldwork in a consistent, standardized and regulatory manner; and must not filter nor keep emotional uncertainty from creating more positive actions. It is measured by the capability to convey the audit outcomes that are not filtered. This construct is measured by five-items developed as a new scale from its definition and literature.

### Mediating Variables

#### *Internal Audit Reliability*

Internal audit reliability refers to the ability of firms to perform the internal audit service independently, clearly and completely by achieving information without error or bias. It is measured by the capacity to perform the audit service independently,



clearly and completely. This construct is measured by four-items developed as a new scale from its definition and literature.

#### *Internal Audit Quality*

Internal audit quality refers to the ability of firms to efficiently perform the internal audit which is properly executed and communicated by achieving the objectives and goals of internal audit to add value and improve an organization's operations. It is measured by the capacity to properly perform audit practices and outcomes. This construct is measured by four-items developed as a new scale from its definition and literature.

#### *Internal Audit Usefulness*

Internal audit usefulness refers to the ability of firms to perform internal audit operational information which all users can use for correct and timely decision-making. It is measured by the capacity to perform internal audit operational information which all users can use for correct and timely decision-making. This construct is measured by four-items developed as a new scale from its definition and literature.

#### *Information Value*

Information value refers to the utility of information which all users can use for correctly and timely decision-making. This construct is measured by four-items developed as a new scale from its definition and literature.

#### *Best Decision-Making*

Best decision-making refers to the best choice between many alternative ways to help a company achieve its objectives or goal set in a correct and timely manner. This construct is adapted from Ninlaphay and Ussahawanitchakit (2012), including four-items.

#### Antecedent Variables

The internal and external factors are treated as the antecedents of internal audit transparency. The internal factors include governance awareness, internal audit professional and internal audit ethics. Two external factors are regulation force and environment uncertainty. The measurement of each variable is discussed in the following.





### *Governance Awareness*

Governance awareness refers to the realization in the workplace environment (formulated from the interaction of employees in an organization) that is focused and compliant with corporate governance. This construct is measured by four-items developed as a new scale from its definition and literature.

### *Internal Audit Professional*

Internal audit professional refers to the ability of firms to work with widely - accepted internal audit standards which are properly planned and executed, achieving the confidence of internal audit quality. This construct is measured by four-items developed as a new scale from its definition and literature.

### *Internal Audit Ethics*

Internal audit ethics refers to the ability of firms to work with a widely - accepted code of internal audit ethics which increases neutrality, free - from - bias practices and relevant information disclosure. This construct is measured by four-items developed as a new scale from its definition and literature.

### *Regulation Force*

Regulation force refers to the current regulations that firms must obey and comply, in order to improve appropriate operational trends. This construct is adapted from Boonmunewai and Ussahawanitchakit (2010), including four-items.

### *Environment Uncertainty*

Environment uncertainty refers to the relevant characteristics of the business environment in which technologies, regulations and stakeholder expectations are evolving. This construct is measured by four-items developed as a new scale from its definition and literature.

## Moderating Variables

### *Morality Climate*

Morality climate refers to the workplace environment that focuses on the ambiguity people perceive when judging whether behaviors are right or wrong. This construct is measured by four-items developed as a new scale from its definition and literature.



### *Internal Audit Learning*

Internal audit learning refers to the ability of firms in which internal auditors acquire an intimate knowledge of all the organization's activities, new technologies and broaden their organizational capabilities. This construct is measured by four-items developed as a new scale from its definition and literature.

### Control Variables

The control variables of this research are firm size and firm age which may affect firm value. Prior research which studies firm value and firm performance has the control variables, including firm size and firm age (Prempee and Ussahawanitchakit, 2013). Therefore, for the reliability of the results, this research includes firm size and firm age as control variables to cover all factors which may impact firm value.

#### *Firm Size*

Firm size is controlled in this research. Prior study suggest that firm size might impact firm performance (Sampattikorn and Ussahawanitchakit, 2012). In this research, firm size is chosen as a control variable which is defined as total assets of the firm invested. It is a dummy variable in which 0 is a firm with total assets lower than 10,000,000,000 baht and 1 is a firm with total assets more than or equal to 10,000,000,000 baht.

#### *Firm Age*

This research controls firm age. Coad, Segarra and Teruel (2013) find evidence indicating that firms get better with age and steadily increase levels of productivity, higher profits, larger size and higher equity ratios. The questions in the questionnaire, regarding of the requirement for the number of operational years are divided into dummy variables for which 0 means a firm has been in business less than or equal 15 years and 1 means firm has been in business more than 15 years.



## Methods

The measurement of the construct in the conceptual model is developed as a new scale. To evaluate the appropriateness of the questionnaire, validity and reliability are the criteria used for assessing the characteristics of a good instrument. These are the reasons for pretesting the individual questions and questionnaires: to increase participant interest; to discover content, wording and sequencing problems; and to explore the ways to improve the overall quality of the questionnaires (Cooper and Schindler, 2008). To pretest the appropriateness of the instrument, this research evaluates the validity of the questionnaire by content validity verification for improvement before being used to collect the data. Thereafter, the questionnaire is revised to become a more effective instrument. In addition, the first thirty respondents are used to test construct validity and reliability by factor analysis and Cronbach's alpha, respectively. However, these first thirty respondents are incorporated into the final data analysis. The validity and reliability testing are elaborated as follows.

### Validity and Reliability

#### *Validity*

Validity is the extent of a scale or set of measures that actually measures what it wishes to measure, or accurately represents the concept of interest (Cooper and Schindler, 2008; Hair et al., 2010). This research tests internal validity, including content validity and construct validity.

#### *Content Validity*

The content validity of an instrument is the measuring instrument that adequately covers the topics that have been defined as the relevant dimensions of the study (Cooper and Schindler, 2008). Content validity is assessed by judgment. It assesses the connection between the individual items and the concept (Hair et al., 2010). To conduct the content validity, the instrument designer may carefully define the construct by more reviews of the literature and carefully develop the items. Furthermore, to assess the content validity by academic experts who specialize in the related area, they review and judge to ensure that the questionnaire appropriately and sufficiently covers the content of all constructs (Cooper and Schindler, 2008). In this



research, content validity is evaluated by two academic experts and thereafter, the questionnaire is adjusted following the suggestions of the experts, to create an effective instrument.

#### *Construct Validity*

Construct validity is the extent of measured items set which actually reflects the theoretical latent construct of those items that they are designed to measure. It is used to test whether items chosen for a particular construct are valid. The exploratory factor analysis (EFA) is used to test the validity of the instrument to confirm that a measure or set of measures accurately represents the concept. EFA is used to reduce the number of factors into a smaller set of single constructs or a high potential to inflate the component loadings. Furthermore, confirmatory factor analysis (CFA) is used to test the construct validity developed from prior research (Reid, 2005; Duff, 2009). Items are used to measure each construct that was extracted to be only one principle component. To assess construct validity, convergent and discriminant validity can be used (Hair et al., 2010). Convergent validity involves the item as the indicator of a specific construct highly correlated with the item that is designed to measure the same construct. On – the other hand, discriminant validity is the extent to which a construct is really distinct from other constructs. A factor loading of 0.40 is minimally acceptable, but a value greater than 0.50 is generally considered necessary for practicality (Hair et al., 2010). This research tests the instrument validity by construct validity testing to ensure that a set of measures accurately reflects the concept of study.

#### *Reliability*

Reliability is the degree of consistency between multiple measurements of a variable. Internal consistency is commonly used to measure reliability. Due to the fact that no single item is a perfect measure of a concept, the rationale of internal consistency is that all individual items measuring the same construct should reflect the same underlying construct and be highly inter-correlated (Cooper and Schindler, 2008). To assess internal consistency, Cronbach's alpha is the most broadly – used. It is generally agree upon that the adequacy of Cronbach's alpha is equal to or higher than 0.70 (Kline, 2005). Thus, the reliability of all constructs in this research is tested by Cronbach's alpha and Cronbach's alpha of equal to or higher than 0.70 is acceptable.



Table 4: Results of Measure Validation and Reliability (n=30)

<b>Variables</b>	<b>Factor Loading</b>	<b>Cronbach's Alpha</b>
Internal Audit Legitimacy Compliance	0.727-0.900	0.864
Internal Audit Process Openness	0.611-0.906	0.887
Internal Audit Method Trust	0.830-0.927	0.935
Internal Audit Practice Clarity	0.749-0.903	0.900
Internal Audit Communication Visibility	0.848-0.914	0.925
Internal Audit Reliability	0.826-0.914	0.902
Internal Audit Quality	0.874-0.932	0.921
Internal Audit Usefulness	0.883-0.920	0.922
Information Value	0.813-0.874	0.865
Best Decision-Making	0.864-0.930	0.915
Firm Goal Achievement	0.855-0.933	0.938
Morality Climate	0.740-0.942	0.883
Internal Audit Learning	0.810-0.914	0.883
Governance Awareness	0.730-0.933	0.859
Internal Audit Professional	0.797-0.925	0.913
Internal Audit Ethics	0.858-0.898	0.900
Regulation Force	0.808-0.872	0.867
Environment Uncertainty	0.843-0.929	0.913

Table 4 presents the factor loadings of all variables in the research model. All variables are loaded in only one factor. The value of the factor loadings are between 0.611-0.942 which is greater than 0.4 as recommended by Hair et al. (2010).

The results of the Cronbach's alpha coefficient of variables in the pretest present that the variables have an alpha coefficient higher than 0.70 as recommended by Kline (2005). They have values ranging from 0.859-0.938. Thus, after the pretest, all questions remained in the questionnaire, with a total of 77 items to be used for collecting the data.



## Statistics

Several statistical techniques are used in this research, including descriptive statistics, correlation analysis and regression analysis. These terms are fully discussed are follows.

### *Descriptive statistics*

Descriptive statistics include frequency, mean and standard deviation which are used to summarize and describe the basic feature of the data in this research. Frequency is deployed to show the distribution for every range of value for a variable. To describe a central tendency, mean is used to estimate the center of a distribution of values. Standard deviation is employed to understand the spread of the values around the central tendency for the variable.

### *Correlation Analysis*

Correlation analysis is used to test the correlation among all variables for preliminary analysis. The results of testing indicate all the correlations between the independent variables and the dependent variable. The correlation matrix reveals that each independent variable has the bivariate correlation with the dependent variable (Hair et al., 2010). This demonstrates the primary relationship between the independent and dependent variables that provide the expectation about the ability of the independent variable to explain the variance of the dependent variable in the stage of regression analysis. To interpret the independent variable relationship with dependent variable, the bivariate correlation coefficient should be statistically significant. Furthermore, the correlation matrix for the independent variables indicates collinearity, which is represented by the bivariate correlations coefficient of 0.80 and higher. Also collinearity may be caused by a multicollinearity problem (Hair et al., 2010). To assess the bivariate correlation of two variables, Pearson's correlation can be used.

### *Regression Analysis*

Regression analysis is used to predict a single dependent variable from the knowledge of one or more independent variables (Kutner, Nachtsheim and Neter, 2008). There is wide used of regression analysis, particularly for solving business research problems. This research deploys multiple regressions which is appropriate to investigate the relationship between a single dependent variable and a set of



independent variables. Multiple regressions are appropriate for two classes of research problems: prediction and explanation (Hair et al., 2010).

All hypotheses of this research are transformed into 24 equations. Each equation consists of the main variables related to the hypotheses testing as described in the previous chapter. In addition, the two control variables of firm size and firm age are included in each of those equations for hypotheses testing as follows.

To examine the relationships between the five dimensions of internal audit transparency and internal audit reliability, equation 1 is presented as follows:

$$\text{Equation 1: } IAR = \alpha_1 + \beta_1 ALC + \beta_2 APO + \beta_3 AMT + \beta_4 APC + \beta_5 ACV + \beta_6 IAQ + \beta_7 FS + \beta_8 FA + \varepsilon_1$$

The relationships between the five dimensions of internal audit transparency and internal audit quality are investigated by equation 2 which is shown as follows:

$$\text{Equation 2: } IAQ = \alpha_2 + \beta_9 ALC + \beta_{10} APO + \beta_{11} AMT + \beta_{12} APC + \beta_{13} ACV + \beta_{14} FS + \beta_{15} FA + \varepsilon_2$$

The five dimensions of internal audit transparency and internal audit usefulness are investigated with their relationships by equation 3 which is demonstrated as follows:

$$\text{Equation 3: } IAU = \alpha_3 + \beta_{16} ALC + \beta_{17} APO + \beta_{18} AMT + \beta_{19} APC + \beta_{20} ACV + \beta_{21} IAQ + \beta_{22} FS + \beta_{23} FA + \varepsilon_3$$

To explore the relationships between the five dimensions of internal audit transparency and information value, equation 4 is presented as follows:

$$\text{Equation 4: } IV = \alpha_4 + \beta_{24} ALC + \beta_{25} APO + \beta_{26} AMT + \beta_{27} APC + \beta_{28} ACV + \beta_{29} FS + \beta_{30} FA + \varepsilon_4$$



To explore the relationships between the five dimensions of internal audit transparency and best decision-making, equation 5 is presented as follows:

$$\text{Equation 5: } BDM = \alpha_5 + \beta_{31} ALC + \beta_{32} APO + \beta_{33} AMT + \beta_{34} APC + \beta_{35} ACV + \beta_{36} FS + \beta_{37} FA + \varepsilon_5$$

The impact of internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity, internal audit communication visibility information value and best decision-making on firm goal achievement are verified by equation 6 as follows:

$$\text{Equation 6: } FGA = \alpha_6 + \beta_{38} ALC + \beta_{39} APO + \beta_{40} AMT + \beta_{41} APC + \beta_{42} ACV + \beta_{43} IV + \beta_{44} BDM + \beta_{45} FS + \beta_{46} FA + \varepsilon_6$$

The impact of internal audit reliability, internal audit quality and internal audit usefulness on information value is verified by equation 7 as follows:

$$\text{Equation 7: } IV = \alpha_7 + \beta_{47} IAR + \beta_{48} IAQ + \beta_{49} IAU + \beta_{50} FS + \beta_{51} FA + \varepsilon_7$$

The impact of internal audit reliability, internal audit quality, internal audit usefulness and information value on best decision-making are verified by equation 8 as follows:

$$\text{Equation 8: } BDM = \alpha_8 + \beta_{52} IAR + \beta_{53} IAQ + \beta_{54} IAU + \beta_{55} IV + \beta_{56} FS + \beta_{57} FA + \varepsilon_8$$

To examine the influence of the five antecedents including governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty on the five dimensions of internal audit transparency, equations 9 to 13 are presented as follows:





$$\text{Equation 9: } ALC = \alpha_9 + \beta_{58} GA + \beta_{59} IAP + \beta_{60} IAE + \beta_{61} RF + \beta_{62} EU + \beta_{63} FS + \beta_{64} FA + \varepsilon_9$$

$$\text{Equation 10: } APO = \alpha_{10} + \beta_{65} GA + \beta_{66} IAP + \beta_{67} IAE + \beta_{68} RF + \beta_{69} EU + \beta_{70} FS + \beta_{71} FA + \varepsilon_{10}$$

$$\text{Equation 11: } AMT = \alpha_{11} + \beta_{72} GA + \beta_{73} IAP + \beta_{74} IAE + \beta_{75} RF + \beta_{76} EU + \beta_{77} FS + \beta_{78} FA + \varepsilon_{11}$$

$$\text{Equation 12: } APC = \alpha_{12} + \beta_{79} GA + \beta_{80} IAP + \beta_{81} IAE + \beta_{82} RF + \beta_{83} EU + \beta_{84} FS + \beta_{85} FA + \varepsilon_{12}$$

$$\text{Equation 13: } ACV = \alpha_{13} + \beta_{86} GA + \beta_{87} IAP + \beta_{88} IAE + \beta_{89} RF + \beta_{90} EU + \beta_{91} FS + \beta_{92} FA + \varepsilon_{13}$$

The moderating effect of morality climate on the relationships among governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty and the five dimensions of internal audit transparency are tested by equations 14 to 18 as shown below.

$$\text{Equation 14: } ALC = \alpha_{14} + \beta_{93} GA + \beta_{94} IAP + \beta_{95} IAE + \beta_{96} RF + \beta_{97} EU + \beta_{98} MC + \beta_{99}(GA*MC) + \beta_{100}(IAP*MC) + \beta_{101}(IAE*MC) + \beta_{102}(RF*MC) + \beta_{103}(EU*MC) + \beta_{104} FS + \beta_{105} FA + \varepsilon_{14}$$

$$\text{Equation 15: } APO = \alpha_{15} + \beta_{106} GA + \beta_{107} IAP + \beta_{108} IAE + \beta_{109} RF + \beta_{110} EU + \beta_{111} MC + \beta_{112}(GA*MC) + \beta_{113}(IAP*MC) + \beta_{114}(IAE*MC) + \beta_{115}(RF*MC) + \beta_{116}(EU*MC) + \beta_{117} FS + \beta_{118} FA + \varepsilon_{15}$$

$$\text{Equation 16: } AMT = \alpha_{16} + \beta_{119} GA + \beta_{120} IAP + \beta_{121} IAE + \beta_{122} RF + \beta_{123} EU + \beta_{124} MC + \beta_{125}(GA*MC) + \beta_{126}(IAP*MC) + \beta_{127}(IAE*MC) + \beta_{128}(RF*MC) + \beta_{129}(EU*MC) + \beta_{130} FS + \beta_{131} FA + \varepsilon_{16}$$



$$\text{Equation 17: } APC = \alpha_{17} + \beta_{132} GA + \beta_{133} IAP + \beta_{134} IAE + \beta_{135} RF + \beta_{136} EU + \beta_{137} MC + \beta_{138}(GA*MC) + \beta_{139}(IAP*MC) + \beta_{140}(IAE*MC) + \beta_{141}(RF*MC) + \beta_{142}(EU*MC) + \beta_{143}FS + \beta_{144}FA + \varepsilon_{17}$$

$$\text{Equation 18: } ACV = \alpha_{18} + \beta_{145} GA + \beta_{146} IAP + \beta_{147} IAE + \beta_{148} RF + \beta_{149}EU + \beta_{150}MC + \beta_{151}(GA*MC) + \beta_{152}(IAP*MC) + \beta_{153}(IAE*MC) + \beta_{154}(RF*MC) + \beta_{155}(EU*MC) + \beta_{156}FS + \beta_{157}FA + \varepsilon_{18}$$

The moderating effect of internal audit learning on the relationships among internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility; and internal audit reliability are tested by equations 19 as shown below.

$$\text{Equation 19: } IAR = \alpha_{19} + \beta_{158} ALC + \beta_{159} APO + \beta_{160} AMT + \beta_{161} APC + \beta_{162} ACV + \beta_{163}IAL + \beta_{164}(ALC *IAL) + \beta_{165}(APO *IAL) + \beta_{166}(AMT *IAL) + \beta_{167}(APC *IAL) + \beta_{168}(ACV *IAL) + \beta_{169}FS + \beta_{170}FA + \varepsilon_{19}$$

The moderating effect of internal audit learning on the relationships among internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility; and internal audit quality are tested by equations 20 as shown below.

$$\text{Equation 20: } IAQ = \alpha_{20} + \beta_{171}ALC + \beta_{172} APO + \beta_{173} AMT + \beta_{174} APC + \beta_{175} ACV + \beta_{176}IAL + \beta_{177}(ALC *IAL) + \beta_{178}(APO *IAL) + \beta_{179}(AMT *IAL) + \beta_{180}(APC *IAL) + \beta_{181}(ACV *IAL) + \beta_{182}FS + \beta_{183}FA + \varepsilon_{20}$$

The moderating effect of internal audit learning on the relationships among internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility; and internal audit usefulness are tested by equations 21 as shown below.



$$\text{Equation 21: } IAU = \alpha_{21} + \beta_{184} ALC + \beta_{185} APO + \beta_{186} AMT + \beta_{187} APC + \beta_{188} ACV + \beta_{189} IAL + \beta_{190}(ALC * IAL) + \beta_{191}(APO * IAL) + \beta_{192}(AMT * IAL) + \beta_{193}(APC * IAL) + \beta_{194}(ACV * IAL) + \beta_{195} FS + \beta_{196} FA + \epsilon_{21}$$

The moderating effect of internal audit learning on the relationships among internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility; and information value are tested by equations 22 as shown below.

$$\text{Equation 22: } IV = \alpha_{22} + \beta_{197} ALC + \beta_{198} APO + \beta_{199} AMT + \beta_{200} APC + \beta_{201} ACV + \beta_{202} IAL + \beta_{203}(ALC * IAL) + \beta_{204}(APO * IAL) + \beta_{205}(AMT * IAL) + \beta_{206}(APC * IAL) + \beta_{207}(ACV * IAL) + \beta_{208} FS + \beta_{209} FA + \epsilon_{22}$$

The moderating effect of internal audit learning on the relationships among internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility; and best decision-making are tested by equations 23 as shown below.

$$\text{Equation 23: } BDM = \alpha_{23} + \beta_{210} ALC + \beta_{211} APO + \beta_{212} AMT + \beta_{213} APC + \beta_{214} ACV + \beta_{215} IAL + \beta_{216}(ALC * IAL) + \beta_{217}(APO * IAL) + \beta_{218}(AMT * IAL) + \beta_{219}(APC * IAL) + \beta_{220}(ACV * IAL) + \beta_{221} FS + \beta_{222} FA + \epsilon_{23}$$

The moderating effect of internal audit learning on the relationships among internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility; and firm goal achievement are tested by equations 24 as shown below.

$$\text{Equation 24: } FGA = \alpha_{24} + \beta_{223} ALC + \beta_{224} APO + \beta_{225} AMT + \beta_{226} APC + \beta_{227} ACV + \beta_{228} IAL + \beta_{229}(ALC * IAL) + \beta_{230}(APO * IAL) + \beta_{231}(AMT * IAL) + \beta_{232}(APC * IAL) + \beta_{233}(ACV * IAL) + \beta_{234} FS + \beta_{235} FA + \epsilon_{24}$$



Where:

ALC = Internal audit legitimacy compliance

APO = Internal audit process openness

AMT = Internal audit method trust

APC = Internal audit practice clarity

ACV = Internal audit communication visibility

IAR = Internal audit reliability

IAQ = Internal audit quality

IAU = Internal audit usefulness

IV = Information value

BDM = Best decision-making

FGA = Firm goal achievement

GA = Governance awareness

IAP = Internal audit professional

IAE = Internal audit ethics

RF = Regulation force

EU = Environmental uncertainty

MC = Morality climate

IAL = Internal audit learning

FS = Firm size

FA = Firm age

$\alpha_n$  = Intercept – value of Y in the regression equation when the independent variable is equal zero

$\beta_n$  = Regression coefficient – the amount of change in the dependent variable for a one-unit change in the independent variable

$\varepsilon_n$  = Residual – error in predicting the research sample data

## Summary

This chapter provides the details of the research methods, including the population and sample selection, the data collection procedure, the measurement of all construct variables, the method including the validity and reliability testing of the



instrument and the statistical analyses. Finally, Table 5 summarizes the definitions of the constructs, the operational variables, the scale source and the sample questions and items. The next chapter describes the statistical results and the discussion of the results.



**Table 5: Definitions and Operational Variables of Constructs**

Construct	Definition	Operational Variables	Scale Source	Sample Question
<p><b>Independent Variables</b></p> <p><u>Internal audit transparency</u></p> <p>Internal audit legitimacy compliance (ALC)</p>	<p>the ability of firms to utilize internal audit standards or relevant laws which lead to perform appropriate internal audit work</p>	<p>compliance with internal audit standards or relevant laws, perform appropriate internal audit work</p>	<p>New scale</p>	<p>Firm emphases to internal audit practices with tracking of new professional standard and regulation to improve the for appropriate internal audit practices.</p>
<p>Internal audit process openness (APO)</p>	<p>the ability of firms to prepare and formulate audit plans for which internal auditors must identify and document sufficient information (e.g., audit scope and objectives, risks and controls, audit duration, resources necessary for the performance of the auditing etc.) to achieve the objectives in audit program and audit working papers in a consistent standardized and regulatory manner and which must be disclosed</p>	<p>planning to achieve the objectives in audit program and audit working papers in a consistent standardized and regulatory manner and must be disclosed</p>	<p>New scale</p>	<p>Firm focuses on disclose the internal audit plan for the stakeholders to gain an acceptable and reliable result.</p>

**Table 5: Definitions and Operational Variables of Constructs**

Construct	Definition	Operational Variables	Scale Source	Sample Question
<p><b>Independent Variables</b></p> <p><u>Internal audit transparency</u></p> <p>Internal audit method trust (AMT)</p>	<p>the ability of firms to prepare and formulate audit programs for which internal auditors must identify and document sufficient information (e.g., specific objectives and instructions, sample size and items to select, identification of audit procedures, dates, expected completion times, manpower and places for audit etc.) to achieve the objectives in audit working papers in a consistent, standardized and regulatory manner; and it must be seen to maintain integrity and independence in the internal audit performance</p>	<p>planning to achieve the objectives in audit working papers in a consistent standardized and regulatory manner and must be seen to maintain integrity and independence in internal audit performance</p>	<p>New scale</p>	<p>Firm believes that the audit program can help to control audit work honestly, independently and completely and be acceptable and reliable from stakeholders.</p>

**Table 5: Definitions and Operational Variables of Constructs**

Construct	Definition	Operational Variables	Scale Source	Sample Question
<p><b>Independent Variables</b>  <u>Internal audit transparency</u>                      Internal audit practice clarity (APC)</p>	<p>the ability of firms to perform the task identified in the audit program for which internal auditors must document working papers in a consistent, standardized and regulatory manner; and it must be organized, clear and comprehensive</p>	<p>auditing and documenting to achieve working papers in a consistent standardized and regulatory manner and must be organized, clear and comprehensive</p>	<p>New scale</p>	<p>Firm focuses on internal audit practices that follow with professional standard and regulation that lead to organized and clear work.</p>
<p>Internal audit communication visibility (ACV)</p>	<p>the ability of firms to convey the audit outcomes which internal auditors conduct throughout the period of fieldwork in a consistent, standardized and regulatory manner; and must not filter nor keep emotional uncertainly from creating more positive actions</p>	<p>conveying audit outcomes in a consistent standardized and regulatory manner and must not filter and keep emotional certainly from creating more positive actions</p>	<p>New scale</p>	<p>Firm emphases to communicate audit outcomes to stakeholders as frankly.</p>



**Table 5: Definitions and Operational Variables of Constructs**

<b>Construct</b>	<b>Definition</b>	<b>Operational Variables</b>	<b>Scale Source</b>	<b>Sample Question</b>
<b>Mediating Variables</b>				
Internal audit reliability (IAR)	the ability of firms to perform the internal audit service independently, clearly and completely by achieving information without error or bias	performing the internal audit service independently, clearly and completely by achieves information without error and bias	New scale	Firm can perform internal audit work clearly and completely cause to acquire audit outcomes that are neutrality and free from bias.
Internal audit quality (IAQ)	the ability of firms to efficiently perform the internal audit which is properly executed and communicated by achieving the objectives and goals of internal audit to add value and improve an organization's operations	performing efficiency of internal audit to achieve the objective and goals of internal audit to add value and improve an organization's operations	New scale	Firm enables to achieve the objective and goals of internal audit as well.
Internal audit usefulness (IAU)	the ability of firms to perform internal audit operational information which all users can use for correct and timely decision - making	perform internal audit operational information which all users can used for decision making correctly and timely	New scale	Internal audit supports the collection of all information relevant to the decision of stakeholders to use information quickly and timely.

**Table 5: Definitions and Operational Variables of Constructs**

<b>Construct</b>	<b>Definition</b>	<b>Operational Variables</b>	<b>Scale Source</b>	<b>Sample Question</b>
<b>Mediating Variables</b>				
Information value (IV)	the utility of information which all users can use for correctly and timely decision - making	presentation information that all users can use for decision making correctly and timely	New scale	Firm presented the fast and appropriate information which respond stakeholder's requirement timely.
Best decision - making (BDM)	the best choice between many alternative ways to help a company achieve its objectives or goal set in a correct and timely manner	analysis and design alternative, to comparative the benefits of each alternative and choosing the best alternative	Ninlaphay and Ussahawanitchakit, 2012	Firm has judgment and considers systems in all issues that are important for business operations.
<b>Dependent Variable</b>				
Firm goal achievement (FGA)	the operational outcome that shows performance of firms, both financial and non-financial, that arises from an ability of firms which are properly operated to achieve their goals	stability improvement of financial performance and market share	Sampattikorn and Ussahawanitchakit, 2012	Firm has the growth rate or market share increasingly.
<b>Antecedent Variables</b>				
Governance awareness (GA)	the realization in the workplace environment (formulated from the interaction of employees in an organization) that is focused and compliant with corporate governance	focusing on corporate governance	New scale	Firm believes that corporate governance can drive an organization to enhance the firm performance.

**Table 5: Definitions and Operational Variables of Constructs**

<b>Construct</b>	<b>Definition</b>	<b>Operational Variables</b>	<b>Scale Source</b>	<b>Sample Question</b>
<b>Antecedent Variables</b>				
Internal audit professional (IAP)	the ability of firms to work with widely - accepted internal audit standards which are properly planned and executed, achieving the confidence of internal audit quality	performing work follows internal audit standards which are properly planned and executed by achieves the confident of internal audit quality	New scale	Firm focuses on complying professional standard that help internal audit achieve completely audit plan.
Internal audit ethics ( IAE)	the ability of firms to work with a widely - accepted code of internal audit ethics which increases neutrality, free - from - bias practices and relevant information disclosure	performing work followsa code of internal audit ethics which leads to gain neutrality and free from bias practices and relevant information disclosure	New scale	Firm focuses on internal audit practices that follow with code of ethics for neutrality and free from bias practices.
Regulation force (RF)	the current regulations that firms must obey and comply, in order to improve appropriate operational trends	obeying and complying the current regulations to improve appropriate operational trend	Boonmunewai and Ussahawanitchakit, 2010	Many current regulations have an effect on improvement operational appropriate of firm.
Environmental uncertainty ( EU)	the relevant characteristics of the business environment in which technologies, regulations and stakeholder expectations are evolving	relevant characteristics of the business environment in which technologies, regulations and stakeholder expectations are evolving	New scale	Information technology rapidly changes impact firm to develop new strategy to maintain market share.

**Table 5: Definitions and Operational Variables of Constructs**

<b>Construct</b>	<b>Definition</b>	<b>Operational Variables</b>	<b>Scale Source</b>	<b>Sample Question</b>
<b>Moderating Variable</b> Morality climate (MC)	the workplace environment that focuses on the ambiguity people perceive when judging whether behaviors are right or wrong	the workplace environment that focuses on the ambiguity people perceive when judging whether behaviors are right or wrong	New scale	Firm supports staffs within the organization commitment to moral principle.
Internal audit learning ( IAL)	the ability of firms in which internal auditors acquire an intimate knowledge of all the organization's activities, new technologies and broaden their organizational capabilities	learning and follow up the organization's activities, new technologies and to broaden organizational capabilities	New scale	Firm focuses on learning and understanding all activities of organization in its entirety in order to get efficient audit work.
<b>Control Variables</b> Firm Size (FS)	firms' total assets	Dummy variable 0 = Total assets < 10,000,000,000 Baht 1 = Total assets ≥ 10,000,000,000 Baht	-	-
Firm Age (FA)	the number of years that firm has been operating	Dummy variable 0 = Listed times ≤ 15years 1 = Listed times >15years	-	-

## CHAPTER IV

### RESULTS AND DISCUSSION

The prior chapter describes the research methods which engage the sample selection and data collection procedure including the population and sample, data collection, the test of non-response bias and equations. Accordingly, research methods help to clearly answer the testable hypotheses in order to answer the research objectives and research questions. In this chapter, the results of the hypotheses testing are revealed. In addition, this chapter describes respondent characteristics and descriptive statistics as well. This chapter is organized as follows. Firstly, the respondents' and firms' characteristics are presented. Secondly, the hypotheses testing and results are detailed. Finally, the summary of all hypotheses testing is included in Table 17.

#### **Respondent Characteristics and Descriptive Statistics**

In this research, the key respondents are internal audit directors or internal audit managers who are expected to have the best knowledge of internal audit transparency of their organization. The respondents and firm demographic characteristics are shown in Appendix C and D.

Table 1C presents the demographic characteristics of 81 key participants with a returned mail survey. It shows that 51.85 percent of participants are male and 48.15 percent are female. The age span of the participants is more than 50 years old (38.27 percent). The participants are single (50.62 percent) and married (49.38 percent). For the educational level, the majority of the key respondents obtained a higher bachelor's degree (60.49 percent). In addition, 59.26 percent of the respondents have worked in the field for more than 15 years. Moreover, most respondents receive an average revenue per month of more than 90,000 baht (46.91 percent). Finally, the majority of the respondents have the status of other position (38.27 percent) such as executive director, assistant vice president and chief financial officer.

Table 1D presents the firm demographic characteristics of 81 respondents. The results indicate that majority of the type of business is an insurance company (39.51



percent). Firm respondents have authorized capital less than 1,000,000,000 Baht (43.21 percent). A large amount of total assets of firm respondents is less than 10,000,000,000 Baht (43.21 percent). In addition, the length of time the firm has been in business is more than 15 years (74.07 percent) and the most of firms have a total of employees between 100 and 500 (33.33 percent).

#### Correlation Analysis

The Pearson's correlation for the bivariate analysis of each variable pair was conducted in this research. The correlation analysis results showed a multicollinearity problem and explored the relationships among the variables. Table 6 shows the results of the correlation analysis of all constructs. The bivariate correlation procedure is subject to a two-tailed test of statistical significance at 2 levels as  $p < 0.01$  and  $p < 0.05$ .

The correlation matrix shows the correlations between two variables and verifying multicollinearity problems by intercorrelations among the independent variables. Accordingly, the evidence suggests that they are significantly related among the five dimensions of internal audit transparency and all constructs between 0.377 - 0.813,  $p < 0.01$ . The results indicate most of the correlation are less than 0.8 as recommended by Hair et al. (2010) except the correlation of internal audit practice clarity on internal audit method trust is 0.813.



Table 6: Descriptive Statistics and Correlation Matrix of Internal Audit Transparency and all Constructs

Variables	ALC	APO	AMT	APC	ACV	IAR	IAQ	IAU	IV	BDM	FGA	GA	IAP	IAE	RF	EU	MC	IAL	FS	FA
Mean	4.488	4.183	4.203	4.267	4.319	4.207	4.093	3.979	4.145	3.975	4.017	4.478	4.349	4.337	4.333	4.238	4.370	4.253	N/A	N/A
Std.	.503	.555	.553	.505	.552	.649	.578	.600	.542	.595	.649	.528	.631	.592	.571	.580	.559	.583	N/A	N/A
ALC																				
APO	.590**																			
AMT	.605**	.758**																		
APC	.710**	.698**	.813**																	
ACV	.677**	.682**	.616**	.762**																
IAR	.527**	.624**	.641**	.747**	.655**															
IAQ	.526**	.701**	.665**	.748**	.597**	.848**														
IAU	.434**	.680**	.634**	.676**	.666**	.770**	.784**													
IV	.417**	.619**	.627**	.729**	.666**	.784**	.746**	.813**												
BDM	.377**	.591**	.549**	.619**	.550**	.719**	.684**	.725**	.767**											
FGA	.445**	.609**	.612**	.675**	.555**	.720**	.741**	.690**	.764**	.844**										
GA	.438**	.398**	.484**	.597**	.477**	.456**	.517**	.403**	.451**	.384**	.501**									
IAP	.664**	.565**	.559**	.715**	.764**	.713**	.614**	.518**	.611**	.581**	.675**	.544**								
IAE	.634**	.573**	.540**	.719**	.784**	.685**	.598**	.597**	.691**	.603**	.670**	.554**	.870**							
RF	.565**	.581**	.588**	.610**	.706**	.535**	.501**	.501**	.512**	.536**	.569**	.432**	.657**	.645**						
EU	.589**	.510**	.502**	.577**	.682**	.543**	.564**	.478**	.484**	.543**	.569**	.426**	.670**	.659**	.814**					
MC	.594**	.520**	.555**	.699**	.649**	.587**	.534**	.432**	.633**	.554**	.600**	.491**	.761**	.842**	.625**	.632**				
IAL	.514**	.533**	.502**	.638**	.649**	.578**	.542**	.458**	.558**	.516**	.606**	.516**	.713**	.724**	.667**	.710**	.727**			
FS	.153	.135	.249**	.235**	.152	.164	.152	.167	.073	.216	.255**	.154	.147	.075	.194	.079	.032	.037		
FA	.197	.094	.023	-.022	.046	-.029	.022	-.128	-.024	.035	.025	-.065	.071	.003	.087	.122	.001	.125	-.061	

\*\*\*p<0.01, \*\*p<0.05

## Hypotheses Testing and Results

The ordinary least squares (OLS) regression analysis was conducted in this research. The regression equation generated is a linear combination of the independent variables that best explain and predict the dependent variable. Then the OLS is an appropriate method for examining the hypothesized relationships. Therefore, all hypotheses in this research were transformed to twenty four equations. Following this further, there were two dummy variables of firm size and firm age which were consistent with the data collection including in those equations for testing as follows.

### Impacts of Each Dimension of Internal Audit Transparency on Its Consequential Constructs

The relationships between the internal audit transparency dimension and the consequential variables, consisting of internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility based on Hypotheses 1a-f–5a-f. This research proposes that internal audit transparency is positively associated with the overall consequences which include internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement. These hypotheses were analyzed from the regression equation in Models 1-6 according to Chapter 3.

The correlations among each dimension of internal audit transparency and its consequences are shown in Table 7. The results show that each dimension of internal audit transparency consist of internal audit legitimacy compliance, internal audit process openness, internal audit method trust, internal audit practice clarity and internal audit communication visibility which are significantly and positively correlated with the consequential variables. However, these correlations are less than 0.80 as recommended by Hair et al. (2010).





Table 7: Correlation Matrix of Internal Audit Transparency on Its Consequences

Variables	ALC	APO	AMT	APC	ACV	IAR	IAQ	IAU	IV	BDM	FGA	FS	FA
<b>Mean</b>	4.488	4.183	4.203	4.267	4.319	4.207	4.093	3.979	4.145	3.975	4.017	N/A	N/A
<b>Std.</b>	.503	.555	.553	.505	.551	.649	.578	.600	.542	.595	.649	N/A	N/A
<b>ALC</b>													
<b>APO</b>	.590***												
<b>AMT</b>	.605***	.758***											
<b>APC</b>	.710***	.698***	.813***										
<b>ACV</b>	.677***	.682***	.616***	.762***									
<b>IAR</b>	.527***	.624***	.641***	.747***	.655***								
<b>IAQ</b>	.526***	.701***	.665***	.748***	.597***	.848***							
<b>IAU</b>	.434***	.680***	.634***	.676***	.666***	.770***	.784***						
<b>IV</b>	.417***	.619***	.627***	.729***	.666***	.784***	.746***	.813***					
<b>BDM</b>	.377***	.591***	.549***	.619***	.550***	.719***	.684***	.725***	.767***				
<b>FGA</b>	.445***	.609***	.612***	.675***	.555***	.720***	.741***	.690***	.764***	.844***			
<b>FS</b>	.153	.135	.249**	.235**	.152	.164	.152	.167	.073	.216	.255**		
<b>FA</b>	.197	.094	.023	-.022	.046	-.029	.022	-.128	-.024	.035	.025	-.061	

\*\*\*p<0.01, \*\*p<0.05

The results of the OLS regression analysis are provided in Table 8. Variance Inflation Factors (VIF) is used to test the intercorrelations among the five dimensions of internal audit transparency on its consequential constructs. In this case, the maximum value of VIF is 5.801 which are well below the cut-off value of 10 (Hair et al., 2010). As a result, the multicollinearity problems should not be a concern.

Table 8: Results of Regression Analysis for the Effects of Each Dimension of Internal Audit Transparency on Its Consequential Constructs

Independent Variables	Dependent Variables <sup>a</sup>					
	IAR	IAQ	IAU	IV	BDM	FGA
ALC	-0.025 (0.088)	-0.056 (0.111)	-0.156 (0.097)	<b>-0.333***</b> (0.110)	<b>-0.228*</b> (0.132)	0.076 (0.091)
APO	-0.107 (0.105)	<b>0.384***</b> (0.124)	0.127 (0.115)	0.159 (0.123)	<b>0.322**</b> (0.147)	0.057 (0.099)
AMT	0.060 (0.114)	-0.056 (0.143)	0.111 (0.125)	0.046 (0.142)	-0.060 (0.171)	0.035 (0.112)
APC	0.113 (0.136)	<b>0.612***</b> (0.156)	-0.074 (0.149)	<b>0.613***</b> (0.154)	<b>0.481**</b> (0.186)	0.071 (0.134)
ACV	<b>0.215**</b> (0.098)	-0.053 (0.123)	<b>0.338***</b> (0.107)	<b>0.303**</b> (0.122)	0.142 (0.147)	-0.099 (0.100)
FS	0.005 (0.119)	-0.023 (0.149)	0.027 (0.130)	-0.194 (0.148)	0.190 (0.178)	0.175 (0.121)
FA	-0.083 (0.136)	0.029 (0.171)	<b>-0.322**</b> (0.149)	0.037 (0.170)	0.135 (0.204)	0.004 (0.134)
Adjusted R <sup>2</sup>	0.742	0.592	0.690	0.599	0.421	0.753
Maximum VIF	5.763	4.759	5.763	4.759	4.759	5.801

\*\*\*p<0.01, \*\*p<0.05, \*p<0.10, <sup>a</sup> Beta coefficients with standard errors



According to Table 8, the results show that the relationships between the first dimension of internal audit transparency and its consequential variables indicate that internal audit legitimacy compliance has a significant negative effect on information value (H1d:  $\beta_{24} = -0.333$ ,  $p < 0.01$ ) and best decision-making (H1e:  $\beta_{31} = -0.228$ ,  $p < 0.10$ ). On the other hand, it has no significant effect on internal audit reliability (H1a:  $\beta_1 = -0.025$ ,  $p > 0.10$ ), internal audit quality (H1b:  $\beta_9 = -0.056$ ,  $p > 0.10$ ), internal audit usefulness (H1c:  $\beta_{16} = -0.156$ ,  $p > 0.10$ ) and firm goal achievement (H1f:  $\beta_{38} = 0.076$ ,  $p > 0.10$ ). This is consistent with Mitchell (2011) who states that transparency can best be viewed as a weak cause of behavioral change; it may be hijacked by the usual problems of regulatory capture. Also, Ninlaphay and Ussahawanitchakit (2012) note that compliance with laws and regulations have no effect on financial information reliability and internal audit quality. **Therefore, Hypotheses 1a -1f are not supported.**

The second dimension of internal audit transparency and its consequential factors indicate that internal audit process openness has a significant positive effect on internal audit quality (H2b:  $\beta_{10} = 0.384$ ,  $p < 0.01$ ) and best decision-making (H2e:  $\beta_{32} = 0.322$ ,  $p < 0.05$ ). However, it has no significant effect on internal audit reliability (H2a:  $\beta_2 = -0.107$ ,  $p > 0.10$ ), internal audit usefulness (H2c:  $\beta_{17} = 0.127$ ,  $p > 0.10$ ), information value (H2d:  $\beta_{25} = 0.159$ ,  $p > 0.10$ ) and firm goal achievement (H2f:  $\beta_{39} = 0.057$ ,  $p > 0.10$ ). This is consistent with Rezaee (1996) who states that a poor work process causes poor work quality, so internal audit functions should be carefully planned to reduce mistakes and cut costs. Moreover, Sampattikorn and Ussahawanitchakit (2012) reveal that internal audit planning comprehension awareness cannot increase the benefit of financial information and organization value. **Therefore, Hypotheses 2b and 2e are supported, but Hypotheses 2a, 2c, 2d and 2f are not supported.**

The third dimension of internal audit transparency and its consequential factors indicate that internal audit method trust has no significant effect on internal audit reliability (H3a:  $\beta_3 = 0.060$ ,  $p > 0.10$ ), internal audit quality (H3b:  $\beta_{11} = -0.056$ ,  $p > 0.10$ ), internal audit usefulness (H3c:  $\beta_{18} = 0.111$ ,  $p > 0.10$ ), information value (H3d:  $\beta_{26} = 0.046$ ,  $p > 0.10$ ) and best decision-making (H3e:  $\beta_{33} = -0.060$ ,  $p > 0.10$ ) and firm goal achievement (H3f:  $\beta_{40} = 0.035$ ,  $p > 0.10$ ). This is consistent with Srirachanapun and Ussahawanitchakit (2012) who state that internal audit planning has no positive effect



on financial reporting reliability. Moreover, Chopset and Ussahawanitchakit (2013) note that internal audit planning efficiency has no influence on goal achievement. **Therefore, Hypotheses 3a - 3f are not supported.**

The fourth dimension of internal audit transparency and its consequential factors indicate that internal audit practice clarity has a significant positive effect on internal audit quality (H4b:  $\beta_{12}= 0.612$ ,  $p<0.01$ ), information value (H4d:  $\beta_{27}= 0.613$ ,  $p<0.01$ ) and best decision-making (H4e:  $\beta_{34}= 0.481$ ,  $p<0.05$ ). However, it has no significant effect on internal audit reliability (H4a:  $\beta_4= 0.113$ ,  $p>0.10$ ), internal audit usefulness (H4c:  $\beta_{19}= -0.074$ ,  $p>0.10$ ). ) and firm goal achievement (H4f:  $\beta_{41}= 0.071$ ,  $p>0.10$ ). This is consistent with Sampattikorn and Ussahawanitchakit (2012) who state that internal audit report value has a significant positive relationship with financial information benefit and organization value, which leads to more usefulness in making decisions by users. Also, the stakeholder perspective clearly signals the challenge for internal audit to become more relevant and valuable to the organization (Lenz and Sarens, 2012). However, Pongsatitpat and Ussahawanitchakit (2013) note that audit value increase has no relationships to financial information usefulness. **Therefore, Hypotheses 4b, 4d and 4e are supported, but Hypotheses 4a, 4c and 4f, are not supported.**

The final dimension of internal audit transparency and its consequential factors indicates that internal audit communication visibility has a significant positive effect on internal audit reliability (H5a:  $\beta_5= 0.215$ ,  $p<0.05$ ), internal audit usefulness (H5c:  $\beta_{20}= 0.338$ ,  $p<0.01$ ) and information value (H5d:  $\beta_{28}= 0.303$ ,  $p<0.05$ ). However, it has no significant effect on internal audit quality (H5b:  $\beta_{13}= -0.053$ ,  $p>0.10$ ), best decision-making (H5e:  $\beta_{35}= 0.142$ ,  $p>0.10$ ) and firm goal achievement (H5f:  $\beta_{42}= -0.099$ ,  $p>0.10$ ). This is consistent with Boonmunewai and Ussahawanitchakit (2010) who state that the firms with higher internal audit competency of internal audit function have greater financial information reliability. However, there is not a reflection of detail about the ultimate form of best value, or the absence of any mention of a role for internal audit. Such lack of clarity is in itself important as it indicates that internal auditors, as potential key players in helping to monitor and ensure delivery of best value, do not have a vision of the likely role of external audit in this important initiative (Bowerman. and Hawksworth, 1999). A 1992 survey in the USA asks chief financial



officers of Fortune 1,000 companies to determine what they expect from an audit and whether their expectations are being met. Respondents are consistent in stating that they expect value added from an audit and are not receiving it (Rickard, 1994). **Therefore, Hypotheses 5a, 5c and 5d are supported, but Hypotheses 5b, 5e and 5f are not supported.**

Overall, these results provide that the financial businesses with each dimension of internal audit transparency has an effect on internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement. **Therefore, Hypotheses 2, 4 and 5 are partially supported but Hypotheses 1 and 3 are not supported.**

For the control variables, firm size has no significant influence on internal audit reliability ( $\beta_7 = 0.005$ ,  $p > 0.10$ ), internal audit quality ( $\beta_{14} = -0.023$ ,  $p > 0.10$ ), internal audit usefulness ( $\beta_{22} = 0.027$ ,  $p > 0.10$ ), information value ( $\beta_{29} = -0.194$ ,  $p > 0.10$ ), best decision-making ( $\beta_{36} = 0.190$ ,  $p > 0.10$ ) and firm goal achievement ( $\beta_{45} = 0.175$ ,  $p > 0.10$ ).

However, firm age has a significant negative influence on internal audit usefulness ( $\beta_{23} = -0.322$ ,  $p < 0.05$ ). On the other hand, it has no significant influence on internal audit reliability ( $\beta_8 = -0.083$ ,  $p > 0.10$ ), internal audit quality ( $\beta_{15} = 0.029$ ,  $p > 0.10$ ), information value ( $\beta_{30} = 0.037$ ,  $p > 0.10$ ), best decision-making ( $\beta_{37} = 0.135$ ,  $p > 0.10$ ) and firm goal achievement ( $\beta_{46} = 0.004$ ,  $p > 0.10$ ). The result is consistent with Chitmun and Ussahawanitchakit (2012) who note that firm age has a negative relationship with valuable unique decision making meaning that a new firm has more valuable unique decision making than a long time operating firm.

#### Impacts of Internal Audit Reliability Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making and Firm Goal Achievement

The relationships between the internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement based on Hypotheses 6a-d ; 7a-b ; 8a-b ; 9a-b ; 10. This research proposes that the relationships between internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement are positive. These hypotheses are analyzed from the regression equation in Models 7-8 according to Chapter 3.



The correlations among the internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement are shown in Table 9. Most of these correlations are less than 0.80 as recommended by Hair et al. (2010) except the correlation of internal audit quality on internal audit reliability, internal audit usefulness on information value, best decision-making on firm goal achievement are 0.848, 0.813 and 0.844 respectively. Moreover, VIF are used to test the intercorrelations among the internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement. In this case, the maximum value of the VIF is 5.801 which are well below the cut-off value of 10 (Hair et al., 2010). As a result, the multicollinearity problems should not be a concern. The results of the OLS regression analysis of the relationships among internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement are shown in Table 10.

According to Table 10, the evidence indicates the relationships between internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement. The results shown that internal audit quality has a significant positive effect on internal audit reliability (H6a:  $\beta_6 = 0.685$ ,  $p < 0.01$ ) and internal audit usefulness (H6b:  $\beta_{21} = 0.559$ ,  $p < 0.01$ ). However, it has no significant influence on information value (H6c:  $\beta_{48} = 0.049$ ,  $p > 0.10$ ) and best decision-making (H6d:  $\beta_{53} = 0.024$ ,  $p > 0.10$ ). This is consistent with Pongsatitpat and Ussahawanitchakit (2013) who state that best audit practice focus has an effect on audit value increase, audit report quality and financial information usefulness. Moreover, Pongpanpattana and Ussahawanitchakit (2013) reveal that internal audit independence orientation is significantly positively related to financial information reliability. Also, the internal auditors provide alerts and warnings for risks that require attention and track corrective actions (Kapoor and Brozzetti, 2012). However, Chopset and Ussahawanitchakit (2013) note that financial report quality has no influence on goal achievement. ***Therefore, Hypotheses 6a and 6b are supported, but Hypotheses 6c and 6d are not supported.***



Table 9: Correlation Matrix of Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making and Firm Goal Achievement

<b>Variables</b>	<b>IAR</b>	<b>IAQ</b>	<b>IAU</b>	<b>IV</b>	<b>BDM</b>	<b>FGA</b>	<b>FS</b>	<b>FA</b>
<b>Mean</b>	4.207	4.093	3.978	4.145	3.975	4.017	N/A	N/A
<b>Std.</b>	.649	.578	.600	.542	.595	.649	N/A	N/A
<b>IAR</b>								
<b>IAQ</b>	.848***							
<b>IAU</b>	.770***	.784***						
<b>IV</b>	.784***	.746***	.813***					
<b>BDM</b>	.719***	.684***	.725***	.767***				
<b>FGA</b>	.720***	.741***	.690***	.764***	.844***			
<b>FS</b>	.164	.152	.167	.073	.216	.255**		
<b>FA</b>	-.029	.022	-.128	-.024	.035	.025	-.061	

\*\*\*p<0.01, \*\*p<0.05

Table 10: Results of Regression Analysis for the Effects of Internal Audit Reliability Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making and Firm Goal Achievement

Independent Variables	Dependent Variables <sup>a</sup>				
	IAR	IAU	IV	BDM	FGA
IAQ	<b>0.685***</b> (0.093)	<b>0.559***</b> (0.102)	0.049 (0.125)	0.024 (0.142)	
IAR			<b>0.361***</b> (0.120)	0.190 (0.144)	
IAU			<b>0.513***</b> (0.105)	0.210 (0.136)	
IV				<b>0.420***</b> (0.131)	<b>0.254**</b> (0.110)
BDM					<b>0.565***</b> (0.092)
FS	0.005 (0.119)	0.027 (0.130)	-0.147 (0.122)	<b>0.248*</b> (0.140)	0.175 (0.121)
FA	-0.083 (0.136)	<b>-0.322**</b> (0.149)	0.099 (0.140)	0.195 (0.160)	0.004 (0.134)
Adjusted R <sup>2</sup>	0.742	0.690	0.712	0.629	0.753
Maximum VIF	5.763	5.763	4.366	4.479	5.801

\*\*\*p<0.01, \*\*p<0.05, \*p<0.10, <sup>a</sup> Beta coefficients with standard errors

In addition, the results indicate that internal audit reliability has a significant positive effect on information value (H7a:  $\beta_{47} = 0.361$ ,  $p < 0.01$ ). However, it has no significant influence on best decision-making (H7b:  $\beta_{52} = 0.190$ ,  $p > 0.10$ ). This is consistent with Sawyer (1993) who notes that modern internal auditors provide the reliable and trustworthy data to assist managers. Moreover, statements on reliability deal with issues related to the extent of assurance provided by an audit, the accounting policies used in the financial statements, the extent of assurance provided by the auditor





that the audited financial statements give a true and fair view, the audited report's effectiveness in communicating the extent of the audit work performed and fraud within the audited entity (Pourheydari and Abousaiedi, 2011). Also, the internal auditors should present information and discoveries in a way that allows decision makers to make good choices (Kapoor and Brozzetti, 2012). On the other hand, Gramling et al. (2004) argue that when the audit procedure reliability is low, the work performance is not contingent on the level of internal audit function competence or objectivity.

***Therefore, Hypothesis 7a is supported, but Hypothesis 7b is not supported.***

Moreover, the results indicate that internal audit usefulness has a significant positive influence on information value (H8a:  $\beta_{49} = 0.513$ ,  $p < 0.01$ ). However, it has no significant influence on best decision-making (H8b:  $\beta_{54} = 0.210$ ,  $p > 0.10$ ). This is consistent with Rezaee (1996) who states that internal auditors are now providing management with a far broader range of information concerning the organization's financial, operational and compliance activities. On the other hand, Laonamtha and Ussahawanitchakit (2012) reveal that accounting information quality has no effect on decision making success. Also, Mihret and Yismaw (2007) note that audit findings would not serve much purpose unless management is committed to implement audit quality. ***Therefore, Hypothesis 8a is supported, but Hypothesis 8b is not supported.***

Furthermore, the results indicate that information value has a significant positive effect on best decision-making (H9a:  $\beta_{55} = 0.420$ ,  $p < 0.01$ ) and firm goal achievement (H9b:  $\beta_{43} = 0.254$ ,  $p < 0.05$ ). This is consistent with Chaikambang and Ussahawanitchakit (2012) who reveal that valuable information specialization has significant effect on decision making advantage. Also, the internal audit can do and assist in providing useful information for strategic decision making (Rickard, 1994; Anderson and Svare, 2013). Moreover, Sampattikorn and Ussahawanitchakit (2012) state that financial information benefit has a significant positive direct effect on organization value enhancement, business performance advantage and goal achievement sustainability. In addition, information value is a key factor that makes firms successful. Then, firms that can provide reliable basic information to decide correctly and timely helps firms manage, control operations and judge effectively, which leads to enhancing the value of a firm and business advantage. ***Therefore, Hypotheses 9a-b are supported.***



Moreover, best decision-making has a significant positive effect on firm goal achievement (H10:  $\beta_{44} = 0.565$ ,  $p < 0.01$ ). This is consistent with Chaikambang and Ussahawanitchakit (2012) who reveal that decision making advantage has significant effect on goal achievement. Furthermore, the internal auditing helps to ensure that business decisions and management operations remain consistent with an organization's mission, strategies and goals (Kapoor and Brozzetti, 2012). ***Therefore, Hypothesis 10 is supported.***

Overall, these results provide the relationships between the internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement. ***Therefore, Hypotheses 9 and 10 are supported, while Hypotheses 6, 7 and 8 are partially supported.***

For the control variables, firm size has a significant positive effect on best decision-making ( $\beta_{36} = 0.248$ ,  $p < 0.10$ ). However, firm size has no significant influence on internal audit reliability ( $\beta_7 = 0.005$ ,  $p > 0.10$ ), internal audit usefulness ( $\beta_{22} = 0.027$ ,  $p > 0.10$ ), information value ( $\beta_{50} = -0.147$ ,  $p > 0.10$ ) and firm goal achievement ( $\beta_{45} = 0.175$ ,  $p > 0.10$ ). This is consistent with prior study suggests that firm size might impact firm performance (Prempree and Ussahawanitchakit, 2013). Additionally, Sampattikorn and Ussahawanitchakit (2012) state that firm size has a significant positive effect on some dimensions of best internal audit practices.

However, firm age has a significant negative effect on internal audit usefulness ( $\beta_{23} = -0.322$ ,  $p < 0.05$ ). On the other hand, firm age has no significant effect on internal audit reliability ( $\beta_8 = -0.083$ ,  $p > 0.10$ ), information value ( $\beta_{51} = 0.099$ ,  $p > 0.10$ ), best decision-making ( $\beta_{57} = 0.195$ ,  $p > 0.10$ ) and firm goal achievement ( $\beta_{46} = 0.004$ ,  $p > 0.10$ ). The result is consistent with Chitmun and Ussahawanitchakit (2012) who note that firm age has a negative relationship with valuable unique decision making meaning that a new firm has more valuable unique decision making than a long time operating firm.

#### Impacts of Governance Awareness, Internal Audit Professional, Internal Audit Ethics, Regulation Force and Environment on Each Dimension of Internal Audit Transparency

This research proposes the relationships among the antecedents of internal audit transparency including and the five dimensions of internal audit transparency (Hypotheses 11 a-e-15a-e). These hypotheses are examined from the regression



equations in Model 9-13 in Chapter 3. Moreover, the maximum value of the VIF is 4.685 which are well below the cut-off value of 10 (Hair et al., 2010). As a result, the multicollinearity problems should not be a concern. The results of the OLS regression analysis of the relationships among management goal achievement, organizational citizenship behavior, customer acceptance outstanding, market opportunity and firm value are shown in Table 12.

The correlations among the antecedents of internal audit transparency including and the five dimensions of internal audit transparency are shown in Table 11. Most of these correlations are less than 0.80 as recommended by Hair et al. (2010) except the correlation of internal audit professional on internal audit ethics and regulation force on environment uncertainty are 0.870 and 0.814 respectively.

Table 12 provides the results of the effects of the antecedent variables and the internal audit transparency dimension. Furthermore, governance awareness has a significant positive impact on internal audit method trust (H11c:  $\beta_{72} = 0.195$ ,  $p < 0.10$ ) and internal audit practice clarity (H11d:  $\beta_{79} = 0.226$ ,  $p < 0.05$ ). However, it has no significant influence on internal audit legitimacy compliance (H11a:  $\beta_{58} = 0.085$ ,  $p > 0.10$ ), internal audit process openness (H11b:  $\beta_{65} = 0.071$ ,  $p > 0.10$ ) and internal audit communication visibility (H11e:  $\beta_{86} = -0.004$ ,  $p > 0.10$ ). This is consistent with Ninlaphay and Ussahawanitchakit (2012) who reveal that corporate governance policy has a positive effect on business process transparency. In the aftermath of the large corporate failures (such as Enron and WorldCom), regulators have taken steps to ensure that companies have internal auditing (Carcello, Hermanson and Raghunandan, 2005). However, Sampattikorn and Ussahawanitchakit (2012) state that corporate governance climate has no significant influence on audit planning comprehension awareness and internal audit report value. ***Hence, Hypotheses 11c and 11d are supported, but Hypotheses 11a, 11b and 11e are not supported.***

Secondly, internal audit professional has no significant impact on internal audit legitimacy compliance (H12a:  $\beta_{59} = 0.292$ ,  $p > 0.10$ ), internal audit process openness



Table 11: Correlation Matrix of Antecedents and Each Dimension of Internal Audit Transparency

Variables	ALC	APO	AMT	APC	ACV	GA	IAP	IAE	RF	EU	FS	FA
<b>Mean</b>	4.488	4.183	4.203	4.267	4.319	4.478	4.349	4.336	4.333	4.238	N/A	N/A
<b>Std.</b>	.503	.555	.553	.505	.551	.528	.631	.592	.571	.580	N/A	N/A
<b>ALC</b>												
<b>APO</b>	.590***											
<b>AMT</b>	.605***	.758***										
<b>APC</b>	.710***	.698***	.813***									
<b>ACV</b>	.677***	.682***	.616***	.762***								
<b>GA</b>	.438***	.398***	.484***	.597***	.477***							
<b>IAP</b>	.664***	.565***	.559***	.715***	.764***	.544***						
<b>IAE</b>	.634***	.573***	.540***	.719***	.784***	.554***	.870***					
<b>RF</b>	.565***	.581***	.588***	.610***	.706***	.432***	.657***	.645***				
<b>EU</b>	.589***	.510***	.502***	.577***	.682***	.426***	.670***	.659***	.814***			
<b>FS</b>	.153	.135	.249**	.235**	.152	.154	.147	.075	.194	.079		
<b>FA</b>	.197	.094	.023	-.022	.046	-.065	.071	.003	.087	.122	-.061	

\*\*\*p<0.01, \*\*p<0.05

Table 12: Results of Regression Analysis for Effects of Antecedents on Each Dimension of Internal Audit Transparency

Independent Variables	Dependent Variables <sup>a</sup>				
	ALC	APO	AMT	APC	ACV
<b>GA</b>	0.085 (0.100)	0.071 (0.110)	<b>0.195*</b> (0.108)	<b>0.226**</b> (0.090)	-0.004 (0.079)
<b>IAP</b>	0.292 (0.175)	0.088 (0.193)	0.154 (0.189)	0.200 (0.157)	0.199 (0.138)
<b>IAE</b>	0.176 (0.174)	0.269 (0.192)	0.091 (0.188)	<b>0.298*</b> (0.156)	<b>0.397***</b> (0.137)
<b>RF</b>	0.055 (0.148)	<b>0.339**</b> (0.163)	<b>0.353**</b> (0.159)	0.155 (0.132)	<b>0.229*</b> (0.116)
<b>EU</b>	0.178 (0.149)	-0.045 (0.165)	-0.046 (0.161)	0.014 (0.134)	0.103 (0.118)
<b>FS</b>	0.129 (0.171)	0.065 (0.188)	0.249 (0.184)	0.222 (0.153)	0.085 (0.134)
<b>FA</b>	<b>0.350***</b> (0.189)	0.179 (0.208)	0.016 (0.204)	-0.077 (0.169)	-0.002 (0.149)
<b>Adjusted R<sup>2</sup></b>	0.475	0.361	0.390	0.579	0.674
<b>Maximum VIF</b>	4.685	4.685	4.685	4.685	4.685

\*\*\*p<0.01, \*\*p<0.05, \*p<0.10, <sup>a</sup> Beta coefficients with standard errors

(H12b:  $\beta_{66} = 0.088$ ,  $p > 0.10$ ), internal audit method trust (H12c:  $\beta_{73} = 0.154$ ,  $p > 0.10$ ), internal audit practice clarity (H12d:  $\beta_{80} = 0.200$ ,  $p > 0.10$ ) and internal audit communication visibility (H12e:  $\beta_{87} = 0.199$ ,  $p > 0.10$ ). This is consistent with Pongpanpattana and Ussahawanitchakit (2013) find that internal audit professional commitment has no significant effect on financial information reliability, risk management excellence and organizational productivity enhancement. However, keeping a professional appearance and the status of the profession more generally is important for the auditor (Carrington, 2010). **Hence, Hypotheses 12a-e are not supported.**



Thirdly, internal audit ethics has a significant positive effect on internal audit practice clarity (H13d:  $\beta_{81} = 0.298$ ,  $p < 0.10$ ) and internal audit communication visibility (H13e:  $\beta_{88} = 0.397$ ,  $p < 0.01$ ). However, it has no significant effect on internal audit legitimacy compliance (H13a:  $\beta_{60} = 0.176$ ,  $p > 0.10$ ), internal audit process openness (H13b:  $\beta_{67} = 0.269$ ,  $p > 0.10$ ) and internal audit method trust (H13c:  $\beta_{74} = 0.091$ ,  $p > 0.10$ ). This is consistent with Sookaneknun and Ussahawanitchakit (2013) who present that ethical climate has a significant positive effect on management practice transparency. Ethical orientation is significantly and positively correlates to internal audit transparency concern (Pongpanpattana and Ussahawanitchakit, 2013). Moreover, the internal auditors are being called upon to help maintain a high standard of ethical behavior in their organizations by handling of reported violations and subsequent disciplinary actions, when warranted (Kapoor and Brozzetti, 2012). However, Everett and Tremblay (2014) note that there are different ways of being ethical and this is no less true for internal auditor. Also, auditors can further choose between being more or less light or heavy, or more or less concerned with justice or courage. **Hence, Hypotheses 13d and 13e are supported, but Hypotheses 13a, 13b and 13c are not supported.**

Fourthly, regulation force has a significant positive effect on internal audit process openness (H14b:  $\beta_{68} = 0.339$ ,  $p < 0.05$ ), internal audit method trust (H14c:  $\beta_{75} = 0.353$ ,  $p < 0.05$ ) and internal audit communication visibility (H14e:  $\beta_{89} = 0.229$ ,  $p < 0.10$ ). However, it has no significant effect on internal audit legitimacy compliance (H14a:  $\beta_{61} = 0.055$ ,  $p > 0.10$ ) and internal audit practice clarity (H14d:  $\beta_{82} = 0.155$ ,  $p > 0.10$ ). This is inconsistent with Boonmunewai and Ussahawanitchakit (2010) who state that the compliance with regulation enforcement is leads to improve the competencies of internal audit to public confidence in order to achieve superior performance. With the implementation of good corporate governance, the public and stakeholders will assess whether incentives or penalties. Incentives in the form of trust while penalties form of damage to company image or reputation for the quality of the implementation of Good Governance (Octavia, 2013). **Hence, Hypotheses 14b, 14c and 14e are supported, but Hypotheses 14a and 14d are not supported.**

Finally, environment uncertainty has no significant effect on internal audit legitimacy compliance (H15a:  $\beta_{62} = 0.178$ ,  $p > 0.10$ ), internal audit process openness



(H15b:  $\beta_{69} = -0.045$ ,  $p > 0.10$ ), internal audit method trust (H15c:  $\beta_{76} = -0.046$ ,  $p > 0.10$ ), internal audit practice clarity (H15d:  $\beta_{83} = 0.014$ ,  $p > 0.10$ ) and internal audit communication visibility (H15e:  $\beta_{90} = 0.103$ ,  $p > 0.10$ ). Surprisingly, this research cannot find the interaction between the environment uncertainty and each dimension of internal audit transparency. However, Sampattikorn and Ussahawanitchakit (2012) state that business competition intensity has no effect on internal audit report value. Also, Sookaneknun and Ussahawanitchakit (2012) present that environmental uncertainty has no significant effect on management practice transparency. But it is inconsistent with Ninlaphay and Ussahawanitchakit (2012) who state that competitive environment diversify positively affects compliance with laws and regulations and business process transparency. **Hence, Hypotheses 15a-e are not supported.**

Overall, these results provide that the relationships among governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty have an effect on each dimension of internal audit transparency. **Therefore, Hypotheses 11, 13 and 14 are partially supported, while Hypotheses 12 and 15 are not supported.**

For the control variables, firm size has no significant influence on internal audit legitimacy compliance ( $\beta_{63} = 0.129$ ,  $p > 0.10$ ), internal audit process openness ( $\beta_{70} = 0.065$ ,  $p > 0.10$ ), internal audit method trust ( $\beta_{77} = 0.249$ ,  $p > 0.10$ ), internal audit practice clarity ( $\beta_{84} = 0.222$ ,  $p > 0.10$ ) and internal audit communication visibility ( $\beta_{91} = 0.085$ ,  $p > 0.10$ ).

However, firm age has a significant positive effect on internal audit legitimacy compliance ( $\beta_{64} = 0.350$ ,  $p < 0.01$ ). On the other hand, firm age has no significant effect on internal audit process openness ( $\beta_{71} = 0.179$ ,  $p > 0.10$ ), internal audit method trust ( $\beta_{78} = 0.016$ ,  $p > 0.10$ ), internal audit practice clarity ( $\beta_{85} = -0.077$ ,  $p > 0.10$ ) and internal audit communication visibility ( $\beta_{92} = -0.002$ ,  $p > 0.10$ ). This is consistent with Sampattikorn and Ussahawanitchakit (2012) who state that the relationships between each dimension of best internal audit practices is affected by influence of firm age.

Impacts of Governance Awareness, Internal Audit Professional, Internal Audit Ethics, Regulation Force and Environment Uncertainty on Each Dimension of Internal Audit Transparency and the Moderating Role of Morality Climate



There is an important part to analyze the linkage among the antecedents of internal audit transparency and internal audit transparency dimensions via morality climate as the moderating effects. The correlations among the antecedents of internal audit transparency, internal audit transparency dimensions and morality climate are shown in Table 13. The results show that the antecedents of internal audit transparency are significantly and positively correlated with the internal audit transparency dimensions and morality climate. Most of these correlations are less than 0.80 as recommended by Hair et al. (2010) except the correlation of internal audit ethics on morality climate is 0.842.

For the moderating role of morality climate on the relationships between the antecedents of internal audit transparency and internal audit transparency dimensions based on Hypotheses 16a-e—20a-e. These hypotheses are analyzed from the regression equations in Models 14-18 according to Chapter 3. Moreover, the maximum value of the VIF is 9.477 which is well below the cut-off value of 10 (Hair et al., 2010). As a result, the multicollinearity problems should not be a concern. The results of the OLS regression analysis are provided in Table 14.

Firstly, the moderating role of morality climate has a significant negative effect among governance awareness and internal audit practice clarity (H16d:  $\beta_{138} = -0.186$ ,  $p < 0.05$ ). However, there are no effect among governance awareness and internal audit legitimacy compliance (H16a:  $\beta_{99} = -0.155$ ,  $p > 0.10$ ), internal audit process openness (H16b:  $\beta_{112} = -0.027$ ,  $p > 0.10$ ), internal audit method trust (H16c:  $\beta_{125} = -0.115$ ,  $p > 0.10$ ) and internal audit communication visibility (H16e:  $\beta_{151} = -0.107$ ,  $p > 0.10$ ). **Therefore, Hypotheses 16a-e are not supported.**

Secondly, the moderating role of morality climate has a significant positive effect among internal audit professional and internal audit process openness (H17b:  $\beta_{113} = 0.491$ ,  $p < 0.05$ ). However, there are no significant effect among internal audit professional and internal audit legitimacy compliance (H17a:  $\beta_{100} = -0.010$ ,  $p > 0.10$ ), internal audit method trust (H17c:  $\beta_{126} = 0.170$ ,  $p > 0.10$ ), internal audit practice clarity (H17d:  $\beta_{139} = 0.109$ ,  $p > 0.10$ ) and internal audit communication visibility (H17e:  $\beta_{152} = 0.205$ ,  $p > 0.10$ ). **Therefore, Hypothesis 17b is supported, but Hypotheses 17a, 17c, 17d and 17e are not supported.**





Table 13: Correlation Matrix of Antecedents, Each Dimension of Internal Audit Transparency and Moderating Role of Morality Climate

Variables	ALC	APO	AMT	APC	ACV	GA	IAP	IAE	RF	EU	MC	FS	FA
<b>Mean</b>	4.488	4.183	4.203	4.267	4.319	4.478	4.349	4.336	4.333	4.238	4.370	N/A	N/A
<b>Std.</b>	.503	.555	.553	.505	.552	.528	.631	.592	.571	.580	.559	N/A	N/A
<b>ALC</b>													
<b>APO</b>	.590***												
<b>AMT</b>	.605***	.758***											
<b>APC</b>	.710***	.698***	.813***										
<b>ACV</b>	.677***	.682***	.616***	.762***									
<b>GA</b>	.438***	.398***	.484***	.597***	.477***								
<b>IAP</b>	.664***	.565***	.559***	.715***	.764***	.544***							
<b>IAE</b>	.634***	.573***	.540***	.719***	.784***	.554***	.870***						
<b>RF</b>	.565***	.581***	.588***	.610***	.706***	.432***	.657***	.645***					
<b>EU</b>	.589***	.510***	.502***	.577***	.682***	.426***	.670***	.659***	.814***				
<b>MC</b>	.594***	.520***	.555***	.699***	.649***	.491***	.761***	.842***	.625***	.632***			
<b>FS</b>	.153	.135	.249**	.235**	.152	.154	.147	.075	.194	.079	.032		
<b>FA</b>	.197	.094	.023	-.022	.046	-.065	.071	.003	.087	.122	.001	-.061	

\*\*\*p<0.01, \*\*p<0.05

Table 14: Results of Regression Analysis for Effects of Antecedents on Each Dimension of Internal Audit Transparency and Moderating Role of Morality Climate

Independent Variables	Dependent Variables <sup>a</sup>				
	ALC	APO	AMT	APC	ACV
GA	-0.100 (0.155)	0.057 (0.170)	0.047 (0.163)	0.003 (0.136)	-0.118 (0.121)
IAP	0.311 (0.193)	0.305 (0.212)	0.273 (0.203)	0.263 (0.169)	<b>0.322**</b> (0.151)
IAE	0.163 (0.222)	0.096 (0.244)	-0.095 (0.233)	0.195 (0.195)	<b>0.478***</b> (0.174)
RF	0.134 (0.156)	<b>0.406**</b> (0.172)	<b>0.387**</b> (0.164)	0.192 (0.137)	<b>0.329***</b> (0.122)
EU	0.106 (0.157)	-0.111 (0.172)	-0.050 (0.165)	-0.008 (0.138)	0.044 (0.123)
MC	0.081 (0.158)	0.020 (0.174)	0.241 (0.166)	<b>0.248*</b> (0.139)	-0.174 (0.124)
GA*MC	-0.155 (0.105)	-0.027 (0.116)	-0.115 (0.111)	<b>-0.186**</b> (0.093)	-0.107 (0.083)
IAP*MC	-0.010 (0.206)	<b>0.491**</b> (0.227)	0.170 (0.217)	0.109 (0.181)	0.205 (0.162)
IAE*MC	-0.008 (0.195)	-0.211 (0.214)	0.230 (0.204)	0.046 (0.171)	-0.143 (0.152)
RF*MC	0.221 (0.174)	-0.016 (0.191)	0.131 (0.183)	0.114 (0.153)	0.120 (0.136)
EU*MC	-0.138 (0.164)	-0.179 (0.181)	-0.274 (0.173)	-0.030 (0.144)	-0.093 (0.129)
FS	0.208 (0.183)	-0.035 (0.201)	0.153 (0.192)	0.243 (0.161)	0.065 (0.143)
FA	<b>0.427**</b> (0.195)	0.251 (0.214)	0.099 (0.205)	0.031 (0.171)	0.067 (0.153)
Adjusted R <sup>2</sup>	0.477	0.368	0.423	0.597	0.679
Maximum VIF	9.477	9.477	9.477	9.477	9.477

\*\*\*p<0.01, \*\*p<0.05, \*p<0.10, <sup>a</sup> Beta coefficients with standard errors



Thirdly, the moderating role of morality climate has no significant effect among internal audit ethics and internal audit legitimacy compliance (H18a:  $\beta_{101} = -0.008$ ,  $p > 0.10$ ), internal audit process openness (H18b:  $\beta_{114} = -0.211$ ,  $p > 0.10$ ), internal audit method trust (H18c:  $\beta_{127} = 0.230$ ,  $p > 0.10$ ), internal audit practice clarity, (H18d:  $\beta_{140} = 0.046$ ,  $p > 0.10$ ) and internal audit communication visibility (H18e:  $\beta_{153} = -0.143$ ,  $p > 0.10$ ). **Therefore, Hypotheses 18a-e are not supported.**

Fourthly, the moderating role of morality climate has no significant effect among regulation force and internal audit legitimacy compliance (H19a:  $\beta_{102} = 0.221$ ,  $p > 0.10$ ), internal audit process openness (H19b:  $\beta_{115} = -0.016$ ,  $p > 0.10$ ), internal audit method trust (H19c:  $\beta_{128} = 0.131$ ,  $p > 0.10$ ), internal audit practice clarity (H19d:  $\beta_{141} = 0.114$ ,  $p > 0.10$ ) and internal audit communication visibility (H19e:  $\beta_{154} = 0.120$ ,  $p > 0.10$ ). **Therefore, Hypotheses 19a-e are not supported.**

Lastly, the moderating role of morality climate has no significant effect among environment uncertainty and internal audit legitimacy compliance (H20a:  $\beta_{103} = -0.138$ ,  $p > 0.10$ ), internal audit process openness (H20b:  $\beta_{116} = -0.179$ ,  $p > 0.10$ ), internal audit method trust (H20c:  $\beta_{129} = -0.274$ ,  $p > 0.10$ ), internal audit practice clarity (H20d:  $\beta_{142} = -0.030$ ,  $p > 0.10$ ) and internal audit communication visibility (H20e:  $\beta_{155} = -0.093$ ,  $p > 0.10$ ). **Therefore, Hypotheses 20a-e are not supported.**

This is consistent with Pongsatitpat and Ussahawanitchakit (2013) who state that morality mindset has the effect to gain greater best audit practice and audit planning orientation. Moreover, Pongpanpattana and Ussahawanitchakit (2013) note that internal audit morality awareness is negatively insignificant with financial information reliability and risk management excellence. It may imply that internal audit morality awareness is not enough.

#### Impacts of Each Dimension of Internal Audit Transparency on its Consequences and the Moderating Role of Internal Audit Learning

There is an important part to analyze the linkage among the internal audit transparency dimensions and its consequences via internal audit learning as the moderating effects. The correlations among the internal audit transparency dimensions and its consequences and morality climate are shown in Table 15. The results show that the internal audit transparency dimensions are significantly and positively correlated



Table 15: Correlation Matrix of Each Dimension of Internal Audit Transparency, Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making, Firm Goal Achievement and Moderating Role of Internal Audit Learning

Variables	ALC	APO	AMT	APC	ACV	IAR	IAQ	IAU	IV	BDM	FGA	IAL	FS	FA
<b>Mean</b>	4.488	4.183	4.203	4.267	4.319	4.207	4.093	3.979	4.145	3.975	4.017	4.253	N/A	N/A
<b>Std.</b>	.503	.555	.553	.505	.552	.649	.578	.600	.542	.595	.649	.583	N/A	N/A
<b>ALC</b>														
<b>APO</b>	.590***													
<b>AMT</b>	.605***	.758***												
<b>APC</b>	.710***	.698***	.813***											
<b>ACV</b>	.677***	.682***	.616***	.762***										
<b>IAR</b>	.527***	.624***	.641***	.747***	.655***									
<b>IAQ</b>	.526***	.701***	.665***	.748***	.597***	.848***								
<b>IAU</b>	.434***	.680***	.634***	.676***	.666***	.770***	.784***							
<b>IV</b>	.417***	.619***	.627***	.729***	.666***	.784***	.746***	.813***						
<b>BDM</b>	.377***	.591***	.549***	.619***	.550***	.719***	.684***	.725***	.767***					
<b>FGA</b>	.445***	.609***	.612***	.675***	.555***	.720***	.741***	.690***	.764***	.844***				
<b>IAL</b>	.514***	.533***	.502**	.638***	.649***	.578***	.542***	.458***	.558***	.516***	.606***			
<b>FS</b>	.153	.135	.249**	.235**	.152	.164	.152	.167	.073	.216	.255**	.037		
<b>FA</b>	.197	.094	.023	-.022	.046	-.029	.022	-.128	-.024	.035	.025	.125	-.061	

\*\*\*p<0.01, \*\*p<0.05

Table 16: Results of Regression Analysis for Effects of Each Dimension of Internal Audit Transparency on Internal Audit Reliability, Internal Audit Quality, Internal Audit Usefulness, Information Value, Best Decision-Making, Firm Goal Achievement, and Moderating Role of Internal Audit Learning

Independent Variables	Dependent Variables <sup>a</sup>					
	IAR	IAQ	IAU	IV	BDM	FGA
ALC	-0.128 (0.116)	-0.157 (0.112)	<b>-0.253**</b> (0.115)	<b>-0.377***</b> (0.110)	-0.169 (0.134)	-0.120 (0.127)
APO	0.127 (0.127)	<b>0.365***</b> (0.122)	<b>0.308**</b> (0.126)	0.158 (0.121)	<b>0.273*</b> (0.147)	<b>0.255*</b> (0.139)
AMT	0.063 (0.151)	-0.029 (0.145)	0.183 (0.149)	0.146 (0.143)	0.005 (0.174)	0.075 (0.165)
APC	<b>0.377**</b> (0.174)	<b>0.537***</b> (0.167)	0.120 (0.172)	<b>0.413**</b> (0.165)	0.293 (0.201)	0.277 (0.190)
ACV	0.216 (0.133)	-0.036 (0.128)	<b>0.390***</b> (0.131)	<b>0.305**</b> (0.126)	0.092 (0.153)	-0.053 (0.145)
IAL	0.105 (0.105)	0.037 (0.100)	-0.035 (0.103)	0.099 (0.099)	<b>0.236*</b> (0.120)	<b>0.344***</b> (0.114)
ALC*IAL	<b>-0.268**</b> (0.112)	<b>-0.220**</b> (0.108)	<b>-0.238**</b> (0.111)	-0.093 (0.106)	-0.147 (0.129)	-0.062 (0.122)
APO*IAL	-0.121 (0.120)	-0.043 (0.115)	0.159 (0.119)	<b>0.227**</b> (0.114)	0.193 (0.138)	0.157 (0.131)
AMT*IAL	0.028 (0.152)	0.014 (0.146)	<b>-0.264*</b> (0.150)	-0.193 (0.144)	-0.105 (0.175)	-0.039 (0.166)
APC*IAL	0.290 (0.176)	0.048 (0.169)	<b>0.396**</b> (0.174)	<b>0.307*</b> (0.167)	<b>0.357*</b> (0.203)	0.185 (0.192)
ACV*IAL	-0.076 (0.166)	0.003 (0.160)	-0.246 (0.164)	<b>-0.427***</b> (0.158)	-0.208 (0.191)	-0.255 (0.181)
FS	0.093 (0.155)	0.075 (0.149)	0.045 (0.153)	-0.138 (0.147)	0.227 (0.179)	<b>0.319*</b> (0.169)
FA	-0.107 (0.177)	0.030 (0.170)	-0.243 (0.175)	0.094 (0.168)	0.145 (0.204)	0.067 (0.193)
Adjusted R <sup>2</sup>	0.590	0.621	0.600	0.632	0.457	0.512
Maximum VIF	9.810	9.810	9.810	9.810	9.810	9.810

\*\*\*p<0.01, \*\*p<0.05, \*p<0.10, <sup>a</sup> Beta coefficients with standard errors



with the internal audit transparency consequences and internal audit learning. However, these correlations are less than 0.80 as recommended by Hair et al. (2010).

For the moderating role of internal audit learning on the relationships between the internal audit transparency dimensions and its consequences based on Hypotheses, 21a-f–25a-f. These hypotheses are analyzed from the regression equations in Models 19-24 according to Chapter 3. Moreover, the maximum value of the VIF is 9.810 which is well below the cut-off value of 10 (Hair et al., 2010). As a result, the multicollinearity problems should not be a concern. The results of the OLS regression analysis are provided in Table 16.

Firstly, the moderating role of internal audit learning has a significant negative effect among internal audit legitimacy compliance and internal audit reliability (H21a:  $\beta_{164} = -0.268$ ,  $p < 0.05$ ), internal audit quality (H21b:  $\beta_{177} = -0.220$ ,  $p < 0.05$ ) and internal audit usefulness (H21c:  $\beta_{190} = -0.238$ ,  $p < 0.05$ ). However, there are no significant effect among internal audit legitimacy compliance and information value (H21d:  $\beta_{203} = -0.093$ ,  $p > 0.10$ ), best decision-making (H21e:  $\beta_{216} = -0.147$ ,  $p > 0.10$ ) and firm goal achievement (H21f:  $\beta_{229} = -0.062$ ,  $p > 0.10$ ). **Therefore, Hypotheses 21a-e are not supported.**

Secondly, the moderating role of internal audit learning has a significant positive effect among internal audit process openness and information value (H22d:  $\beta_{204} = 0.227$ ,  $p < 0.05$ ). However, there are no significant effect among internal audit process openness and internal audit reliability (H22a:  $\beta_{165} = -0.121$ ,  $p > 0.10$ ), internal audit quality (H22b:  $\beta_{178} = -0.043$ ,  $p > 0.10$ ), internal audit usefulness (H22c:  $\beta_{191} = 0.159$ ,  $p > 0.10$ ), best decision-making (H22e:  $\beta_{217} = 0.193$ ,  $p > 0.10$ ) and firm goal achievement (H22f:  $\beta_{230} = 0.157$ ,  $p > 0.10$ ). **Therefore, Hypothesis 22d is supported, but Hypotheses 22a, 22b, 22c, 22e and 22ef are not supported.**

Thirdly, the moderating role of internal audit learning has a significant negative significant effect among internal audit method trust and internal audit usefulness (H23c:  $\beta_{192} = -0.264$ ,  $p < 0.10$ ). However, there are no significant effect among internal audit method trust and internal audit reliability (H23a:  $\beta_{166} = 0.028$ ,  $p > 0.10$ ), internal audit quality (H23b:  $\beta_{179} = 0.014$ ,  $p > 0.10$ ), information value (H23d:  $\beta_{205} = -0.193$ ,  $p > 0.10$ ), best decision-making (H23e:  $\beta_{218} = -0.105$ ,  $p > 0.10$ ) and firm goal achievement (H23f:  $\beta_{231} = -0.039$ ,  $p > 0.10$ ). **Therefore, Hypotheses 23a-f are not supported.**



Fourthly, the moderating role of internal audit learning has a significant positive effect among internal audit practice clarity and internal audit usefulness (H24c:  $\beta_{193}= 0.396$ ,  $p<0.05$ ), information value (H24d:  $\beta_{206}= 0.307$ ,  $p<0.10$ ) and best decision-making (H24e:  $\beta_{219}= 0.357$ ,  $p<0.10$ ). However, there are no significant effect among internal audit practice clarity and internal audit reliability (H24a:  $\beta_{167}= 0.290$ ,  $p>0.10$ ), internal audit quality (H24b:  $\beta_{180}= 0.048$ ,  $p>0.10$ ) and firm goal achievement (H24f:  $\beta_{232}= 0.185$ ,  $p>0.10$ ). **Therefore, Hypotheses 24c, 24d and 24e are supported, but Hypotheses 24a, 24b and 24f are not supported.**

Lastly, the moderating role of internal audit learning has a significant negative effect among internal audit communication visibility and information value (H25d:  $\beta_{207}= -0.427$ ,  $p<0.01$ ). However, there are no significant effect among internal audit communication visibility and internal audit reliability (H25a:  $\beta_{168}= -0.076$ ,  $p>0.10$ ), internal audit quality (H25b:  $\beta_{181}= 0.003$ ,  $p>0.10$ ), internal audit usefulness (H25c:  $\beta_{194}= -0.246$ ,  $p>0.10$ ), best decision-making (H25e:  $\beta_{220}= -0.208$ ,  $p>0.10$ ) and firm goal achievement (H25f:  $\beta_{233}= -0.255$ ,  $p>0.10$ ). **Therefore, Hypotheses 25a-f are not supported.**

Surprisingly, this research rarely finds the moderator effects of internal audit learning in the context of Thai-financial business firms. The result is consistent with Kanchanda and Ussahawanitchakit (2012) who note that the moderating effect of marketing learning has a negative effect on the relationship between product innovation concentration and dynamic marketing advantage. Similarly, Chaikambang and Ussahawanitchakit (2012) investigate the moderating effects of best environmental learning, the results show that best environmental learning has no significant relate on relationship between decision making advantage and goal achievement. Furthermore, Sookaneknun and Ussahawanitchakit (2013) state that organizational learning capability has no significant effect on the relationships between the six dimensions of management governance and the consequences and the relationships between management goal achievement, organizational citizenship behavior, customer acceptance outstanding, market opportunity and firm value. However, a learning organization is one that continually transforms itself to meet its vision such as establishing audit plan (Pickett, 2000).



## Summary

This chapter presents the results of this research. The first part provides the characteristics of key participants and demographic information of Thai-financial business firms. Consequently, it presents the results and discussion of the testing of all twenty-five hypotheses. The results reveal that three dimensions of internal audit transparency that are internal audit process openness, internal audit practice clarity and internal audit communication visibility have a significant positive effect on internal audit reliability, internal audit quality, internal audit usefulness, information value and best decision-making. Moreover, internal audit reliability and internal audit usefulness have a significant positive effect on information value. Also, information value has a significant positive influence on best decision-making and firm goal achievement. Similarly, best decision-making has a significant positive effect on firm goal achievement. Moreover governance awareness, internal audit ethics and regulation force relate to internal audit transparency. Besides, internal audit learning moderates these relationships: internal audit process openness and information value, internal audit practice clarity and internal audit usefulness, internal audit practice clarity and information value, internal audit practice clarity and best decision-making. Furthermore, morality climate has a moderating role on internal audit professional and internal audit process openness relationships. Finally, the summary of the results of all hypotheses testing is presented in Table 17.





Table 17: Summary of the Results of Hypotheses Testing

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H1a	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit reliability.	Not supported
H1b	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit quality.	Not supported
H1c	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater internal audit usefulness.	Not supported
H1d	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater information value.	Not supported
H1e	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater best decision-making.	Not supported
H1f	The higher internal audit legitimacy compliance is, the more likely that firms will gain greater firm goal achievement.	Not supported
H2a	The higher internal audit process openness is, the more likely that firms will gain greater internal audit reliability.	Not supported
H2b	The higher internal audit process openness is, the more likely that firms will gain greater internal audit quality.	Supported
H2c	The higher internal audit process openness is, the more likely that firms will gain greater internal audit usefulness.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H2d	The higher internal audit process openness is, the more likely that firms will gain greater information value.	Not supported
H2e	The higher internal audit process openness is, the more likely that firms will gain greater best decision-making.	Supported
H2f	The higher internal audit process openness is, the more likely that firms will gain greater firm goal achievement.	Not supported
H3a	The higher internal audit method trust is, the more likely that firms will gain greater internal audit reliability.	Not supported
H3b	The higher internal audit method trust is, the more likely that firms will gain greater internal audit quality.	Not supported
H3c	The higher internal audit method trust is, the more likely that firms will gain greater internal audit usefulness.	Not supported
H3d	The higher internal audit method trust is, the more likely that firms will gain greater information value.	Not supported
H3e	The higher internal audit method trust is, the more likely that firms will gain greater best decision-making.	Not supported
H3f	The higher internal audit method trust is, the more likely that firms will gain greater firm goal achievement.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H4a	The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit reliability.	Not supported
H4b	The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit quality.	Supported
H4c	The higher internal audit practice clarity is, the more likely that firms will gain greater internal audit usefulness.	Not supported
H4d	The higher internal audit practice clarity is, the more likely that firms will gain greater information value.	Supported
H4e	The higher internal audit practice clarity is, the more likely that firms will gain greater best decision-making.	Supported
H4f	The higher internal audit practice clarity is, the more likely that firms will gain greater firm goal achievement.	Not supported
H5a	The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit reliability.	Supported
H5b	The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit quality.	Not supported
H5c	The higher internal audit communication visibility is, the more likely that firms will gain greater internal audit usefulness.	Supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H5d	The higher internal audit communication visibility is, the more likely that firms will gain greater information value.	Supported
H5e	The higher internal audit communication visibility is, the more likely that firms will gain greater best decision-making.	Not supported
H5f	The higher internal audit communication visibility is, the more likely that firms will gain greater firm goal achievement.	Not supported
H6a	The higher internal audit quality is, the more likely that firms will gain greater internal audit reliability.	Supported
H6b	The higher internal audit quality is, the more likely that firms will gain greater internal audit usefulness.	Supported
H6c	The higher internal audit quality is, the more likely that firms will gain greater information value.	Not supported
H6d	The higher internal audit quality is, the more likely that firms will gain greater best decision-making.	Not supported
H7a	The higher internal audit reliability is, the more likely that firms will gain greater information value.	Supported
H7b	The higher internal audit reliability is, the more likely that firms will gain greater best decision-making.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H8a	The higher internal audit usefulness is, the more likely that firms will gain greater information value.	Supported
H8b	The higher internal audit usefulness is, the more likely that firms will gain greater best decision-making.	Not supported
H9a	The higher information value is, the more likely that firms will gain greater best decision-making.	Supported
H9b	The higher information value is, the more likely that firms will gain greater firm goal achievement.	Supported
H10	The higher best decision-making is, the more likely that firms will gain greater firm goal achievement.	Supported
H11a	The higher governance awareness is, the more likely that firms will gain greater internal audit legitimacy compliance.	Not supported
H11b	The higher governance awareness is, the more likely that firms will gain greater internal audit process openness.	Not supported
H11c	The higher governance awareness is, the more likely that firms will gain greater internal audit method trust.	Supported
H11d	The higher governance awareness is, the more likely that firms will gain greater internal audit practice clarity.	Supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H11e	The higher governance awareness is, the more likely that firms will gain greater internal audit communication visibility.	Not supported
H12a	The higher internal audit professional is, the more likely that firms will gain greater internal audit legitimacy compliance.	Not supported
H12b	The higher internal audit professional is, the more likely that firms will gain greater internal audit process openness.	Not supported
H12c	The higher internal audit professional is, the more likely that firms will gain greater internal audit method trust.	Not supported
H12d	The higher internal audit professional is, the more likely that firms will gain greater internal audit practice clarity.	Not supported
H12e	The higher internal audit professional is, the more likely that firms will gain greater internal audit communication visibility.	Not supported
H13a	The higher internal audit ethics is, the more likely that firms will gain greater internal audit legitimacy compliance.	Not supported
H13b	The higher internal audit ethics is, the more likely that firms will gain greater internal audit process openness.	Not supported
H13c	The higher internal audit ethics is, the more likely that firms will gain greater internal audit method trust.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H13d	The higher internal audit ethics is, the more likely that firms will gain greater internal audit practice clarity.	Supported
H13e	The higher internal audit ethics is, the more likely that firms will gain greater internal audit communication visibility.	Supported
H14a	The higher regulation force is, the more likely that firms will gain greater internal audit legitimacy compliance.	Not supported
H14b	The higher regulation force is, the more likely that firms will gain greater internal audit process openness.	Supported
H14c	The higher regulation force is, the more likely that firms will gain greater internal audit method trust.	Supported
H14d	The higher regulation force is, the more likely that firms will gain greater internal audit practice clarity.	Not supported
H14e	The higher regulation force is, the more likely that firms will gain greater internal audit communication visibility.	Supported
H15a	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit legitimacy compliance.	Not supported
H15b	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit process openness.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H15c	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit method trust.	Not supported
H15d	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit practice clarity.	Not supported
H15e	The higher environmental uncertainty is, the more likely that firms will gain greater internal audit communication visibility.	Not supported
H16a	Morality climate will positively moderate the governance awareness- internal audit legitimacy compliance relationships.	Not supported
H16b	Morality climate will positively moderate the governance awareness- internal audit process openness relationships.	Not supported
H16c	Morality climate will positively moderate the governance awareness- internal audit method trust relationships.	Not supported
H16d	Morality climate will positively moderate the governance awareness- internal audit practice clarity relationships.	Not supported
H16e	Morality climate will positively moderate the governance awareness- internal audit communication visibility relationships.	Not supported
H17a	Morality climate will positively moderate the internal audit professional- internal audit legitimacy compliance relationships.	Not supported





Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H17b	Morality climate will positively moderate the internal audit professional- internal audit process openness relationships.	Supported
H17c	Morality climate will positively moderate the internal audit professional- internal audit method trust relationships.	Not supported
H17d	Morality climate will positively moderate the internal audit professional- internal audit practice clarity relationships.	Not supported
H17e	Morality climate will positively moderate the internal audit professional- internal audit communication visibility relationships.	Not supported
H18a	Morality climate will positively moderate the internal audit ethics- internal audit legitimacy compliance relationships.	Not supported
H18b	Morality climate will positively moderate the internal audit ethics - internal audit process openness relationships.	Not supported
H18c	Morality climate will positively moderate the internal audit ethics - internal audit method trust relationships.	Not supported
H18d	Morality climate will positively moderate the internal audit ethics - internal audit practice clarity relationships.	Not supported
H18e	Morality climate will positively moderate the internal audit ethics - internal audit communication visibility relationships.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H19a	Morality climate will positively moderate the regulation force- internal audit legitimacy compliance relationships.	Not supported
H19b	Morality climate will positively moderate the regulation force - internal audit process openness relationships.	Not supported
H19c	Morality climate will positively moderate the regulation force - internal audit method trust relationships.	Not supported
H19d	Morality climate will positively moderate the regulation force - internal audit practice clarity relationships.	Not supported
H19e	Morality climate will positively moderate the regulation force - internal audit communication visibility relationships.	Not supported
H20a	Morality climate will positively moderate the environmental uncertainty- internal audit legitimacy compliance relationships.	Not supported
H20b	Morality climate will positively moderate the environmental uncertainty - internal audit process openness relationships.	Not supported
H20c	Morality climate will positively moderate the environmental uncertainty - internal audit method trust relationships.	Not supported
H20d	Morality climate will positively moderate the environmental uncertainty - internal audit practice clarity relationships.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H20e	Morality climate will positively moderate the environmental uncertainty - internal audit communication visibility relationships.	Not supported
H21a	Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit reliability relationships.	Not supported
H21b	Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit quality relationships.	Not supported
H21c	Internal audit learning will positively moderate the internal audit legitimacy compliance - internal audit usefulness relationships.	Not supported
H21d	Internal audit learning will positively moderate the internal audit legitimacy compliance - information value relationships.	Not supported
H21e	Internal audit learning will positively moderate the internal audit legitimacy compliance – best decision - making relationships.	Not supported
H21f	Internal audit learning will positively moderate the internal audit legitimacy compliance - firm goal achievement relationships.	Not supported
H22a	Internal audit learning will positively moderate the internal audit process openness - internal audit reliability relationships.	Not supported
H22b	Internal audit learning will positively moderate the internal audit process openness - internal audit quality relationships.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H22c	Internal audit learning will positively moderate the internal audit process openness - internal audit usefulness relationships.	Not supported
H22d	Internal audit learning will positively moderate the internal audit process openness - information value relationships.	Supported
H22e	Internal audit learning will positively moderate the internal audit process openness - best decision-making relationships.	Not supported
H22f	Internal audit learning will positively moderate the internal audit process openness - firm goal achievement relationships.	Not supported
H23a	Internal audit learning will positively moderate the internal audit method trust - internal audit reliability relationships.	Not supported
H23b	Internal audit learning will positively moderate the internal audit method trust - internal audit quality relationships.	Not supported
H23c	Internal audit learning will positively moderate the internal audit method trust - internal audit usefulness relationships.	Not supported
H23d	Internal audit learning will positively moderate the internal audit method trust - information value relationships.	Not supported
H23e	Internal audit learning will positively moderate the internal audit method trust - best decision-making relationships.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H23f	Internal audit learning will positively moderate the internal audit method trust - firm goal achievement relationships.	Not supported
H24a	Internal audit learning will positively moderate the internal audit practice clarity - internal audit reliability relationships.	Not supported
H24b	Internal audit learning will positively moderate the internal audit practice clarity - internal audit quality relationships.	Not supported
H24c	Internal audit learning will positively moderate the internal audit practice clarity - internal audit usefulness relationships.	Supported
H24d	Internal audit learning will positively moderate the internal audit practice clarity - information value relationships.	Supported
H24e	Internal audit learning will positively moderate the internal audit practice clarity - best decision-making relationships.	Supported
H24f	Internal audit learning will positively moderate the internal audit practice clarity - firm goal achievement relationships.	Not supported
H25a	Internal audit learning will positively moderate the internal audit communication visibility - internal audit reliability relationships.	Not supported
H25b	Internal audit learning will positively moderate the internal audit communication visibility - internal audit quality relationships.	Not supported



Table 17: Summary of the Results of Hypotheses Testing (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H25c	Internal audit learning will positively moderate the internal audit communication visibility - internal audit usefulness relationships.	Not supported
H25d	Internal audit learning will positively moderate the internal audit communication visibility - information value relationships.	Not supported
H25e	Internal audit learning will positively moderate the internal audit communication visibility - best decision-making relationships.	Not supported
H25f	Internal audit learning will positively moderate the internal audit communication visibility - firm goal achievement relationships.	Not supported



### Additional Analysis

From the results of the OLS regression analysis in Equation 1- 6 to test the effect of each dimension of internal audit transparency and its consequences (internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement). The results show positive significant effect of some dimension only, while some dimension have no significant effect on its consequences, which is probably that this research classify the internal audit transparency into five dimension. Then, the additional analysis is tested in order to confirm the effect and importance of internal audit transparency.

In additional analysis, the five dimensions of internal audit transparency are grouped in only one factor as a new variable, namely, internal audit transparency (IAT). The relationships of internal audit transparency and internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement are examined, which is presented in Equation 25-30 as follows:

$$\text{Equation 25: } IAR = \alpha_{25} + \beta_{236} IAT + \beta_{237} FS + \beta_{238} FA + \varepsilon_{25}$$

$$\text{Equation 26: } IAQ = \alpha_{26} + \beta_{239} IAT + \beta_{240} FS + \beta_{241} FA + \varepsilon_{26}$$

$$\text{Equation 27: } IAU = \alpha_{27} + \beta_{242} IAT + \beta_{243} FS + \beta_{244} FA + \varepsilon_{27}$$

$$\text{Equation 28: } IV = \alpha_{28} + \beta_{245} IAT + \beta_{246} FS + \beta_{247} FA + \varepsilon_{28}$$

$$\text{Equation 29: } BDM = \alpha_{29} + \beta_{248} IAT + \beta_{249} FS + \beta_{250} FA + \varepsilon_{29}$$

$$\text{Equation 30: } FGA = \alpha_{30} + \beta_{251} IAT + \beta_{252} FS + \beta_{253} FA + \varepsilon_{30}$$

Moreover, the moderating role of internal audit learning on the relationships between internal audit transparency and its consequences are investigated in Equation 31-36 as follows:

$$\begin{aligned} \text{Equation 31: } IAR &= \alpha_{31} + \beta_{254} IAT + \beta_{255} IAL + \beta_{256} (IAT * IAL) \\ &+ \beta_{257} FS + \beta_{258} FA + \varepsilon_{31} \end{aligned}$$

$$\begin{aligned} \text{Equation 32: } IAQ &= \alpha_{32} + \beta_{259} IAT + \beta_{260} IAL + \beta_{261} (IAT * IAL) \\ &+ \beta_{262} FS + \beta_{263} FA + \varepsilon_{32} \end{aligned}$$



$$\begin{aligned} \text{Equation 33: } IAU &= \alpha_{33} + \beta_{264} IAT + \beta_{265} IAL + \beta_{266} (IAT * IAL) \\ &+ \beta_{267} FS + \beta_{268} FA + \epsilon_{33} \end{aligned}$$

$$\begin{aligned} \text{Equation 34: } IV &= \alpha_{34} + \beta_{269} IAT + \beta_{270} IAL + \beta_{271} (IAT * IAL) \\ &+ \beta_{272} FS + \beta_{273} FA + \epsilon_{34} \end{aligned}$$

$$\begin{aligned} \text{Equation 35: } BDM &= \alpha_{35} + \beta_{274} IAT + \beta_{275} IAL + \beta_{276} (IAT * IAL) \\ &+ \beta_{277} FS + \beta_{278} FA + \epsilon_{35} \end{aligned}$$

$$\begin{aligned} \text{Equation 36: } FGA &= \alpha_{36} + \beta_{279} IAT + \beta_{280} IAL + \beta_{281} (IAT * IAL) \\ &+ \beta_{282} FS + \beta_{283} FA + \epsilon_{36} \end{aligned}$$

Additionally, the relationships among the five antecedents, namely, governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty and internal audit transparency, including the moderator role of morality climate are investigated in Equation 37-38 as follows:

$$\begin{aligned} \text{Equation 37: } IAT &= \alpha_{37} + \beta_{284} GA + \beta_{285} IAP + \beta_{286} IAE + \beta_{287} RF + \\ &\beta_{288} EU + \beta_{289} FS + \beta_{290} FA + \epsilon_{37} \end{aligned}$$

$$\begin{aligned} \text{Equation 38: } IAT &= \alpha_{38} + \beta_{291} GA + \beta_{292} IAP + \beta_{293} IAE + \beta_{294} RF + \\ &\beta_{295} EU + \beta_{296} MC + \beta_{297} (GA * MC) + \beta_{298} (IAP * MC) \\ &+ \beta_{299} (IAE * MC) + \beta_{300} (RF * MC) + \beta_{301} (EU * MC) \\ &+ \beta_{302} FS + \beta_{303} FA + \epsilon_{38} \end{aligned}$$

The results of additional test from regression Equation 25 to Equation 36 in Table 18 show a significant positively effect of internal audit transparency on internal audit reliability ( $\beta_{236} = .745$ ,  $p < .01$ ), internal audit quality ( $\beta_{239} = .754$ ,  $p < .01$ ), internal audit usefulness ( $\beta_{242} = .727$ ,  $p < .01$ ), information value ( $\beta_{245} = .723$ ,  $p < .01$ ), best decision-making ( $\beta_{248} = .605$ ,  $p < .01$ ) and firm goal achievement ( $\beta_{251} = .647$ ,  $p < .01$ ). These results reveal that internal audit transparency can enhance internal audit reliability, internal audit quality, internal audit usefulness and information value for making best decisions which causes to adding organization value and gain firm goals achievement.





Table 18: Results of the Additional Analysis on the Effect of Internal Audit Transparency and Its Consequences via Internal Audit Learning as Moderator

Independent Variables	Dependent Variables <sup>a</sup>											
	IAR		IAQ		IAU		IV		BDM		FGA	
IAT	<b>0.745***</b> (0.078)	<b>0.605***</b> (0.104)	<b>0.754***</b> (0.078)	<b>0.654***</b> (0.102)	<b>0.727***</b> (0.079)	<b>0.712***</b> (0.108)	<b>0.733***</b> (0.082)	<b>0.619***</b> (0.110)	<b>0.605***</b> (0.091)	<b>0.497***</b> (0.117)	<b>0.647***</b> (0.086)	<b>0.446***</b> (0.110)
IAL		<b>0.172*</b> (0.102)		0.072 (0.100)		-0.002 (0.106)		0.158 (0.107)		<b>0.254**</b> (0.115)		<b>0.332***</b> (0.108)
IAT *IAL		-0.065 (0.064)		<b>-0.135**</b> (0.063)		-0.042 (0.066)		-0.020 (0.067)		<b>0.166**</b> (0.072)		0.058 (0.068)
FS	-0.002 (0.157)	0.051 (0.157)	-0.027 (0.156)	0.026 (0.154)	-0.009 (0.159)	0.003 (0.163)	-0.177 (0.164)	-0.140 (0.165)	0.178 (0.182)	0.183 (0.177)	0.238 (0.172)	<b>0.289*</b> (0.166)
FA	-0.191 (0.174)	-0.228 (0.172)	-0.077 (0.172)	-0.110 (0.169)	<b>-0.413**</b> (0.176)	<b>-0.419**</b> (0.179)	-0.196 (0.181)	-0.223 (0.182)	-0.009 (0.202)	-0.021 (0.194)	-0.036 (0.190)	-0.078 (0.182)
Adjusted R <sup>2</sup>	0.535	0.549	0.544	0.565	0.523	0.513	0.515	0.499	0.373	0.425	0.444	0.494
Maximum VIF	1.057	1.914	1.057	1.914	1.057	1.914	1.057	1.914	1.057	1.914	1.057	1.914

\*\*\*p<0.01, \*\*p<0.05, \*p<0.10, <sup>a</sup> Beta coefficients with standard errors

For the moderating role of internal audit learning finds that positively moderate the relationships between best decision-making and internal audit transparency ( $\beta_{276} = .166, p < .05$ ) only, while it has not a moderating effect on internal audit reliability ( $\beta_{256} = -.065, p > .10$ ), internal audit usefulness ( $\beta_{266} = -.042, p > .10$ ), information value ( $\beta_{271} = -.020, p > .10$ ) and firm goal achievement ( $\beta_{281} = .058, p > .10$ ) relationships. However, internal audit learning has a negative effect on the relationships between internal audit quality and internal audit transparency ( $\beta_{261} = -.135, p < .05$ ). Consistently with the results in Equation 25-36, it is revealed that internal audit learning is not a proper moderator in this context and should be investigated as other role such as independent variables in future research.

The results of additional test from regression Equation 37 to Equation 38 in Table 19 show the moderating role of morality climate ( $\beta_{297} = -.138, p > .10$ ;  $\beta_{298} = .222, p > .10$ ;  $\beta_{299} = -.018, p > .10$ ;  $\beta_{300} = .127, p > .10$ ;  $\beta_{301} = -.161, p > .10$ , respectively) which does not appear in this additional test. Hence, future research should test this as independent or mediating variable.



Table 19: Results of the Additional Analysis of the Antecedents on Internal Audit Transparency and Moderating Role of Morality Climate

Independent Variables	Dependent Variables <sup>a</sup>	
	IAT	
GA	0.132 (0.081)	-0.027 (0.125)
IAP	0.221 (0.143)	<b>0.345**</b> (0.155)
IAE	<b>0.280*</b> (0.142)	0.189 (0.179)
RF	<b>0.261**</b> (0.120)	<b>0.332***</b> (0.126)
EU	0.045 (0.121)	-0.005 (0.126)
MC		0.099 (0.127)
GA*MC		-0.138 (0.085)
IAP*MC		0.222 (0.166)
IAE*MC		-0.018 (0.157)
RF*MC		0.127 (0.140)
EU*MC		-0.161 (0.132)
FS	0.177 (0.139)	0.152 (0.147)
FA	0.099 (0.154)	0.194 (0.157)
Adjusted R <sup>2</sup>	0.652	0.661
Maximum VIF	4.685	9.477

\*\*\*p<0.01, \*\*p<0.05, \*p<0.10, <sup>a</sup> Beta coefficients with standard errors



Table 2: Summary of Hypothesized Relationships (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H24d	Internal audit learning will positively moderate the internal audit practice clarity - information value relationships.
H24e	Internal audit learning will positively moderate the internal audit practice clarity – best decision-making relationships.
H24f	Internal audit learning will positively moderate the internal audit practice clarity - firm goal achievement relationships.
H25a	Internal audit learning will positively moderate the internal audit communication visibility - internal audit reliability relationships.
H25b	Internal audit learning will positively moderate the internal audit communication visibility - internal audit quality relationships.
H25c	Internal audit learning will positively moderate the internal audit communication visibility - internal audit usefulness relationships.
H25d	Internal audit learning will positively moderate the internal audit communication visibility - information value relationships.
H25e	Internal audit learning will positively moderate the internal audit communication visibility – best decision-making relationships.
H25f	Internal audit learning will positively moderate the internal audit communication visibility - firm goal achievement relationships.



## CHAPTER V

### CONCLUSION

The previous chapter described respondent characteristics and descriptive statistics. Moreover, the results of hypotheses testing are revealed in prior chapter as well. Therefore, this chapter is going to provide detailed conclusion and explain the contributions, limitations and useful suggestion for future research in this research.

This research has investigated the influences of internal audit transparency on the firm goal achievement of Thai-financial business firms. Moreover, the effects of internal audit outcomes: internal audit reliability, internal audit quality, internal audit usefulness, information value and best decision-making have also been examined. Additionally, governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty are proposed as the antecedents of internal audit transparency. Morality climate is assumed as moderator of five antecedents and five dimensions of internal audit transparency; while internal audit learning is proposed to be moderators of internal audit outcomes and firm goal achievement.

The key research question of this research is how internal audit transparency has an impact on firm goal achievement. Furthermore, the specific research questions are as follows: (1) How does internal audit transparency affect internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement? (2) How does internal audit quality affect internal audit reliability and internal audit usefulness? (3) How do internal audit reliability, internal audit quality and internal audit usefulness relate to information value? (4) How do internal audit reliability, internal audit quality and internal audit usefulness relate to best decision-making? (5) How does information value affect best decision-making and firm goal achievement? (6) How does best decision-making affect firm goal achievement? (7) How do governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty relate to internal audit transparency? (8) How does morality climate moderate the relationships between a) governance awareness, b) internal audit professional, c) internal audit ethics, d) regulation force and e) environment uncertainty and each dimension of internal audit transparency? And



(9) How does internal audit learning moderate the relationships between each dimension of internal audit transparency and a) internal audit reliability, b) internal audit quality, c) internal audit usefulness, d) information value, e) best decision-making and f) firm goal achievement?

In this research, two theoretical perspectives have been integrated to draw the conceptual framework, namely, agency theory and contingency theory. Firstly, agency theory is implemented to explain the relationship of internal audit transparency, mediating and dependence variables as firm goal achievement. Finally, the contingency theory is used to explain the relationships between antecedents and internal audit transparency. Furthermore, this research proposes the interaction theory to explain the relationships of each variable throughout the intention to examine and answer the research questions and objectives.

This research selects internal audit directors or internal audit managers of Thai-financial business firms as the key informant because they can obtain the real information and have a clear, true, understanding of its practices and also give some comments. The sample of this research is chosen from the Bank of Thailand and the Office of Insurance Commission on its website. As a result, the questionnaires are directly distributed to 238 Thai-financial business firms. Finally, the successful questionnaires mailing are 233 surveys, from which 81 responses are returned and usable for hypotheses testing by multiple regression. Hence, the response rate is 34.76 percent.

With regard to the key research question, the evidence reveals that three dimensions of internal audit transparency have influence on internal audit outcome. Firstly, internal audit process openness positively relate to internal audit quality and best decision-making. Secondly, internal audit practice clarity has a significant positive relationship with internal audit quality, information value and best decision-making. Lastly, internal audit communication visibility has a significant positive relationship with internal audit reliability, internal audit usefulness and information value. Besides, internal audit quality positively affects internal audit reliability and internal audit usefulness. Also, internal audit reliability and Also, information value has a significant positive influence on best decision-making and firm goal achievement. Similarly, best decision-making has a significant positive effect on firm goal achievement.



For the antecedents of internal audit transparency, the findings assert that the governance awareness has a significant positive impact on internal audit method trust and internal audit practice clarity. Internal audit ethics has a significant positive effect on internal audit practice clarity and internal audit communication visibility. Additionally, regulation force has a significant positive effect on internal audit process openness, internal audit method trust and internal audit communication visibility.

Furthermore, internal audit learning moderates these relationships: internal audit process openness and information value, internal audit practice clarity and internal audit usefulness, internal audit practice clarity and information value, internal audit practice clarity and best decision-making. Also, the moderating role of morality climate has a significant positive effect among internal audit professional and internal audit process openness. Moreover, the supported hypotheses are illustrated in Table 20 and also in Figure 13.



Table 20: Summary of Results in All Research Questions

<b>Research Questions</b>	<b>Hypotheses</b>	<b>Results</b>	<b>Conclusions</b>
1. How does internal audit transparency affect internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement?	Hypotheses 1 (a-f), 2 (a-f), 3 (a-f), 4 (a-f), 5 (a-f)	From five dimensions of internal audit transparency, just three dimensions have an effect on internal audit outcomes. That are internal audit process openness positively relate to internal audit quality and best decision-making. While, internal audit practice clarity has a significant positive relationship with internal audit quality, information value and best decision-making. Also, internal audit communication visibility has a significant positive relationship with internal audit reliability, internal audit usefulness and information value.	Partially Supported
2. How does internal audit quality affect internal audit reliability and internal audit usefulness?	Hypotheses 6 a-b	Internal audit quality positively effect on internal audit reliability and internal audit usefulness.	Fully Supported





Table 20: Summary of Results in All Research Questions (Continued)

<b>Research Questions</b>	<b>Hypotheses</b>	<b>Results</b>	<b>Conclusions</b>
3. How do internal audit reliability, internal audit quality and internal audit usefulness relate to information value?	Hypotheses 6c, 7a, 8a	Internal audit reliability and internal audit usefulness have a positive effect on information value.	Partially Supported
4. How do internal audit reliability, internal audit quality and internal audit usefulness relate to best decision-making?	Hypotheses 6d, 7b, 8b	Internal audit reliability, internal audit quality and internal audit usefulness have no effect on best decision-making.	Not Supported
5. How does information value affect best decision-making and firm goal achievement?	Hypotheses 9 a-b	Information value has a positive effect on best decision-making and firm goal achievement.	Fully Supported
6. How does best decision-making affect firm goal achievement?	Hypotheses 10	Best decision-making has a positive effect on firm goal achievement.	Fully Supported



Table 20: Summary of Results in All Research Questions (Continued)

<b>Research Questions</b>	<b>Hypotheses</b>	<b>Results</b>	<b>Conclusions</b>
7. How do governance awareness, internal audit professional, internal audit ethics, regulation force and environment uncertainty relate to internal audit transparency?	Hypotheses 11 (a-e), 12 (a-e), 13 (a-e), 14 (a-e), 15 (a-e)	Governance awareness, internal audit ethics and regulation force have a positive influence on some dimension of internal audit transparency.	Partially Supported
8. How does morality climate moderate the relationships between a) governance awareness, b) internal audit professional, c) internal audit ethics, d) regulation force and e) environment uncertainty and each dimension of internal audit transparency?	Hypotheses 16 (a-e), 17 (a-e), 18 (a-e), 19 (a-e), 20 (a-e)	Morality climate moderates the relationships among internal audit professional and internal audit process openness.	Partially Supported



Table 20: Summary of Results in All Research Questions (Continued)

Research Questions	Hypotheses	Results	Conclusions
9. How does internal audit learning moderate the relationships between each dimension of internal audit transparency and a) internal audit reliability, b) internal audit quality, c) internal audit usefulness, d) information value, e) best decision-making and f) firm goal achievement?	Hypotheses 21 (a-f), 22 (a-f), 23 (a-f), 24 (a-f), 25 (a-f)	Internal audit learning moderates these relationships: internal audit process openness and information value, internal audit practice clarity and internal audit usefulness, internal audit practice clarity and information value, internal audit practice clarity and best decision-making.	Partially Supported

### Theoretical and Managerial Contributions

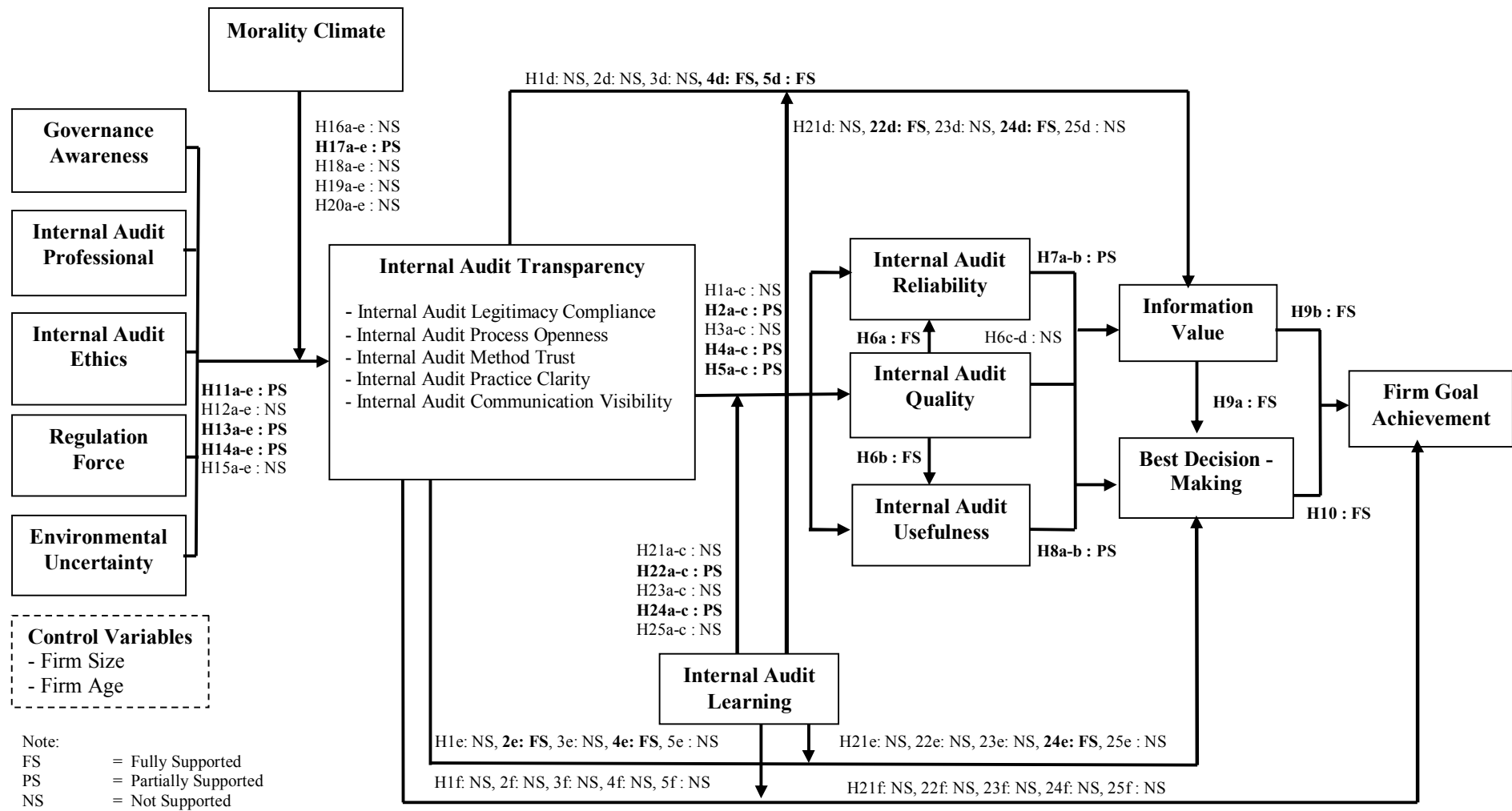
This research contributes significantly toward understanding how internal audit transparency for Thai-financial business firms increase internal audit reliability, internal audit quality, internal audit usefulness, information value and best decision-making that lead firms to achieve goals. Regarded as the conceptual model, this research provides theoretical and managerial contributions.

#### Theoretical Contribution

Due to the research, the results provide a clearer understanding of the relationships between antecedents and consequences of internal audit transparency in the context of Thai-financial business firms. This research is intended to expand the theoretical contributions on previous knowledge and relevant internal audit transparency literature. Based on agency theory and contingency theory are used to explain the



Figure 13: Summary of the Results of the Hypotheses Testing



relationships among constructs in the conceptual framework. Moreover, the advancing contributions of theoretical are the new dimension of internal audit transparency and empirically testing with antecedents and consequence construct, which a few empirical studies in internal auditing that focus on the characteristics of the internal audit task at the organization level.

Furthermore, this research results confirm and conclude that the relationships of the internal audit transparency and firm goal achievement are able to explain by both two theories. The contingency theory argues that firm focuses on fitting between the organizational context and the internal audit practices which leading to goal achievement. Additionally, base on agency theory, the results reveal that internal audit transparency trends to be beneficial with internal audit reliability, internal audit quality, internal audit usefulness, information value, best decision-making and firm goal achievement.

According to the empirical results of this research, the need for further research is apparent. Since the results are not in accordance with the hypotheses whether some dimension of internal audit transparency, its antecedents and consequences, including moderating variables. Therefore, the effect should be investigated in other roles to fulfill the internal audit literature.

#### Managerial Contribution

The research results provide managerial implications for both practitioners and professional institution. The finding can help managers, or directors of Thai-financial business firms to understand the importance of internal audit transparency that make firms to success.

Furthermore, this research sheds some light to provide the practitioner (internal audit directors/managers or others) and academic community with understanding and setting priorities of internal audit work and its outcomes, identify and justify audit practices from other factors or other views and provide more insights of the key factor that influences audit success. Additionally, it is a significant powerful tool for organizational success including enhancing the efficiency and effectiveness of the firm, to achieve its performance and growth including helping the firm to keep its advantage and respond more quickly than their competitors, which leads to success of their goals.



Moreover, this research provide the empirical evidence possibly useful to guide the internal audit function which concerns transparency in an internal audit such as internal audit process openness and internal audit practice clarity. Additionally, the Institute of Internal Auditors (IIA) of Thailand should provide more participation, support and specific, transparency in internal audit task, in order to enhance the internal audit outcomes of the International Standards for the Professional Practice of Internal Auditing. Consequently, it becomes a significant key driver of determining and explaining a firm goal achievement.

### **Limitations and Future Research Directions**

#### Limitations

Although the study results have theoretical and managerial implications for internal audit researcher and practitioners, respectively, some carefulness should be taken due to the limitations of this research. Firstly, the period of data collection procedure is relatively short, including this time the political unrest in Thailand, which firms are facing trouble running their businesses; thus affecting the respondents in this research. If this had been normal situation, the response rate would have been higher and the sample size. Therefore, limitation concerns sample size and response rate may affect analysis, particularly the power of statistical test. This is consistent with Wan-Hussin and Bamahros (2013) who state that small sample size lowers the power of the statistical tests. However, Ho and Hutchinson (2010) develop a survey questionnaire; there are a total of 53 useable responses, representing a 26.5% useable response rate.

Secondly, the constructs of this research are developed as new scale. Although scales are develops from a careful relevant literature and measured by using the definition of each construct. As a result, the variables are over-lab and unclear in the role both internal audit transparency and its antecedent and consequences include the moderator variables. Thus, interpretation and implementation of the results should be carefully made and concerned with applying for the next studies.

Finally, the results of this research are derived from the data only collected from Thai-financial business firms. Thus, these finding may be lacking generalized



## **BIBLIOGRAPHY**



## BIBLIOGRAPHY

- Aaker, D.A., Kumar, V. and Day, G. (2001). *Marketing Research*. 7<sup>th</sup> edition.  
New York: John Wiley and sons.
- Adams, M.B. (1994). Agency Theory and the Internal Audit. *Managerial Auditing Journal*, 9(8), 8-12.
- Anderson, R.J. and Svare, J.C. (2013). Internal Audit Oversight. *Journal of Accountancy*, 216(2), 20.
- Arena, M. (2013). Internal Audit in Italian Universities. An Empirical Study. *Procedia - Social and Behavioral Sciences*, 93, 2000 - 2005.
- Abbott, L.J., Parker, S. and Peters, G.G. (2012). Audit Fee Reductions from Internal Audit-Provided Assistance: The Incremental Impact of Internal Audit Characteristics. *Contemporary Accounting Research*, 29, 94-118.
- Agbejule, A. and Jokipii, A. (2009). Strategy, Control Activities, Monitoring and Effectiveness. *Managerial Auditing Journal*, 24, 500-522.
- Al-Laith, A.A.G. (2012). Adaptation of the Internal Control Systems with the Use of Information Technology and its Effects on the Financial Statements Reliability: An Applied Study on Commercial Banks. *International Management Review*, 8, 12-20.
- Al-Sharairi, J.A. and Alsharayri, M.A. (2012). The Operating Islamic Banks in Jordan Applying the International Internal Auditing Standards (IIA's). *International Journal of Economics and Finance*, 4, 232-242.
- Altiock, P. (2011). Applicable Vision, Mission and the Effects of Strategic Management on Crisis Resolve. *Procedia Social and Behavioral Sciences*, 24, 61-71.
- Al-Twajiry, A.A.M., Brierley, J.A. and Gwilliam, D.R. (2003). The Development of Internal Audit in Saudi Arabia : An Institutional Theory Perspective. *Critical Perspectives on Accounting*, 14, 507-531.
- Anderson, R. (1996). Internal Audit Taps New Sources. *The Journal of Business Strategy*, 17, 22-24.
- Anderson, U.L., Christ, M.H., Johnstone, K.M. and Rittenberg, L.E. (2012). A Post-SOX Examination of Factors Associated with the Size of Internal Audit Functions. *Accounting Horizons*, 26, 167-191.





- Archambeault, D.S., DeZoort, F.T. and Holt, T.P. (2008). The Need for an Internal Auditor Report to External Stakeholders to Improve Governance Transparency. *Accounting Horizons*, 22, 375-388.
- Arel, B. (2010). The Influence of Litigation Risk and Internal Audit Source on Reliance Decisions. *Advances in Accounting, incorporating Advances in International Accounting*, 26, 170-176.
- Arel, B., Beaudoin, C.A. and Cianc, A.M. (2012). The Impact of Ethical Leadership, the Internal Audit Function and Moral Intensity on a Financial Reporting Decision. *Journal of Business Ethics*, 109, 351-366.
- Armstrong, J.S. and Overton, T.S. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research*, 14, 396-402.
- Aurelia, S., Eugeniu, T., Ioana, D. and Viorel, D. (2008). Tridimensional Approaches of the Internal Audit, Private, Public and Banking System. *Economic Science Series*, 17, 1491-1495.
- Avgerou, C. (2013). Explaining Trust in IT-Mediated Elections: A Case Study of E-Voting in Brazil. *Journal of the Association for Information Systems*, 14, 420-451.
- Baker, N. (2011). Raising Internal Audit's Potential. *Internal Auditor*, 2, 31-35.
- Bechervaise, N.E. and Benjamin, C.G. (2013). Visionary or Criminal: From Profit through Morality to Socially Sustainable Entrepreneurship. *Procedia - Social and Behavioral Sciences*, 99, 339 - 350.
- Benston, G.J., Carmichael, D.R., Demski, J.S., Dharan, B. G., Jamal, K., Laux, R., Rajgopal, S. and Vrana, G. (2007). The FASB's Conceptual Framework for Financial Reporting: A Critical Analysis. *Accounting Horizons*, 21, 229-238.
- Bielińska-Dusza, E. (2011). Analysis of Internal Audit Functioning in Poland – Empirical Research Findings. *Business, Management and Education*, 9(2), 236-247.
- Bierstaker, J., Janvrin, D. and Lowe, D.J. (2008). An Examination of Factors Associated with the Type and Number of Internal Control Documentation Formats. *Advances in Accounting*, 23, 31-48.
- Bloomfield, R.J. (2002). The Incomplete Revelation Hypothesis and Financial Reporting. *Accounting Horizons*, 16, 233-243.



- Boonmunewai, S. and Ussahawanitchakit, P. (2010). Internal Audit Competency, Organizational Outcomes and Firm Success: An Empirical Evidence from Thai-Listed Firms. *Journal of International Management Studies*, 10, 192-211.
- Boritz, J.E. (2005). IS Practitioners' Views on Core Concepts of Information Integrity. *International Journal of Accounting Information Systems*, 6, 260-279.
- Botez, D. (2012). Internal Audit and Management Entity. *Procedia Economics and Finance*, 3, 1156-1160.
- Bowerman, M. and Hawksworth, S. (1999). Local Government Internal Auditors' Perceptions of the Audit Commission. *Managerial Auditing Journal*, 14(8), 396-407.
- Boyle, D.M., Hermanson, D.R. and Wilkins, A. (2011). Ethics Audits: Implications for Internal Auditors. *Internal Auditing*, 26, 3-8.
- Brody, R.G. and Frank, K.E. (2000). The Future of the Certified Internal Auditor and the Internal Auditing Profession. *Journal of Education for Business*, 75(4), 215-218.
- Buchman, T.A. (1983). The Reliability of Internal Auditors' Working Papers. *Auditing*, 3, 92-103.
- Burch, S. (2011). Building an Internal Audit Function. *Internal Auditor*, 68, 46-51.
- Burkhardt, K. and Strausz, R. (2009). Accounting Transparency and the Asset Substitution Problem. *The Accounting Review*, 84, 689-712.
- Cadez, S. and Guilding, C. (2008). An Exploratory Investigation of an Integrated Contingency Model of Strategic Management Accounting. *Accounting, Organizations and Society*, 33, 836-863.
- Carcello, J.V., Hermanson and D.R., Raghunandan, K. (2005). Factors Associated with U.S. Public Companies' Investment in Internal Auditing. *Accounting Horizons*, 19 (2) : 69-84.
- Carrington, T. (2010). An Analysis of the Demands on a Sufficient Audit: Professional Appearance is What Counts!. *Critical Perspectives on Accounting*, 21, 669-682.
- Chaikambang, C. and Ussahawanitchakit, P. (2012). Strategic Cost Management and Goal Achievement: Evidence from Food Businesses in Thailand. *International Journal of Business Strategy*, 12(4), 1-30.



- Chenhall, R. H. (2005). Integrative Strategic Performance Measurement Systems, Strategic Alignment of Manufacturing, Learning and Strategic Outcomes: An Exploratory Study. *Accounting, Organizations and Society*, 30, 395-422.
- Chitmun, S. and Ussahawanitchakit, P. (2012). Best Modern Managerial Accounting Practice of Corporate Governance Awarded Firms in Thailand: An Empirical Investigation of the Antecedents and Consequences. *Journal of Academy of Business and Economics*, 12(5), 125-152.
- Chong, V.K. and Eggleton, I.R.C. (2007). The Impact of Reliance on Incentive-Based Compensation Schemes, Information Asymmetry and Organizational Commitment on Managerial Performance. *Management Accounting Research*, 18, 312-342.
- Chopset, S. and Ussahawanitchakit, P. (2013). Internal Audit Judgment and Goal Achievement: Evidence from Thai Automotive Businesses. *International Journal of Business Research*, 13(2), 57-74.
- Chrisman, J.J., Sharma, P., Steier, L.P. and Chua, J.H. (2013). The Influence of Family Goals, Governance and Resources on Firm Outcomes. *Entrepreneurship Theory and Practice*, 1249-1261.
- Christopher, J., Sarens, G. and Leung, P. (2009). A Critical Analysis of the Independence of the Internal Audit Function: Evidence from Australia. *Accounting, Auditing & Accountability Journal*, 22(2), 200-220.
- Chutter, M. and Swanger, S.L. (2000). Internal Auditing in Community Financial Institutions. *Community Banker*, 9, 34-38.
- Claycomb, C., Porter, S.S and Martin, C.L. (2000). Riding the Wave: Response Rates and the Effects of Time Intervals between Successive Mail Survey Follow-up Efforts. *Journal of Business Research*, 48, 157-162.
- Coad, A, Segarra, A. and Teruel, M. (2013). Like Milk or Wine: Does Firm Performance Improve with Age?. *Structural Change and Economic Dynamics*, 24, 173-189.
- Collier, P. and Gregory, A. (1999). Audit Committee Activity and Agency Costs. *Journal of Accounting and Public Policy*, 18, 311-332.



- Conyon, M.J. and He, L. (2004). Compensation Committees and CEO Compensation Incentives in US Entrepreneurial Firms. *Journal of Management Accounting Research*, 16, 35-56.
- Cooper, B.J., Leung, P. and Mathews, C. (1994). Internal Audit: An Australian Profile. *Managerial Auditing Journal*, 9(3), 13-19.
- Cooper, D.R. and Schindler, P.S. (2008). *Business Research Methods*. Singapore: The McGraw-Hill Companies, Inc.
- Coram, P., Ferguson, C. and Moroney, R. (2008). Internal Audit, Alternative Internal Audit Structures and the Level of Misappropriation of Assets Fraud. *Accounting and Finance*, 48, 543-559.
- Cortesi, A., P. Tettamanzi and Corno, F. (2009). Empirical Evidence on Internal Control Systems and Corporate Governance in Italy. *J Manag Gov*, 13, 75-100.
- Cristina, B-A. and Cristina, P. (2009). Measuring and Assessment of Internal Audit's Effectiveness. *Economic Science Series*, 18, 784-790.
- Crowe, C. and Meade, E.E. (2008). Central Bank Independence and Transparency: Evolution and Effectiveness. *European Journal of Political Economy*, 24, 763-777.
- Crumpton, M.A. 2011. The Value of Transparency. *The Bottom Line: Managing Library Finances*, 24, 125-128.
- Dalton, A.N. and Spiller, S.A. (2012). Too Much of a Good Thing: The Benefits of Implementation Intentions Depend on the Number of Goals. *Journal of Consumer Research*, 39, 600-614.
- Dando, N. and Swift, T. (2003). Transparency and Assurance: Minding the Credibility Gap. *Journal of Business Ethics*, 44, 195-200.
- Daugherty, B. (2013). The Influence of the PCAOB'S New Auditing Standard on Communications. *Internal Auditing*, 28, 41-44.
- Dawes, S.S. (2010). Stewardship and Usefulness: Policy Principles for Information-Based Transparency. *Government Information Quarterly*, 27, 377-383.
- DeBoskey, D.G. and Gillett, P.R. (2013). The Impact of Multi-Dimensional Corporate Transparency on Us Firms' Credit Ratings and Cost of Capital. *Rev Quant Finan Acc*, 40, 101-134.



- Deepen, J.M., Goldsby, T.J., Knemeyer, A.M. and Wallenburg C.M. (2008). Beyond Expectations: An Examination of Logistics Outsourcing Goal Achievement and Goal Exceedance. *Journal of Business Logistics*, 29, 75-105.
- Deumes, R., Schelleman, C., Bauwhede, H.V. and Vanstraelen A. (2012). Audit Firm Governance: Do Transparency Reports Reveal Audit Quality?. *Auditing: A Journal of Practice & Theory*, 31, 193-214.
- Dillman, D.A. (1991). The Design and Administration of Mail Surveys. *Annual Reviews Sociology*, 17, 225-249.
- Dittenhofer, M. and Sennetti, J. (1995). Ethics and the Internal Auditor Phase II : A Comparison of 1983 and 1994 Surveys (a Digest Version). *Managerial Auditing Journal*, 10(4), 35-43.
- Dixon, G. and Goodall, G. (2007). The Quality Assurance Review: IS Your Internal Audit Function Effective?. *Internal Auditing*, 22, 3-6.
- Duff, A. (2009). Measuring audit quality in an era of change: An empirical investigation of UK audit market stakeholders in 2002 and 2005. *Managerial Auditing Journal*, 24(5), 400 - 422.
- Dunk, A.S. (2004). Product Life Cycle Cost Analysis: The Impact of customer Profiling, Competitive Advantage and Quality of IS Information. *Management Accounting Research*, 15, 401-414.
- Elder, R.J., Akresh, A.D., Glover, S.M., Higgs, J.L. and Liljegren J. (2013). Audit Sampling Research: A Synthesis and Implications for Future Research. *Auditing: A Journal of Practice & Theory*, 32, 99-129.
- Emil, G. (2008). Remarks on the Importance and Necessity for Public Entities to Associate in Order to Perform Efficient Activities of Internal Audit. *Economic Science Series*, 7, 684-687.
- Erdogan, B.Z. and Baker, M.J. (2002). Increasing Mail Survey Response Rates from an Industrial Population. *Industrial Marketing Management*, 31, 65-73.
- Everett, J. and Tremblay, M-S. (2014). Ethics and Internal Audit : Moral will and Moral Skill in a Heteronomous Field. *Critical Perspectives on Accounting*, 3, 181-196.
- Fadzil, F.H., Haron, H. and Jantan, M. (2005). Internal Auditing Practices and Internal Control System. *Managerial Auditing Journal*, 20(8), 844-866.



- Fassin, Y., Rossem, A.V. and Buelens, M. (2011). Small-Business Owner-Managers' Perceptions of Business Ethics and CSR-Related Concepts. *Journal of Business Ethics*, 98, 425-453.
- Florea, R. and Florea R. (2011). Audit Techniques and Audit Evidence. *Economy Transdisciplinarity Cognition*, 14, 350-358.
- Flostoiu, S. (2012). The Objective of the Public Internal Audit The Value-Added. *Revista Academiei Fortelor Terestre*, 17, 162-166.
- Fox, C.M., Robinson, K.L. and Boardley D. (1998). Cost-Effectiveness of Follow-Up Strategies in Improving the Response Rate of Mail Surveys. *Industrial Marketing Management*, 27, 127-133.
- Gelderen, M.V., Sluis, L.V.D. and Jansen, P. (2005). Learning Opportunities and Learning Behaviors of Small Business Starters: Relations with Goal Achievement, Skill Development and Satisfaction. *Small Business Economics*, 25, 97-108.
- Gramling, A.A. and Hemanson D.R. (2007). The IIA's Research on the State of the Internal Auditing Profession. *Internal Auditing*, 22, 32-34.
- Gramling, A.A. and Vanderveldeothers S.D. (2006). Assessing Internal Audit Quality. *Internal Auditing*, 21, 26-33.
- Gramling, A.A., Maletta, M.J., Schneider, A. and Church, B.K. (2004). The Role of the Internal Audit Function in Corporate Governance: A Synthesis of the Extant Internal Auditing Literature and Directions for Future Research. *Journal of Accounting Literature*, 23, 194-244.
- Guiral, A., Ruiz, E. and Choi, H.J. (2014). Audit Report Information Content and the Provision of Non-audit Services: Evidence from Spanish Lending Decisions. *Journal of International Accounting*, 4, 1-14.
- Gunawardane, G. (2011). Reliability of the Internal Service Encounter. *International Journal of Quality & Reliability Management*, 28, 1003-1018.
- Haat, M.H.C., Rahman, R.A. and Mahenthiran, S. (2008). Corporate Governance, Transparency and Performance of Malaysian Companies. *Managerial Auditing Journal*, 23, 744-778.



- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010). *Multivariate Data Analysis: A Global Perspective*. 7<sup>th</sup> Edition. United States: Pearson Education International.
- Hassall, T., Dunlop, A. and Lewis, S. (1996). Internal Audit Education: Exploring Professional Competence. *Managerial Auditing Journal*, 11(5), 28-36.
- Hawkes, L.C. and Adams, M.B. (1994). Total Quality Management: Implications for Internal Audit. *Managerial Auditing Journal*, 9, 11-18.
- . (1995). Total Quality Management and the Internal Audit: Empirical Evidence. *Managerial Auditing Journal*, 10(1), 31-36.
- Head, S.W. (2009). Current Trends and Issues Facing Internal Audit. *Internal Auditing*, 24, 3-16.
- Hill, C.L. and Booker, Q. (2007). State Accountancy Regulators' Perceptions of Independence of External Auditors When Performing Internal Audit Activities for Nonpublic Clients. *Accounting Horizons*, 21, 43-57.
- Ho, S. and Hutchinson, M. (2010). Internal Audit Department Characteristics/Activities and Audit Fees: Some Evidence from Hong Kong Firms. *Journal of International Accounting, Auditing and Taxation*, 19, 121-136.
- Holma, C. and Zamanb, M. (2012). Regulating Audit Quality: Restoring Trust and Legitimacy. *Accounting Forum*, 36, 51-61.
- Huarng, A.S. (1995). System Development Effectiveness: An Agency Theory perspective. *Information & Management*, 28, 283-291.
- Hyland, P. and Beckett R. (2002). Learning to Compete: The Value of Internal Benchmarking. *Benchmarking*, 9, 293-304.
- Idiab, A.I., Haron, M.S.B. and Ahmad, S.B.H. (2012). Standards of Professional Practice and Professional Conduct of Internal Audit. *Advances in Natural and Applied Sciences*, 6, 930-935.
- Imhoff, E.A.Jr. (2003). Accounting quality, auditing and corporate governance. *Accounting Horizons*, 17, 117-128.
- Ivancevich, J.M. and Donnelly, J.H. (1974). Study of Role Clarity and Need for Clarity for Three Occupational Groups. *Academy of Management Journal*, 17, 28-36.
- James, K.L. (2003). The Effects of Internal Audit Structure on Perceived Financial Statement Fraud Prevention. *Accounting Horizons*, 17, 315-327.





- Jensen, M.C. and Meckling, W.H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305-360.
- Jiang, W., Rupley, K.H. and Wu, J. (2010). Internal Control Deficiencies and the Issuance of Going Concern Opinions. *Research in Accounting Regulation*, 22, 40-46.
- Johnson, N.B. and Droege, S. (2004). Reflections on the Generalization of Agency Theory: Cross-cultural Considerations. *Human Resource Management Review*, 14, 325-335.
- Jonas, G.J. and Blanchet, J. (2000). Assessing Quality of Financial Reporting. *Accounting Horizons*, 14, 353-363.
- Kagan, A. (2000). Information Systems Implementation within US Agribusiness: An Applications Approach. *Computers and Electronics in Agriculture*, 28, 207-228.
- Kanchanda, K. and Ussahawanitchakit, P. (2012). Proactive Marketing Strategy and the antecedents and consequences: Evidence from Gems and Jewelry Exporting Businesses in Thailand. *International Journal of Business Research*, 12(5), 1-26.
- Kapoor, G. and Brozzetti, M. (2012). The Transformation of Internal Auditing. *The CPA Journal*, 2, 32-35.
- Kim, H-J., Mannino, M. and Nieschwietz, R.J. (2009). Information Technology Acceptance in the Internal Audit Profession: Impact of Technology Features and Complexity. *International Journal of Accounting Information Systems*, 10, 214-228.
- Kinney, W.R. (2005). Twenty-Five Years of Audit Deregulation and Re-Regulation: What Does IT Mean for 2005 and Beyond?. *Auditing*, 24, 89-109.
- Kline, R.B. (2005). *Principles and Practice of Structural Equation Modeling*. 2nd edition. The United States of America: The Guilford Press.
- Krause, R. and Bruton G. (2014). Agency and Monitoring Clarity on Venture Boards of Directors. *Academy of Management Review*, 39, 111-117.
- Krejcie, R.V. and Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610.





- Kroeger, L. (1993). Coaching the Internal Audit Team to Writing Success. *The Internal Auditor*, 50, 59-61.
- Laonamtha, U. and Ussahawanitchakit, P. (2012). Enterprise Resource Planning System Capability and Decision Making Success: Evidence from Thai Manufacturing Businesses in Thailand. *Journal of Academy of Business and Economics*, 12(4), 1-15.
- Larson, P.D. and Chow G. (2003). Total Cost-Response Rate trade-offs in Mail Survey Research: Impact of Follow-up Mailings and Monetary Incentives. *Industrial Marketing Management*, 32, 533-537.
- Lee, D. and Ismail I. (2010). Internal Audit Practices of Listed Construction Companies in Malaysia: Some Preliminary Evidence. *Internal Auditing & Risk Management*, 3, 65-73.
- Lenz, R. and Sarens, G. (2012). Reflections on the Internal Auditing Profession: What might have Gone Wrong?. *Managerial Auditing Journal*, 27(6), 532-549.
- Leung, P., Cooper B.J. and Perera L. (2011). Accountability Structures and Management Relationships of Internal Audit: An Australian Study. *Managerial Auditing Journal*, 26, 794-816.
- López-Gamero, M.D., Molina-Azorín, J.F. and Claver-Cortés, E. (2011). Environmental Uncertainty and Environmental Management Perception: A Multiple Case Study. *Journal of Business Research*, 64, 427-435.
- Love, V.J. and Manisero, T.R. (2011). Management Integrity: The Lynchpin of a GAAS Audit. *The CPA Journal*, 3, 22-25.
- Maines, L.A. and Wahlen, J.M. (2006). The Nature of Accounting Information Reliability: Inferences from Archival and Experimental Research. *Accounting Horizons*, 20, 399-425.
- Marx, B. and Els, G. (2009). The Role of the Audit Committee in Strengthening Business Ethics and Protecting Stakeholders' Interests. *African Journal of Business Ethics*, 4, 5-15.
- Mast, L.J. (1998). Designing an Internal Audit Process for Physician Billing Compliance. *Healthcare Financial Management*, 52, 80-84.
- McDonnell, C. (2005). Business Information the Need for a Single, Timely, Consistent Version of the Truth. *Accountancy Ireland*, 37, 83-85.



- Meijer, A. (2009). Understanding Modern Transparency. *International Review of Administrative Sciences*, 75, 255-267.
- Mihăilescu, C. and Ducu, C. (2011). Internal Audit- A Key Element of Corporate Governance in Credit Institutions. *Annales Universitatis Apulensis Series Oeconomica*, 13(2), 387-395.
- Mihret, D.G. and Yismaw, A.W. (2007). Internal Audit Effectiveness: An Ethiopian Public Sector Case Study. *Managerial Auditing Journal*, 22, 470-484.
- Miles, R.H. and Petty, M.M. (1975). Relationships between Role Clarity, Need for Clarity and Job Tension and Satisfaction for Supervisory and Nonsupervisory Roles. *Academy of Management Journal*, 18, 877-883.
- Minbashian, A., Earl, J. and Bright, J.E.H. (2013). Openness to Experience as a Predictor of Job Performance Trajectories. *Applied Psychology: An International Review*, 62, 1-12.
- Mitchell, R. (2011). Transparency for Governance: The Mechanisms and Effectiveness of Disclosure-Based and Education-Based Transparency Policies. *Ecological Economics*, 70, 1882-1890.
- Morton, S.M.B, Banndara, D.K., Robinson, E.M. and Atatoa Carr, P.E. (2012). In the 21st Century, What is an Acceptable Response Rate?. *Australian and New Zealand Journal of Public Health*, 36(2), 106-108.
- Munteanua, V. and Zahariab, D.L. (2014). Current Trends in Internal Audit. *Procedia – Social and Behavioral Sciences*, 116, 2239 - 2242.
- Munteanua, V., Zuca, M. and Țîntă, A. (2010). Internal Audit Regulations in Romania and Their Convergence to European Exigencies. *Annales Universitatis Apulensis Series Oeconomica*, 12, 267-273.
- Muqattash, R. (2011). The Effect of the Factors in the Internal Audit Department on the Internal Auditors Objectivity in the Banks Operating in the United Arab Emirates: (A Field Study). *Journal of International Management Studies*, 6(3), 92-99.
- Nagy, A.L. (2010). Section 404 Compliance and Financial Reporting Quality. *Accounting Horizons*, 24(3), 441-454.



- Nickell, E.B. and Roberts, R.W. (2013). Organizational Legitimacy, Conflict and Hypocrisy: An Alternative View of the Role of Internal Auditing. *Critical Perspectives on Accounting*, 4, 1-5.
- Ninlaphay, S., Ussahawanitchakit, P. and Boonlua, S. (2012). Internal Auditing; Business Enterprises; Stakeholders; Management- Employee Participation; Decision Making in Economics; Competition; Diversification ; Thailand. *Journal of International Finance & Economics*, 12, 61-84.
- Norman, C.S., Rose, A.M. and Rose, J.M. (2010). Internal Audit Reporting Lines, Fraud Risk Decomposition and Assessments of Fraud Risk. *Accounting, Organizations and Society*, 35, 546-557.
- Octavia, E. (2013). The Effects of Implementation on Internal Audit and Good Corporate Governance in Corporate Performance. *Journal of Global Business and Economics*, 6, 77-87.
- O'Donnell, E. and David, J.S. (2000). How Information Systems Influence User Decisions : A Research Framework and Literature Review. *Information Journal of Accounting Information Systems*, 1, 178-203.
- Okike, E. (2004). Management of Crisis: The Response of the Auditing Profession in Nigeria to the Challenge to Its Legitimacy. *Accounting, Auditing & Accountability Journal*, 17, 705-730.
- O'Regan, D. (2001). Genesis of a Profession: Towards Professional Status for Internal Auditing. *Managerial Auditing Journal*, 16(4), 215-226.
- O'Reilly-Allen, M. and McMullen, D. (2002). Internal Control Reporting and Users' Perceptions of Financial Statement Reliability. *American Business Review*, 20, 100-107.
- Ostapski, S.A. and Isaacs, C.N. (1992). Corporate Moral Responsibility and the Moral Audit: Challenges for Refuse Relief Inc. *Journal of Business Ethics*, 11, 231-239.
- Ostapski, S.A. and Pressley, D.G. (1992). Moral Audit of Diabco Corporation. *Journal of Business Ethics*, 11, 71-80.
- Otetea, A.V., Tita, C.M. and Aristotel, U.M. (2013). Internal Public Audit in the Financial Crisis Context. *Procedia Economics and Finance*, 6, 688-693.



- Otley, D. (1980). The Contingency Theory of Management Accounting: Achievement and Prognosis. *Accounting, Organizations and Society*, 2, 413-428.
- Pagliari, S., Brambilla, M., Sacchi, S., D'Angelo, M. and Ellemers, N. (2013). Initial Impressions Determine Behaviours: Morality Predicts the Willingness to Help Newcomers. *J Bus Ethics*, 117, 37-44.
- Pajak, W. (2012). Personnel Audit Process. *Business, Management and Education*, 10, 25-37.
- Paliszkievicz, J.O. (2011). Trust Management : Literature Review. *Management*, 6, 315-331.
- Parker, S.K., Johnson, A., Collins, C. and Nguyen, H. (2013). Making the most of Structural Support: Moderating Influence of Employees' Clarity and Negative Affect. *Academy of Management Journal*, 56, 867-892.
- Penman, S.H. (2003). The Quality of Financial Statements: Perspectives from the Recent Stock Market Bubble. *Accounting Horizons*, 17, 77-95.
- Pickett, S. (2000). Developing Internal Audit Competencies. *Managerial Auditing Journal*, 15(6), 265-278.
- Pongpanpattana, J. and Ussahawanitchakit, P. (2013). Internal Audit Governance and Business Goal Achievement: An Empirical Examination of Electronic Parts Businesses in Thailand. *Journal of International Finance and Economics*, 13(3), 35-58.
- Pongsatitpat, S. and Ussahawanitchakit, P. (2013). Audit Intelligence and Audit Survival: An Empirical Research of Tax Auditors (TAs) in Thailand. *Journal of International Business and Economics*, 13(3), 111-136.
- Poston, R.S. and Grabski, S.V. (2000). Accounting Information Systems Research: Is It Another QWERTY?. *International Journal of Accounting Information Systems*, 1, 9-53.
- Pott, C., Mock, T.J. and Watrin, C. (2008). The Effect of a Transparency Report on Auditor Independence: Practitioners' Self-Assessment. *Rev Manage Sci*, 2, 111-127.
- Pourheydari, O. and Abousaiedi, M. (2011). An Empirical Investigation of the Audit Expectations Gap in Iran. *Journal of Islamic Accounting and Business Research*, 2(1), 63-76.



- Prempee, K., Ussahawanitchakit, P. and Boonlua, S. (2013). Textile Industry; Competition; Information Theory; Managerial Accounting; Production. *International Journal of Business Strategy*, 13, 41-72.
- Ratliff, R.L, Jenson, R.L and Flagg, J.C. (1993). An Empirical Comparison of Internal and External Audit Supervision. *Managerial Auditing Journal*, 8(2), 9-16.
- Reid, M. (2005). Performance Auditing OF Integrated Marketing Communication (IMC) Actions and Outcomes. *Journal of Advertising*, 34(4), 41 - 54.
- Rezaee, Z. (1996). Improving the Quality of Internal Audit Functions through Total Quality Management. *Managerial Auditing Journal*, 11(1), 30-34.
- Rickard, P. (1994). Understanding Internal Audit. *Australian Accountant*, 64(3), 30-34.
- Robert, L.P., Dennis, A.R. and Hung, Y.C. (2009). Individual Swift Trust and Knowledge-Based Trust in Face-to-Face and Virtual Team Members. *Journal of Management Information Systems*, 26, 241-279.
- Roscoe, A.M., Lang, D. and Sheth, J.N. (1975). Follow-up Methods, Questionnaire Length and Market Differences in Mail Surveys. *Journal of Marketing*, 39, 20-27, April.
- Ruck, K. and Welch, M. (2012). Valuing Internal Communication; Management and Employee Perspectives. *Public Relations Review*, 38, 294- 302.
- Salehi, M., Arianpoor, A. and Salehi, F. (2013). Investigating the Effect of Internal Audit on the Performance of Private Banks' System. *Journal of Accounting – Business & Management*, 20, 46-58.
- Sampattikorn, S. and Ussahawanitchakit, P. (2011). Internal Audit Quality, Accounting Transparency and Financial Reporting Effectiveness: Evidence from Thai Listed Firms. *Journal of International Finance Studies*, 3, 11.
- . (2012). Best Internal Audit Practices and Goal Achievement Sustainability: An Empirical Examination of Thai Listed Firms. *Journal of International Business and Economics*, 12(5), unpagued.
- Sarens, G., Beelde, I.D. and Everaert, P. (2009). Internal Audit: A Comfort Provider to the Audit Committee. *The British Accounting Review*, 41, 90-106.
- Sarkis, J., Gonzalez-Torre, P. and Adenso-Diaz, B. (2010). Stakeholder Pressure and the Adoption of Environmental Practices: The Mediating Effect of Training. *Journal of Operations Management*, 28, 163-176.



- Savin, N. E. and White, K.J. (1977). The Dubin-Watson Test for Serial Correlation with Extreme Sample Sizes or Many Regressors. *Econometrica*, 45(8), 1989-1996.
- Sawalqa, F.A. and Qtish, A. (2012). Internal Control and Audit Program Effectiveness: Empirical Evidence from Jordan. *International Business Research*, 5(9), 128-135.
- Sawyer, L.B. (1993). Why internal auditing?. *The Internal Auditor*, 50(6), 43-48.
- Schaubroeck, J.M., Peng, A.C. and Hannah, S.T. (2013). Developing Trust with Peers and Leaders: Impacts on Organizational Identification and Performance During Entry. *Academy of Management Journal*, 56, 1148-1168.
- Schneider, A. (2009a). Does the Expectation of Finding Deficiencies Impact Internal Audit Work?. *Journal of Applied Accounting Research*, 10(2), 122-131.
- . (2009b). Informing the Audit Committee: Information and Reports Provided by Internal Audit. *Internal Auditing*, 24, 24-32.
- Sfetcu, M. (2013). Management Methods and Techniques Used to Ensure the Internal Audit Performance. *Proceedings of the Scientific Conference Afases*, 3, 65-79.
- Shane, S., Nicolaou, N., Cherkas, L. and Spector, T.D. (2010). Do Openness to Experience and Recognizing Opportunities have the Same Genetic Source?. *Human Resource Management*, 49, 291 - 303.
- Sherchan, W., Nepal, S. and Paris, C. (2013). A Survey of Trust in Social Networks. *ACM Computing Surveys*, 45(47), 1-47, 33.
- Sisaye, S. (1999). An Organizational Approach for the Study of the Diffusion of Process Innovation Strategies in Internal Auditing and Control Systems. *International Journal of Applied Quality Management*, 2, 279-293.
- Sobel, P. and Kapoor, G. (2012). Step Up to the Plate. *Internal Auditor*, 69, 41-44.
- Sookaneknun, S. and Ussahawanitchakit, P. (2013). Management Governance and Firm Value: Empirical Evidence from Electronics Businesses in Thailand. *International Journal of Business Research*, 13920, 137-164.
- Sori, Z.M. (2009). Accounting Information Systems (AIS) and Knowledge Management : A Case Study. *American Journal of Scientific Research*, 4, 36-44.
- Spraakman, G. (1997). Transaction Cost Economics: a Theory for Internal Audit? *Managerial Auditing Journal*, 12(7), 323-330.



- Srichanapun, P. and Ussahawanitchakit, P. (2013). Internal Audit Proficiency and Firm Goal Achievement: An Empirical Investigation of Thai-Listed Firms. *International Journal of Business Research*, 13920, 111-136.
- Steinbart, P.J., Raschke, R.L., Gal, G. and Dilla, W.N. (2012). The Relationship between Internal Audit and Information Security: An Exploratory Investigation. *International Journal of Accounting Information Systems*, 13, 228-243.
- Steinbart, P.J., Raschke, R.L., Gal, G. and Dilla, W.N. (2013). Information Security Professionals' Perceptions about the Relationship between the Information Security and Internal Audit Functions. *Journal of Information Systems*, 27, 65-86.
- Susmanschi, G. (2012). Internal Audit and Whistle-Blowing. *Economics, Management and Financial Markets*, 7, 415-421.
- Sussman, S.W. and Sproull, L. (1999). Straight talk: Delivering Bad News through Electronic Communication. *Information Systems Research*, 10(2), 150-166.
- Sutton, M.H. (2002). Financial reporting at a crossroads. *Accounting Horizons*, 16, 319-328.
- Vasile, E. and Croitoru, I. (2012). The Prospects of the Internal Audit in Improving Management of Public Institutions. *Internal Auditing & Risk Management*, 27, 1-10.
- Verschoor, C. C. (2002). Reflections on the Audit Committee's Role. *The Internal Auditor*, 59, 26-35.
- Venter, J. and Bruyn, R.D. (2002). Reviewing the Internal Auditing Function: Processes and Procedures. *Meditari Accountancy Research*, 10, 227-241.
- Vinten, G. (1998). Putting Ethics into Quality. *The TQM Magazine*, 10(2), 89-94.
- . (1999). Audit Independence in the UK - The State of the Art. *Managerial Auditing Journal*, 14(8), 408-437.
- Wan-Hussin, W.N. and Bamahros, H.M. (2013). Do Investment in and the Sourcing Arrangement of the Internal Audit Function Affect Audit Delay?. *Journal of Contemporary Accounting & Economics*, 9, 19-32.
- Watson, M. (2007). Internal Audit Five Best Practices for Oversight. *Accountancy Ireland*, 39, 28-31.



- Watts, R.L. (2003). Conservatism in Accounting Part I: Explanations and Implications. *Accounting Horizons*, 17, 207-221.
- Wiltermuth, S.S. and Flynn, F.J. (2013). Power, Moral Clarity and Punishment in the Workplace. *Academy of Management Journal*, 56, 1002-1023.
- Wognum, P.M., Bremmers, H., Trienekens, J.H. and Vorst, J.G. (2011). Systems for Sustainability and Transparency of Food Supply Chains-Current Status and Challenges. *Advanced Engineering Informatics*, 25, 65-76.
- Ziegenfuss, D.E. and Singhapakdi, A. (1994). Professional Values and the Ethical Perceptions of Internal Auditors Business. *Managerial Auditing Journal*, 9(1), 34-44.





## **APPENDICES**



**APPENDIX A**  
**The Original Items**



Table 1A: Original Items in Scales

Constructs	Items
<b>Internal Audit Legitimacy Compliance (ALC)</b>	
ALC1	Firm focuses on internal audit practices that follow with professional standard and regulation for efficient internal audit practices.
ALC2	Firm strongly adheres to consistent internal audit practices with professional standard and regulation for confident to internal audit quality.
ALC3	Firm emphasizes to internal audit practices with tracking of new professional standard and regulation to improve the for appropriate internal audit practices.
ALC4	Firm trusts on internal audit practices that follow with professional standard and regulation will lead to be acceptable and reliable from stakeholders.
<b>Internal Audit Process Openness (APO)</b>	
APO1	Firm relies on the internal audit plan is prepared clearly and covers all activities of the organization in its entirety.
APO2	Firm strongly adheres to prepare audit plan which can help to find potential risk timely and help to deal those risks efficiently.
APO3	Firm relies on the internal audit plan is prepared clearly and can be used to determine the audit scope and planning.
APO4	Firm relies on the internal audit plan can be used to determine the audit time and necessary audit resources systematically and concisely.
APO5	Firm focuses on disclose the internal audit plan for the stakeholders to gain an acceptable and reliable result.
<b>Internal Audit Method Trust (AMT)</b>	
AMT1	Firm relies on the guideline in audit program can be used to determine the audit procedures clearly.
AMT2	Firm relies on the audit program can be used to determine the audit procedures which cover the audit scope and audit objective.
AMT3	Firm realizes the importance of audit program which is the well instruction for staff to audit clearly and concisely.
AMT4	Firm believes that the audit program can help to determine the necessary time, place, and staff to audit work.
AMT5	Firm believes that the audit program can help to control audit work honestly, independently, and completely and be acceptable and reliable from stakeholders.



Table 1A: Original Items in Scales (Continued)

Constructs	Items
<b>Internal Audit Practice Clarity (APC)</b>	
APC1	Firm focuses on internal audit practices that follow with professional standard and regulation that lead to organized and clear work.
APC2	Firm relies on the internal auditor performs work accurately cause to acquire audit scope and audit objective.
APC3	Firm relies on the internal auditor performs work to the guideline in audit program can gain an adequate and appropriate evidences.
APC4	Firm relies on the internal auditor performs work and record the audit finding continuously and consistently cause to acquire audit evidence accurately and completeness.
APC5	Firm trusts on professional standard and regulation practices that lead to acceptable and reliable for stakeholders.
<b>Internal Audit Communication Visibility (ACV)</b>	
ACV 1	Firm emphases to communicate audit outcomes accurately and completely which cause to acquire audit objectives.
ACV2	Firm focuses on the positive communication to stakeholders to maximize the awareness and understanding audit outcomes.
ACV3	Firm emphases to communicate audit outcomes openly and timely which lead to be high benefit for users.
ACV4	Firm emphases to communicate audit outcomes to stakeholders as directly and orderly which lead to be benefit for users.
ACV5	Firm emphases to communicate audit outcomes to stakeholders as frankly for confident of internal audit report.
<b>Internal Audit Reliability (IAR)</b>	
IAR1	Firm enables to perform clear guideline in audit plan which can use to practice in accordance with the audit scope and audit objective.
IAR2	Firm enables to perform internal audit work independently cause to increase firm value and improve performance of firm.
IAR3	Firm can perform internal audit work completely in accordance with professional standard and regulation.
IAR4	Firm can perform internal audit work clearly and completely cause to acquire audit outcomes that is neutrality and free from bias.



Table 1A: Original Items in Scales (Continued)

Constructs	Items
<b>Internal Audit Quality (IAQ)</b>	
IAQ1	Firm enables to achieve the objective and goals of internal audit as well.
IAQ 2	Firm enables to perform clear guideline in audit plan which can be used to practice concisely.
IAQ3	Firm can operate in accordance with the professional standard conforming and regulation cause to increase firm value and improve performance of firm.
IAQ4	Firm can convey audit outcomes to stakeholders clearly and timely.
<b>Internal Audit Usefulness (IAU)</b>	
IAU1	Firm can collect all information relevant to the decision of stakeholders to use information quickly and timely.
IAU2	Firm can increase firm value and improve perform of firm.
IAU3	Firm can find potential risks timely and deal those risks efficiently. .
IAU4	Firm can help stakeholders to make accurate decision.
<b>Information Value (IV)</b>	
IV1	Firm presented the crucial and relevant information which stakeholders can use to make accurate decision.
IV2	Firm presented the fast and appropriate information which respond stakeholders requirement timely.
IV3	Firm presented the information which demonstrate the real performance of business.
IV4	Firm presented information that is neutrality and free from bias which stakeholders can use to make efficient decision.
<b>Best Decision – Making (BDM)</b>	
BDM1	Firm decides all issues with effectively and efficiently.
BDM2	Firm has information for decisions in all activities in accordance with goals achievement.
BDM3	Firm has judgment and considers systems in all issues that are important for business operations.
BDM4	Firm can immediately use information for correct decision making and timeliness.



Table 1A: Original Items in Scales (Continued)

Constructs	Items
<b>Firm Goal Achievement (FGA)</b>	
FGA1	Firm enabled to achieve the objective and goals of organization as well.
FGA2	Firm has gained more monetary and non-monetary performance.
FGA3	Firm confident that financial position and performance of firm are strong and stable.
FGA4	Firm has the growth rate or market share increasingly.
FGA5	Firm confident that firm has the ability and potential to maintain growth and survive in the future.
<b>Morality Climate (MC)</b>	
MC1	Firm supports staffs within the organization commitment to moral principle.
MC2	Firm believes that moral principle can ensure the honest and sincere practices.
MC3	Firm believes that the administration under moral principle can strengthen the credibility for the organization and acceptable from stakeholders.
MC4	Firm believes that the administration under moral principle can help firm succeed.
<b>Internal Audit Learning (IAL)</b>	
IAL1	Firm believes that new knowledge can help firm succeed as well.
IAL2	Firm focuses on learning and understanding all activities of organization in its entirety in order to get efficient audit work.
IAL3	Firm focuses on learning and understanding available information technology can help firm to improve internal audit work as well.
IAL4	Firm focuses on learning and understanding the situation changes in order to plan and improve internal audit practices appropriately.
<b>Governance Awareness (GA)</b>	
GA1	Firm believes that corporate governance can drive an organization to enhance the firm performance.
GA2	Firm emphasizes and strongly adheres to operating with disclosure and fairness to all parties.
GA3	Firm encourages people to participate in governance to achieve transparent operation.
GA4	Firm promotes setting a guideline and best practices to ensure accuracy are straight forward which help establish the recognized of the stakeholders.



Table 1A: Original Items in Scales (Continued)

Constructs	Items
<b>Internal Audit Professional (IAP)</b>	
IAP1	Firm focuses on complying professional standard that help internal audit achieve completely audit plan.
IAP2	Firm strongly adheres to consistent internal audit practices with professional standard for confident of internal audit quality.
IAP3	Firm focuses on internal audit practices that follow with professional standard for efficient internal audit practices.
IAP4	Firm trusts on internal audit practices that follow with professional standard will lead to acceptable and reliable.
<b>Internal Audit Ethics (IAE)</b>	
IAE1	Firm focuses on internal audit practices that follow with code of ethics for neutrality and free from bias practices.
IAE2	Firm focuses on internal audit practices that follow with code of ethics in accordance with necessary knowledge, skill, and experience.
IAE3	Firm relies on internal audit practices that follow with code of ethics will lead to acceptable for stakeholders.
IAE4	Firm relies on internal audit practices that follow with code of ethics will encourage the firm to disclose all relevant information for the decision of stakeholders.
<b>Regulation Force (RF)</b>	
RF1	Many current regulations have an effect on improvement operational appropriate of firm.
RF2	Various current regulations have an effect on tracking and changing operational appropriate of firm.
RF3	Current stringent regulations cause firm to improve appropriate operational trend.
RF4	Current regulations have more stringent penalty that impacts firm to continuously operate quality.
<b>Environment Uncertainty (EU)</b>	
EU1	Business environment intense changes impact firm to develop new strategy to increase competitive advantage.
EU2	Information technology rapidly changes impact firm to develop new strategy to maintain market share.
EU3	Many regulations impact firm to improve operational appropriate of firm.
EU4	Many current expectation of stakeholders impact firm to determine the operational of firm that focuses on the benefit and need of stakeholders.



**APPENDIX B**  
**Test of Non-Response Bias**





Table 1B: Test of Non-Response Bias

Comparison	n	Mean	Std. Dev.	t-value	p-value
<b>Type of firm:</b>					
• First Group	40	8.700	3.982		
• Second Group	<u>41</u>	8.098	3.618	0.713	0.478
	<u>81</u>				
<b>Amount of capital:</b>					
• First Group	40	2.000	1.220		
• Second Group	<u>41</u>	2.244	1.221	-0.900	0.371
	<u>81</u>				
<b>Total assets</b>					
• First Group	40	1.950	1.131		
• Second Group	<u>41</u>	2.220	1.255	-1.014	0.314
	<u>81</u>				
<b>Age of firm:</b>					
• First Group	40	3.500	0.934		
• Second Group	<u>41</u>	3.610	0.771	-0.578	0.565
	<u>81</u>				



**APPENDIX C**  
**Respondent Characteristics**



Table 1C: Demographic Characteristics of Respondents

Description	Categories	Frequencies	Percent (%)
1. Gender	Male	42	51.85
	Female	39	48.15
	<b>Total</b>	<b>81</b>	<b>100.00</b>
2. Age	Less than 30 years old	3	3.70
	30-40 years old	26	32.10
	41-50 years old	21	25.93
	More than 50 years old	31	38.27
	<b>Total</b>	<b>81</b>	<b>100.00</b>
3. Marital status	Single	41	50.62
	Married	40	49.38
	Divorced	0	0.00
	<b>Total</b>	<b>81</b>	<b>100.00</b>
4. Education levels	Undergraduate	32	39.51
	Higher than undergraduate	49	60.49
	<b>Total</b>	<b>81</b>	<b>100.00</b>
5. Working experience	Less than 5 years	3	3.70
	5-10 years	17	20.99
	11-15 years	13	16.05
	More than 15 years	48	59.26
	<b>Total</b>	<b>81</b>	<b>100.00</b>
6. Average revenues per month	Less than 50,000 Baht	14	17.29
	50,000-70,000 Baht	16	19.75
	70,001-90,000 Baht	13	16.05
	More than 90,000 Baht	38	46.91
	<b>Total</b>	<b>81</b>	<b>100.00</b>
7. Working positions	Internal audit directors	26	32.10
	Internal audit managers	24	29.63
	Other position	31	38.27
	<b>Total</b>	<b>81</b>	<b>100.00</b>



**APPENDIX D**  
**Financial Business Characteristics**



Table 1D: Demographic Characteristics of Financial Businesses in Thailand

<b>Descriptions</b>	<b>Categories</b>	<b>Frequencies</b>	<b>Percentage (%)</b>
1. Type of business	Thai commercial bank	5	6.17
	Foreign bank representatives	1	1.23
	Foreign banks branches	4	4.94
	Assets management companies	12	14.82
	Finance companies	2	2.47
	Specialized financial institutions	3	3.70
	Credit fanciers	2	2.47
	Credit card company	3	3.70
	Life insurance company	12	14.82
	Insurance company	32	39.51
	Personal loan company	5	6.17
	Other business	0	0.00
	<b>Total</b>	<b>81</b>	<b>100.00</b>
2. Authorized capital of firm	Less than 1,000,000,000 Baht	35	43.21
	1,000,000,000-5,000,000,000 Baht	21	25.93
	5,000,000,001-9,000,000,000 Baht	5	6.17
	More than 9,000,000,000 Baht	20	24.69
	<b>Total</b>	<b>81</b>	<b>100.00</b>
3. Total assets of firm	Less than 10,000,000,000 Baht	35	43.21
	10,000,000,000-50,000,000,000 Baht	23	28.40
	50,000,000,001-90,000,000,000 Baht	4	4.94
	More than 90,000,000,000 Baht	19	23.45
	<b>Total</b>	<b>81</b>	<b>100.00</b>
4. The period of time in business	Less than 5 years	4	4.94
	5-10 years	7	8.64
	11-15 years	10	12.35
	More than 15 years	60	74.07
	<b>Total</b>	<b>81</b>	<b>100.00</b>



Table 1D: Demographic Characteristics of Financial Businesses in Thailand  
(Continued)

<b>Descriptions</b>	<b>Categories</b>	<b>Frequencies</b>	<b>Percentage (%)</b>
5. Number of employees	Less than 100	22	27.16
	100-500	27	33.33
	501-900	11	13.58
	More than 900	21	25.93
	<b>Total</b>	<b>81</b>	<b>100.00</b>



## **APPENDIX E**

### **Item Factor Loadings and Reliability Analyses in Sample**



Table 1E: Item Factor Loadings and Reliability Analyses in Sample

<b>Constructs</b>	<b>Items</b>	<b>Factor Loadings</b>	<b>Reliability (Alpha)</b>
Internal Audit Legitimacy Compliance (ALC)	ALC1	0.889	0.864
	ALC2	0.900	
	ALC 3	0.854	
	ALC 4	0.727	
Internal Audit Process Openness (APO)	APO1	0.900	0.887
	APO2	0.898	
	APO3	0.879	
	APO4	0.906	
	APO5	0.611	
Internal Audit Method Trust (AMT)	AMT1	0.927	0.935
	AMT2	0.901	
	AMT3	0.924	
	AMT4	0.868	
	AMT5	0.830	
Internal Audit Practice Clarity (APC)	APC1	0.749	0.900
	APC2	0.870	
	APC3	0.903	
	APC4	0.843	
	APC5	0.878	
Internal Audit Communication Visibility (ACV)	ACV1	0.848	0.925
	ACV2	0.906	
	ACV3	0.914	
	ACV4	0.870	
	ACV5	0.849	
Internal Audit Reliability (IAR)	IAR1	0.826	0.902
	IAR2	0.873	
	IAR3	0.904	
	IAR4	0.914	
Internal Audit Quality (IAQ)	IAQ1	0.932	0.921
	IAQ2	0.898	
	IAQ3	0.895	
	IAQ4	0.874	
Internal Audit Usefulness (IAU)	IAU1	0.913	0.922
	IAU2	0.920	
	IAU3	0.887	
	IAU4	0.883	





Table 1E: Item Factor Loadings and Reliability Analyses in Sample (Continued)

<b>Constructs</b>	<b>Items</b>	<b>Factor Loadings</b>	<b>Reliability (Alpha)</b>
Information Value (IV)	IV1	0.874	0.865
	IV2	0.869	
	IV3	0.813	
	IV4	0.816	
Best Decision – Making (BDM)	BDM1	0.901	0.915
	BDM2	0.930	
	BDM3	0.883	
	BDM4	0.864	
Firm Goal Achievement (FGA)	FGA1	0.855	0.938
	FGA2	0.929	
	FGA3	0.903	
	FGA4	0.933	
	FGA5	0.880	
Morality Climate (MC)	MC1	0.846	0.883
	MC2	0.942	
	MC3	0.936	
	MC4	0.740	
Internal Audit Learning (IAL)	IAL1	0.810	0.883
	IAL2	0.889	
	IAL3	0.850	
	IAL4	0.914	
Governance Awareness (GA)	GA1	0.827	0.859
	GA2	0.865	
	GA3	0.933	
	GA4	0.730	
Internal Audit Professional (IAP)	IAP1	0.921	0.913
	IAP2	0.914	
	IAP3	0.925	
	IAP4	0.797	
Internal Audit Ethics (IAE)	IAE1	0.863	0.900
	IAE2	0.898	
	IAE3	0.858	
	IAE4	0.897	



Table 1E: Item Factor Loadings and Reliability Analyses in Sample (Continued)

<b>Constructs</b>	<b>Items</b>	<b>Factor Loadings</b>	<b>Reliability (Alpha)</b>
Regulation Force (RF)	RF1	0.870	0.867
	RF2	0.872	
	RF3	0.833	
	RF4	0.808	
Environment Uncertainty (EU)	EU1	0.881	0.913
	EU2	0.915	
	EU3	0.929	
	EU4	0.843	



## **APPENDIX F**

### **Test of the Assumption of Regression Analysis**



### **Results of the Assumption of Regression Analysis Testing**

This research verified the assumption of regression analysis, including (1) linearity of the phenomenon, (2) constant variance of the error terms (homoscedasticity), (3) independent of the error terms, and (4) normality of the error term distribution. The results of testing are shown as the following.

#### **1. Linearity of the Phenomenon**

The linearity of the dependent – independent variables relationship describes the degree change in the dependent variable as related to the independent variable. This research uses residual plots to examine the linearity of any bivariate relationship. The results of linearity testing do not demonstrate any nonlinear pattern to the residuals. Thus, in overall, each model is linear.

#### **2. Constant Variance of the Error Terms (Homoscedasticity)**

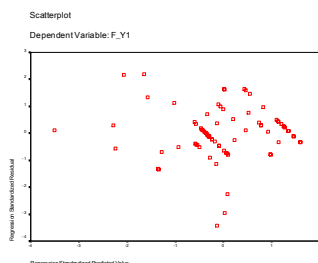
The constant variance of the error terms assumption describes that the dependent variable shows equal level of variance across the range of independent variables. To consider the constant variance of error terms, plotting the residuals against the predicted dependent values is used for verification. As a result, there shows no pattern of increasing or decreasing residuals. This finding indicates homoscedasticity in the set of independent variables.

The following shows the residual plots for linearity and constant variance of error terms testing.

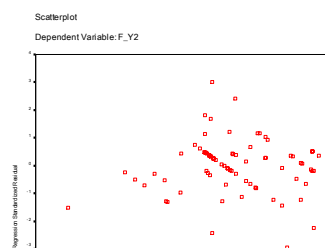


**Model 1**

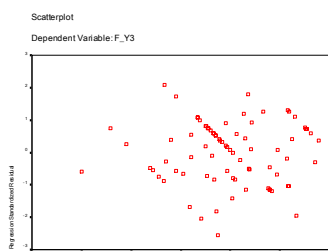
$$IAR = \alpha_1 + \beta_1 ALC + \beta_2 APO + \beta_3 AMT + \beta_4 APC + \beta_5 ACV + \beta_6 IAQ + \beta_7 FS + \beta_8 FA + \varepsilon_1$$

**Model 2**

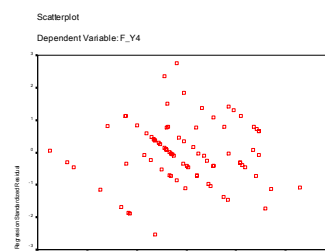
$$IAQ = \alpha_2 + \beta_9 ALC + \beta_{10} APO + \beta_{11} AMT + \beta_{12} APC + \beta_{13} ACV + \beta_{14} FS + \beta_{15} FA + \varepsilon_2$$

**Model 3**

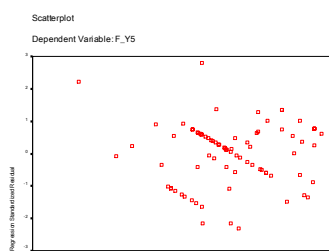
$$IAU = \alpha_3 + \beta_{16} ALC + \beta_{17} APO + \beta_{18} AMT + \beta_{19} APC + \beta_{20} ACV + \beta_{21} IAQ + \beta_{22} FS + \beta_{23} FA + \varepsilon_3$$

**Model 4**

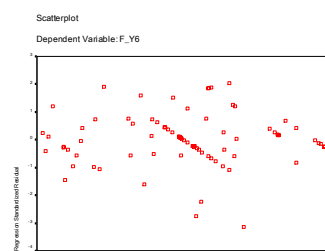
$$IV = \alpha_4 + \beta_{24} ALC + \beta_{25} APO + \beta_{26} AMT + \beta_{27} APC + \beta_{28} ACV + \beta_{29} FS + \beta_{30} FA + \varepsilon_4$$

**Model 5**

$$BDM = \alpha_5 + \beta_{31} ALC + \beta_{32} APO + \beta_{33} AMT + \beta_{34} APC + \beta_{35} ACV + \beta_{36} FS + \beta_{37} FA + \varepsilon_5$$

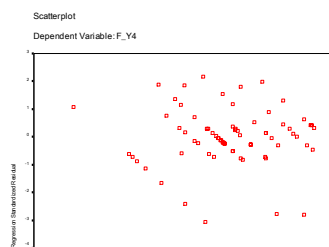
**Model 6**

$$FGA = \alpha_6 + \beta_{38} ALC + \beta_{39} APO + \beta_{40} AMT + \beta_{41} APC + \beta_{42} ACV + \beta_{43} IV + \beta_{44} BDM + \beta_{45} FS + \beta_{46} FA + \varepsilon_6$$

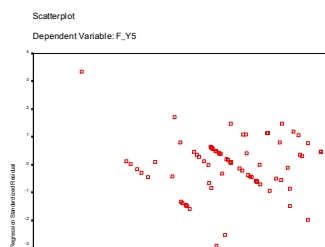


**Model 7**

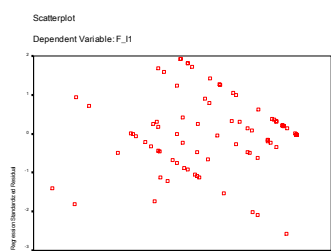
$$IV = \alpha_7 + \beta_{47} IAR + \beta_{48} IAQ + \beta_{49} IAU + \beta_{50} FS + \beta_{51} FA + \varepsilon_7$$

**Model 8**

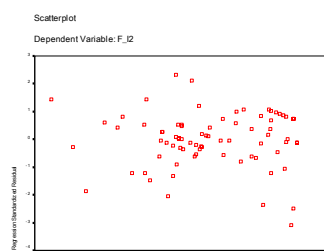
$$BDM = \alpha_8 + \beta_{52} IAR + \beta_{53} IAQ + \beta_{54} IAU + \beta_{55} IV + \beta_{56} FS + \beta_{57} FA + \varepsilon_8$$

**Model 9**

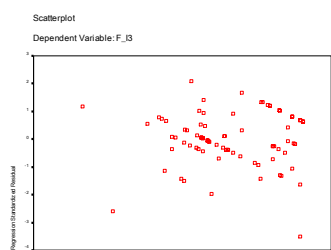
$$ALC = \alpha_9 + \beta_{58} GA + \beta_{59} IAP + \beta_{60} IAE + \beta_{61} RF + \beta_{62} EU + \beta_{63} FS + \beta_{64} FA + \varepsilon_9$$

**Model 10**

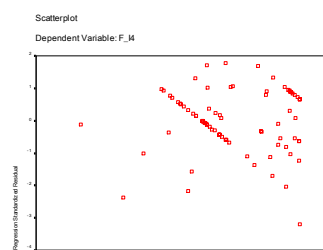
$$APO = \alpha_{10} + \beta_{65} GA + \beta_{66} IAP + \beta_{67} IAE + \beta_{68} RF + \beta_{69} EU + \beta_{70} FS + \beta_{71} FA + \varepsilon_{10}$$

**Model 11**

$$AMT = \alpha_{11} + \beta_{72} GA + \beta_{73} IAP + \beta_{74} IAE + \beta_{75} RF + \beta_{76} EU + \beta_{77} FS + \beta_{78} FA + \varepsilon_{11}$$

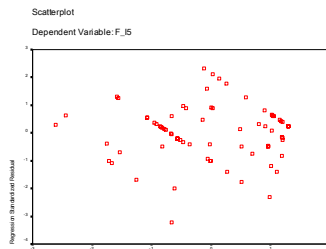
**Model 12**

$$APC = \alpha_{12} + \beta_{79} GA + \beta_{80} IAP + \beta_{81} IAE + \beta_{82} RF + \beta_{83} EU + \beta_{84} FS + \beta_{85} FA + \varepsilon_{12}$$

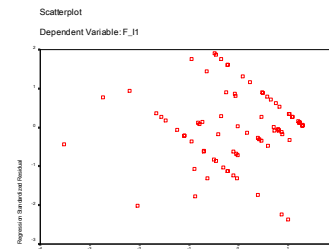


**Model 13**

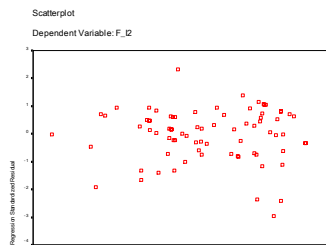
$$\begin{aligned}
 ACV = & \alpha_{13} + \beta_{86} GA + \beta_{87} IAP \\
 & + \beta_{88} IAE + \beta_{89} RF + \\
 & \beta_{90} EU + \beta_{91} FS + \beta_{92} FA \\
 & + \varepsilon_{13}
 \end{aligned}$$

**Model 14**

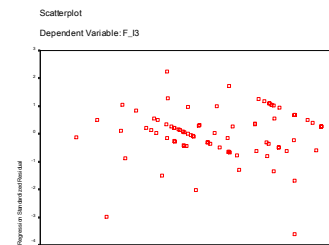
$$\begin{aligned}
 ALC = & \alpha_{14} + \beta_{93} GA + \beta_{94} IAP + \beta_{95} IAE \\
 & + \beta_{95} IAE + \beta_{96} RF + \beta_{97} EU \\
 & + \beta_{98} MC + \beta_{99}(GA*MC) + \\
 & \beta_{100}(IAP*MC) + \beta_{101}(IAE*MC) \\
 & + \beta_{102}(RF*MC) + \beta_{103}(EU*MC) \\
 & + \beta_{104} FS + \beta_{105} FA + \varepsilon_{14}
 \end{aligned}$$

**Model 15**

$$\begin{aligned}
 APO = & \alpha_{15} + \beta_{106} GA + \beta_{107} IAP \\
 & + \beta_{108} IAE + \beta_{109} RF + \\
 & \beta_{110} EU + \beta_{111} MC + \\
 & \beta_{112}(GA*MC) + \beta_{112}(GA*MC) \\
 & + \beta_{113}(IAP*MC) + \beta_{114}(IAE*MC) \\
 & + \beta_{115}(RF*MC) + \beta_{116}(EU*MC) \\
 & + \beta_{117} FS + \beta_{118} FA + \varepsilon_{15}
 \end{aligned}$$

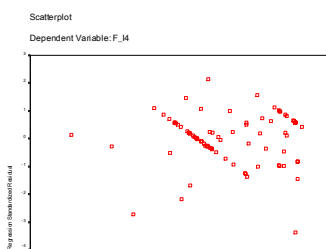
**Model 16**

$$\begin{aligned}
 AMT = & \alpha_{16} + \beta_{119} GA + \beta_{120} IAP \\
 & + \beta_{121} IAE + \beta_{122} RF + \\
 & \beta_{123} EU + \beta_{124} MC + \\
 & \beta_{125}(GA*MC) + \beta_{126}(IAP*MC) \\
 & + \beta_{127}(IAE*MC) + \beta_{128}(RF*MC) \\
 & + \beta_{129}(EU*MC) + \beta_{130} FS + \\
 & \beta_{131} FA + \varepsilon_{16}
 \end{aligned}$$

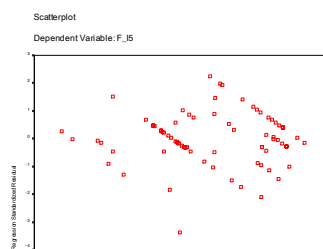


**Model 17**

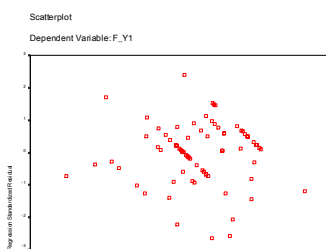
$$\begin{aligned}
 APC &= \alpha_{17} + \beta_{132} GA + \beta_{133} IAP \\
 &+ \beta_{134} IAE + \beta_{135} RF + \\
 &\beta_{136} EU + \beta_{137} MC + \\
 &\beta_{138}(GA*MC) + \beta_{139}(IAP*MC) \\
 &+ \beta_{140}(IAE*MC) + \beta_{141}(RF*MC) \\
 &+ \beta_{142}(EU*MC) + \beta_{143} FS + \\
 &\beta_{144} FA + \varepsilon_{17}
 \end{aligned}$$

**Model 18**

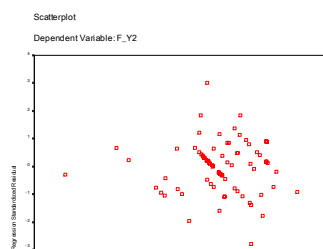
$$\begin{aligned}
 ACV &= \alpha_{18} + \beta_{145} GA + \beta_{146} IAP + \\
 &\beta_{147} IAE + \beta_{148} RF + \\
 &\beta_{149} EU + \beta_{150} MC + \\
 &\beta_{151}(GA*MC) + \beta_{152}(IAP*MC) \\
 &+ \beta_{153}(IAE*MC) + \beta_{154}(RF*MC) + \\
 &\beta_{155}(EU*MC) + \beta_{156} FS + \beta_{157} FA \\
 &+ \varepsilon_{18}
 \end{aligned}$$

**Model 19**

$$\begin{aligned}
 IAR &= \alpha_{19} + \beta_{158} ALC + \beta_{159} APO \\
 &+ \beta_{160} AMT + \beta_{161} APC \\
 &+ \beta_{162} ACV + \beta_{163} IAL + \\
 &\beta_{164}(ALC * IAL) + \beta_{165}(APO * IAL) \\
 &+ \beta_{166}(AMT * IAL) + \beta_{167}(APC * IAL) \\
 &+ \beta_{168}(ACV * IAL) + \beta_{169} FS + \beta_{170} FA \\
 &+ \varepsilon_{19}
 \end{aligned}$$

**Model 20**

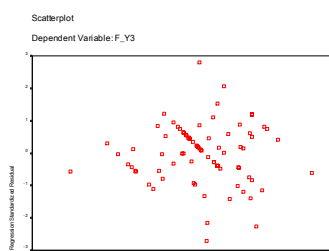
$$\begin{aligned}
 : IAQ &= \alpha_{20} + \beta_{171} ALC + \beta_{172} APO \\
 &+ \beta_{173} AMT + \beta_{174} APC + \\
 &\beta_{175} ACV + \beta_{176} IAL + \\
 &\beta_{177}(ALC * IAL) + \beta_{178}(APO * IAL) \\
 &+ \beta_{179}(AMT * IAL) + \beta_{180}(APC * IAL) \\
 &+ \beta_{181}(ACV * IAL) + \beta_{182} FS + \\
 &\beta_{183} FA + \varepsilon_{20}
 \end{aligned}$$



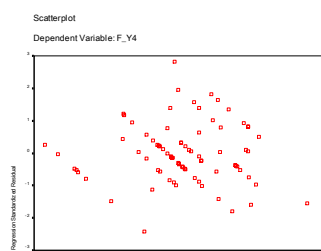


**Model 21**

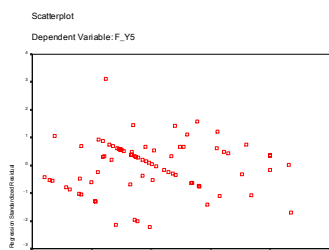
$$\begin{aligned}
 IAU = & \alpha_{21} + \beta_{184} ALC + \beta_{185} APO \\
 & + \beta_{186} AMT + \beta_{187} APC \\
 & + \beta_{188} ACV + \beta_{189} IAL + \\
 & \beta_{190}(ALC * IAL) + \beta_{191}(APO * IAL) \\
 & + \beta_{192}(AMT * IAL) + \beta_{193}(APC * IAL) \\
 & + \beta_{194}(ACV * IAL) + \beta_{195} FS + \\
 & \beta_{196} FA + \varepsilon_{21}
 \end{aligned}$$

**Model 22**

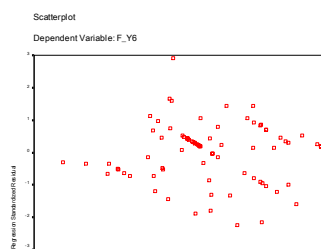
$$\begin{aligned}
 IV = & \alpha_{22} + \beta_{197} ALC + \beta_{198} APO + \\
 & \beta_{199} AMT + \beta_{200} APC + \beta_{201} ACV \\
 & + \beta_{202} IAL + \beta_{203}(ALC * IAL) + \\
 & \beta_{204}(APO * IAL) + \beta_{205}(AMT * IAL) \\
 & + \beta_{206}(APC * IAL) + \beta_{207}(ACV * IAL) \\
 & + \beta_{208} FS + \beta_{209} FA + \varepsilon_{22}
 \end{aligned}$$

**Model 23**

$$\begin{aligned}
 BDM = & \alpha_{23} + \beta_{210} ALC + \beta_{211} APO \\
 & + \beta_{212} AMT + \beta_{213} APC + \beta_{214} ACV \\
 & + \beta_{215} IAL + \beta_{216}(ALC * IAL) + \\
 & \beta_{217}(APO * IAL) + \beta_{218}(AMT * IAL) \\
 & + \beta_{219}(APC * IAL) + \beta_{220}(ACV * IAL) \\
 & + \beta_{221} FS + \beta_{222} FA + \varepsilon_{23}
 \end{aligned}$$

**Model 24**

$$\begin{aligned}
 FGA = & \alpha_{24} + \beta_{223} ALC + \beta_{224} APO \\
 & + \beta_{225} AMT + \beta_{226} APC + \beta_{227} ACV \\
 & + \beta_{228} IAL + \beta_{229}(ALC * IAL) + \\
 & \beta_{230}(APO * IAL) + \beta_{231}(AMT * IAL) \\
 & + \beta_{232}(APC * IAL) + \beta_{233}(ACV * IAL) \\
 & + \beta_{234} FS + \beta_{235} FA + \varepsilon_{24}
 \end{aligned}$$



### 3. Independence of the Error Terms

In regression, there is an assumption that each predicted value is independent. These mean that the predicted value is not related to any other prediction. In this research, Durbin-Watson statistic was used to assess that the error terms are independence. The results of the independence of error terms assumption testing are shown as the following in Table 1F. The results find that most of the D values are higher than the upper bounds. This finding can be included that the independence of the error terms assumption is met.

Table 1F: The Results of the Independence of Error Terms

Number	Model	Durbin-Watson (The value of D statistic)
1	$IAR = \alpha_1 + \beta_1 ALC + \beta_2 APO + \beta_3 AMT + \beta_4 APC + \beta_5 ACV + \beta_6 IAQ + \beta_7 FS + \beta_8 FA + \varepsilon_1$	1.736
2	$IAQ = \alpha_2 + \beta_9 ALC + \beta_{10} APO + \beta_{11} AMT + \beta_{12} APC + \beta_{13} ACV + \beta_{14} FS + \beta_{15} FA + \varepsilon_2$	1.925
3	$IAU = \alpha_3 + \beta_{16} ALC + \beta_{17} APO + \beta_{18} AMT + \beta_{19} APC + \beta_{20} ACV + \beta_{21} IAQ + \beta_{22} FS + \beta_{23} FA + \varepsilon_3$	1.561
4	$IV = \alpha_4 + \beta_{24} ALC + \beta_{25} APO + \beta_{26} AMT + \beta_{27} APC + \beta_{28} ACV + \beta_{29} FS + \beta_{30} FA + \varepsilon_4$	2.156
5	$BDM = \alpha_5 + \beta_{31} ALC + \beta_{32} APO + \beta_{33} AMT + \beta_{34} APC + \beta_{35} ACV + \beta_{36} FS + \beta_{37} FA + \varepsilon_5$	2.001
6	$FGA = \alpha_6 + \beta_{38} ALC + \beta_{39} APO + \beta_{40} AMT + \beta_{41} APC + \beta_{42} ACV + \beta_{43} IV + \beta_{44} BDM + \beta_{45} FS + \beta_{46} FA + \varepsilon_6$	1.628



Table 1F: The Results of the Independence of Error Terms (Continued)

Number	Model	Durbin-Watson (The value of D statistic)
7	$IV = \alpha_7 + \beta_{47} IAR + \beta_{48} IAQ + \beta_{49} IAU + \beta_{50} FS + \beta_{51} FA + \varepsilon_7$ $BDM = \alpha_8 + \beta_{52} IAR + \beta_{53} IAQ + \beta_{54} IAU + \beta_{55} IV + \beta_{56} FS + \beta_{57} FA + \varepsilon_8$	1.968
8	$BDM = \alpha_8 + \beta_{52} IAR + \beta_{53} IAQ + \beta_{54} IAU + \beta_{55} IV + \beta_{56} FS + \beta_{57} FA + \varepsilon_8$	1.655
9	$ALC = \alpha_9 + \beta_{58} GA + \beta_{59} IAP + \beta_{60} IAE + \beta_{61} RF + \beta_{62} EU + \beta_{63} FS + \beta_{64} FA + \varepsilon_9$	1.875
10	$APO = \alpha_{10} + \beta_{65} GA + \beta_{66} IAP + \beta_{67} IAE + \beta_{68} RF + \beta_{69} EU + \beta_{70} FS + \beta_{71} FA + \varepsilon_{10}$	1.913
11	$AMT = \alpha_{11} + \beta_{72} GA + \beta_{73} IAP + \beta_{74} IAE + \beta_{75} RF + \beta_{76} EU + \beta_{77} FS + \beta_{78} FA + \varepsilon_{11}$	1.702
12	$APC = \alpha_{12} + \beta_{79} GA + \beta_{80} IAP + \beta_{81} IAE + \beta_{82} RF + \beta_{83} EU + \beta_{84} FS + \beta_{85} FA + \varepsilon_{12}$	1.766
13	$ACV = \alpha_{13} + \beta_{86} GA + \beta_{87} IAP + \beta_{88} IAE + \beta_{89} RF + \beta_{90} EU + \beta_{91} FS + \beta_{92} FA + \varepsilon_{13}$	1.678
14	$ALC = \alpha_{14} + \beta_{93} GA + \beta_{94} IAP + \beta_{95} IAE + \beta_{96} RF + \beta_{97} EU + \beta_{98} MC + \beta_{99}(GA*MC) + \beta_{100}(IAP*MC) + \beta_{101}(IAE*MC) + \beta_{102}(RF*MC) + \beta_{103}(EU*MC) + \beta_{104} FS + \beta_{105} FA + \varepsilon_{14}$	1.851
15	$APO = \alpha_{15} + \beta_{106} GA + \beta_{107} IAP + \beta_{108} IAE + \beta_{109} RF + \beta_{110} EU + \beta_{111} MC + \beta_{112}(GA*MC) + \beta_{113}(IAP*MC) + \beta_{114}(IAE*MC) + \beta_{115}(RF*MC) + \beta_{116}(EU*MC) + \beta_{117} FS + \beta_{118} FA + \varepsilon_{15}$	1.881



Table 1F: The Results of the Independence of Error Terms (Continued)

Number	Model	Durbin-Watson (The value of D statistic)
16	$AMT = \alpha_{16} + \beta_{119} GA + \beta_{120} IAP + \beta_{121} IAE + \beta_{122} RF + \beta_{123} EU + \beta_{124} MC + \beta_{125}(GA*MC) + \beta_{126}(IAP*MC) + \beta_{127}(IAE*MC) + \beta_{128}(RF*MC) + \beta_{129}(EU*MC) + \beta_{130} FS + \beta_{131} FA + \varepsilon_{16}$	1.879
17	$APC = \alpha_{17} + \beta_{132} GA + \beta_{133} IAP + \beta_{134} IAE + \beta_{135} RF + \beta_{136} EU + \beta_{137} MC + \beta_{138}(GA*MC) + \beta_{139}(IAP*MC) + \beta_{140}(IAE*MC) + \beta_{141}(RF*MC) + \beta_{142}(EU*MC) + \beta_{143} FS + \beta_{144} FA + \varepsilon_{17}$	1.920
18	$ACV = \alpha_{18} + \beta_{145} GA + \beta_{146} IAP + \beta_{147} IAE + \beta_{148} RF + \beta_{149} EU + \beta_{150} MC + \beta_{151}(GA*MC) + \beta_{152}(IAP*MC) + \beta_{153}(IAE*MC) + \beta_{154}(RF*MC) + \beta_{155}(EU*MC) + \beta_{156} FS + \beta_{157} FA + \varepsilon_{18}$	1.603
19	$IAR = \alpha_{19} + \beta_{158} ALC + \beta_{159} APO + \beta_{160} AMT + \beta_{161} APC + \beta_{162} ACV + \beta_{163} IAL + \beta_{164}(ALC *IAL) + \beta_{165}(APO *IAL) + \beta_{166}(AMT *IAL) + \beta_{167}(APC *IAL) + \beta_{168}(ACV *IAL) + \beta_{169} FS + \beta_{170} FA + \varepsilon_{19}$	1.983



Table 1F: The Results of the Independence of Error Terms (Continued)

Number	Model	Durbin-Watson (The value of D statistic)
20	$IAQ = \alpha_{20} + \beta_{171}ALC + \beta_{172}APO + \beta_{173}AMT + \beta_{174}APC + \beta_{175}ACV + \beta_{176}IAL + \beta_{177}(ALC * IAL) + \beta_{178}(APO * IAL) + \beta_{179}(AMT * IAL) + \beta_{180}(APC * IAL) + \beta_{181}(ACV * IAL) + \beta_{182}FS + \beta_{183}FA + \epsilon_{20}$	1.892
21	$IAU = \alpha_{21} + \beta_{184}ALC + \beta_{185}APO + \beta_{186}AMT + \beta_{187}APC + \beta_{188}ACV + \beta_{189}IAL + \beta_{190}(ALC * IAL) + \beta_{191}(APO * IAL) + \beta_{192}(AMT * IAL) + \beta_{193}(APC * IAL) + \beta_{194}(ACV * IAL) + \beta_{195}FS + \beta_{196}FA + \epsilon_{21}$	2.044
22	$IV = \alpha_{22} + \beta_{197}ALC + \beta_{198}APO + \beta_{199}AMT + \beta_{200}APC + \beta_{201}ACV + \beta_{202}IAL + \beta_{203}(ALC * IAL) + \beta_{204}(APO * IAL) + \beta_{205}(AMT * IAL) + \beta_{206}(APC * IAL) + \beta_{207}(ACV * IAL) + \beta_{208}FS + \beta_{209}FA + \epsilon_{22}$	2.358
23	$BDM = \alpha_{23} + \beta_{210}ALC + \beta_{211}APO + \beta_{212}AMT + \beta_{213}APC + \beta_{214}ACV + \beta_{215}IAL + \beta_{216}(ALC * IAL) + \beta_{217}(APO * IAL) + \beta_{218}(AMT * IAL) + \beta_{219}(APC * IAL) + \beta_{220}(ACV * IAL) + \beta_{221}FS + \beta_{222}FA + \epsilon_{23}$	2.049



Table 1F: The Results of the Independence of Error Terms (Continued)

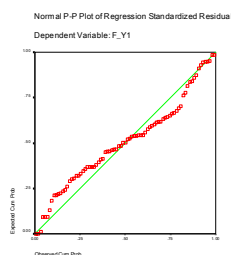
Number	Model	Durbin-Watson (The value of D statistic)
24	$FGA = \alpha_{24} + \beta_{223} ALC + \beta_{224} APO + \beta_{225} AMT + \beta_{226} APC + \beta_{227} ACV + \beta_{228} IAL + \beta_{229}(ALC * IAL) + \beta_{230}(APO * IAL) + \beta_{231}(AMT * IAL) + \beta_{232}(APC * IAL) + \beta_{233}(ACV * IAL) + \beta_{234} FS + \beta_{235} FA + \varepsilon_{24}$	1.704

#### 4. Normality of the Error Term Distribution

The normal probability plot of the residuals is used to check the normality of error term distribution. “The normal distribution makes a straight diagonal line, and the plotter residuals are compared with the diagonal. If a distribution is normal, the residual line closely follows the diagonal.” (Hair et al., 2010, p.185). As shown in the following, the values fall along the diagonal with no systematic departures. Therefore, the assumption of normality is met.

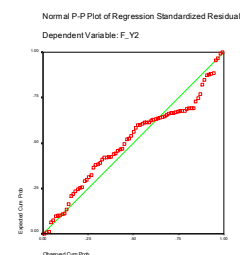
##### Model 1

$$IAR = \alpha_1 + \beta_1 ALC + \beta_2 APO + \beta_3 AMT + \beta_4 APC + \beta_5 ACV + \beta_6 IAQ + \beta_7 FS + \beta_8 FA + \varepsilon_1$$



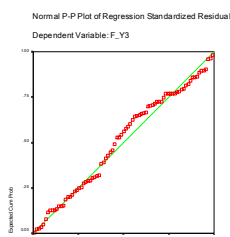
##### Model 2

$$IAQ = \alpha_2 + \beta_9 ALC + \beta_{10} APO + \beta_{11} AMT + \beta_{12} APC + \beta_{13} ACV + \beta_{14} FS + \beta_{15} FA + \varepsilon_2$$

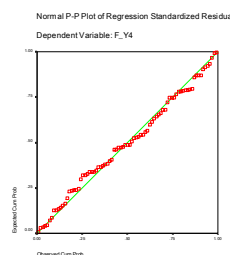


**Model 3**

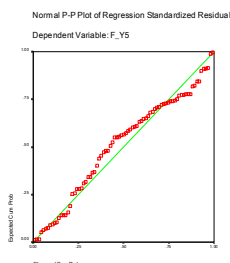
$$IAU = \alpha_3 + \beta_{16} ALC + \beta_{17} APO + \beta_{18} AMT + \beta_{19} APC + \beta_{20} ACV + \beta_{21} IAQ + \beta_{22} FS + \beta_{23} FA + \varepsilon_3$$

**Model 4**

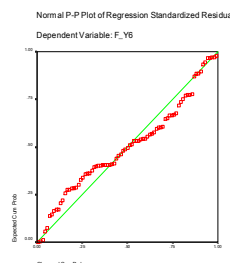
$$IV = \alpha_4 + \beta_{24} ALC + \beta_{25} APO + \beta_{26} AMT + \beta_{27} APC + \beta_{28} ACV + \beta_{29} FS + \beta_{30} FA + \varepsilon_4$$

**Model 5**

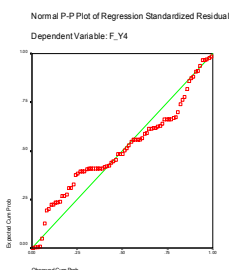
$$BDM = \alpha_5 + \beta_{31} ALC + \beta_{32} APO + \beta_{33} AMT + \beta_{34} APC + \beta_{35} ACV + \beta_{36} FS + \beta_{37} FA + \varepsilon_5$$

**Model 6**

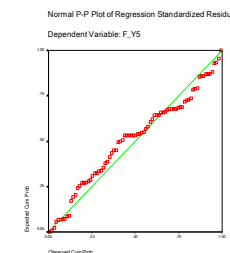
$$FGA = \alpha_6 + \beta_{38} ALC + \beta_{39} APO + \beta_{40} AMT + \beta_{41} APC + \beta_{42} ACV + \beta_{43} IV + \beta_{44} BDM + \beta_{45} FS + \beta_{46} FA + \varepsilon_6$$

**Model 7**

$$IV = \alpha_7 + \beta_{47} IAR + \beta_{48} IAQ + \beta_{49} IAU + \beta_{50} FS + \beta_{51} FA + \varepsilon_7$$

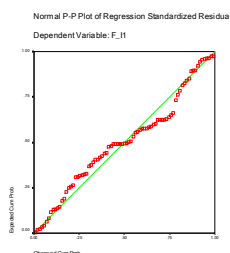
**Model 8**

$$BDM = \alpha_8 + \beta_{52} IAR + \beta_{53} IAQ + \beta_{54} IAU + \beta_{55} IV + \beta_{56} FS + \beta_{57} FA + \varepsilon_8$$

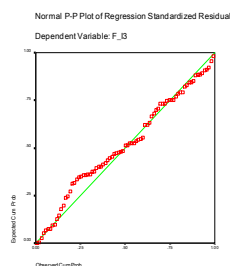


**Model 9**

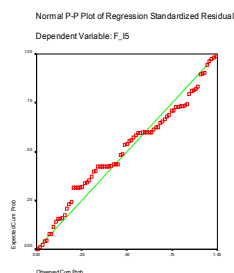
$$\begin{aligned}
 ALC &= \alpha_9 + \beta_{58} GA + \beta_{59} IAP \\
 &+ \beta_{60} IAE + \beta_{61} RF + \\
 &\beta_{62} EU + \beta_{63} FS + \beta_{64} FA \\
 &+ \varepsilon_9
 \end{aligned}$$

**Model 11**

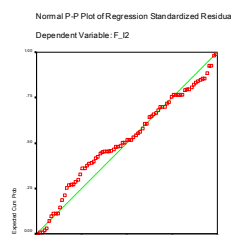
$$\begin{aligned}
 AMT &= \alpha_{11} + \beta_{72} GA + \beta_{73} IAP \\
 &+ \beta_{74} IAE + \beta_{75} RF + \\
 &\beta_{76} EU + \beta_{77} FS + \beta_{78} FA \\
 &+ \varepsilon_{11}
 \end{aligned}$$

**Model 13**

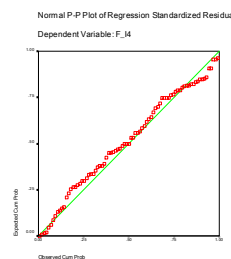
$$\begin{aligned}
 ACV &= \alpha_{13} + \beta_{86} GA + \beta_{87} IAP \\
 &+ \beta_{88} IAE + \beta_{89} RF + \\
 &\beta_{90} EU + \beta_{91} FS + \beta_{92} FA \\
 &+ \varepsilon_{13}
 \end{aligned}$$

**Model 10**

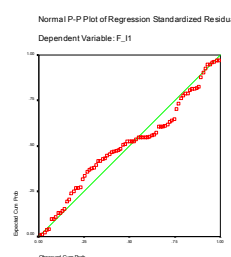
$$\begin{aligned}
 APO &= \alpha_{10} + \beta_{65} GA + \beta_{66} IAP + \\
 &\beta_{67} IAE + \beta_{68} RF + \beta_{69} EU + \\
 &\beta_{70} FS + \beta_{71} FA + \varepsilon_{10}
 \end{aligned}$$

**Model 12**

$$\begin{aligned}
 APC &= \alpha_{12} + \beta_{79} GA + \beta_{80} IAP \\
 &+ \beta_{81} IAE + \beta_{82} RF + \\
 &\beta_{83} EU + \beta_{84} FS + \beta_{85} FA \\
 &+ \varepsilon_{12}
 \end{aligned}$$

**Model 14**

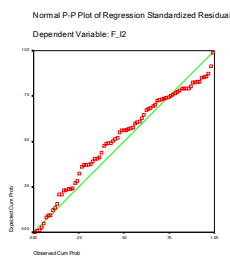
$$\begin{aligned}
 ALC &= \alpha_{14} + \beta_{93} GA + \beta_{94} IAP + \beta_{95} IAE \\
 &+ \beta_{95} IAE + \beta_{96} RF + \beta_{97} EU \\
 &+ \beta_{98} MC + \beta_{99}(GA*MC) + \\
 &\beta_{100}(IAP*MC) + \beta_{101}(IAE*MC) \\
 &+ \beta_{102}(RF*MC) + \beta_{103}(EU*MC) \\
 &+ \beta_{104} FS + \beta_{105} FA + \varepsilon_{14}
 \end{aligned}$$



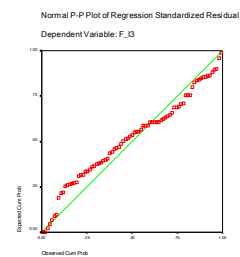


**Model 15**

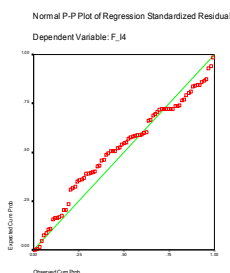
$$\begin{aligned}
 APO &= \alpha_{15} + \beta_{106} GA + \beta_{107} IAP \\
 &+ \beta_{108} IAE + \beta_{109} RF + \\
 &\beta_{110} EU + \beta_{111} MC + \\
 &\beta_{112}(GA*MC) + \beta_{112}(GA*MC) \\
 &+ \beta_{113}(IAP*MC) + \beta_{114}(IAE*MC) \\
 &+ \beta_{115}(RF*MC) + \beta_{116}(EU*MC) \\
 &+ \beta_{117} FS + \beta_{118} FA + \varepsilon_{15}
 \end{aligned}$$

**Model 16**

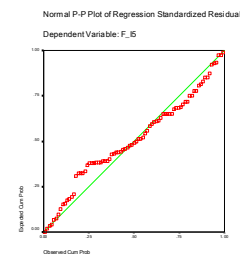
$$\begin{aligned}
 AMT &= \alpha_{16} + \beta_{119} GA + \beta_{120} IAP \\
 &+ \beta_{121} IAE + \beta_{122} RF + \\
 &\beta_{123} EU + \beta_{124} MC + \\
 &\beta_{125}(GA*MC) + \beta_{126}(IAP*MC) \\
 &+ \beta_{127}(IAE*MC) + \beta_{128}(RF*MC) \\
 &+ \beta_{129}(EU*MC) + \beta_{130} FS + \\
 &\beta_{131} FA + \varepsilon_{16}
 \end{aligned}$$

**Model 17**

$$\begin{aligned}
 APC &= \alpha_{17} + \beta_{132} GA + \beta_{133} IAP \\
 &+ \beta_{134} IAE + \beta_{135} RF + \\
 &\beta_{136} EU + \beta_{137} MC + \\
 &\beta_{138}(GA*MC) + \beta_{139}(IAP*MC) \\
 &+ \beta_{140}(IAE*MC) + \beta_{141}(RF*MC) \\
 &+ \beta_{142}(EU*MC) + \beta_{143} FS + \\
 &\beta_{144} FA + \varepsilon_{17}
 \end{aligned}$$

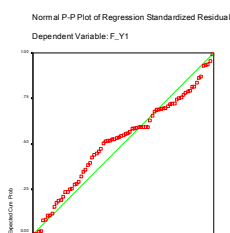
**Model 18**

$$\begin{aligned}
 ACV &= \alpha_{18} + \beta_{145} GA + \beta_{146} IAP + \\
 &\beta_{147} IAE + \beta_{148} RF + \\
 &\beta_{149} EU + \beta_{150} MC + \\
 &\beta_{151}(GA*MC) + \beta_{152}(IAP*MC) \\
 &+ \beta_{153}(IAE*MC) + \beta_{154}(RF*MC) + \\
 &\beta_{155}(EU*MC) + \beta_{156} FS + \beta_{157} FA \\
 &+ \varepsilon_{18}
 \end{aligned}$$

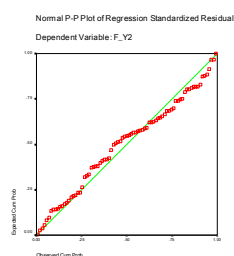


**Model 19**

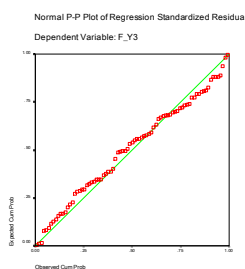
$$\begin{aligned}
 IAR = & \alpha_{19} + \beta_{158} ALC + \beta_{159} APO \\
 & + \beta_{160} AMT + \beta_{161} APC \\
 & + \beta_{162} ACV + \beta_{163} IAL + \\
 & \beta_{164}(ALC *IAL) + \beta_{165}(APO *IAL) \\
 & + \beta_{166}(AMT *IAL) + \beta_{167}(APC *IAL) \\
 & + \beta_{168}(ACV *IAL) + \beta_{169}FS + \beta_{170}FA \\
 & + \varepsilon_{19}
 \end{aligned}$$

**Model 20**

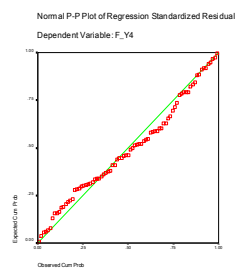
$$\begin{aligned}
 : IAQ = & \alpha_{20} + \beta_{171}ALC + \beta_{172} APO \\
 & + \beta_{173} AMT + \beta_{174} APC + \\
 & \beta_{175} ACV + \beta_{176}IAL + \\
 & \beta_{177}(ALC *IAL) + \beta_{178}(APO *IAL) \\
 & + \beta_{179}(AMT *IAL) + \beta_{180}(APC *IAL) \\
 & + \beta_{181}(ACV *IAL) + \beta_{182}FS + \\
 & \beta_{183}FA + \varepsilon_{20}
 \end{aligned}$$

**Model 21**

$$\begin{aligned}
 IAU = & \alpha_{21} + \beta_{184} ALC + \beta_{185} APO \\
 & + \beta_{186}AMT + \beta_{187} APC \\
 & + \beta_{188} ACV + \beta_{189}IAL + \\
 & \beta_{190}(ALC *IAL) + \beta_{191}(APO *IAL) \\
 & + \beta_{192}(AMT *IAL) + \beta_{193}(APC *IAL) \\
 & + \beta_{194}(ACV *IAL) + \beta_{195}FS + \\
 & \beta_{196}FA + \varepsilon_{21}
 \end{aligned}$$

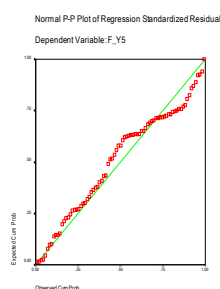
**Model 22**

$$\begin{aligned}
 IV = & \alpha_{22} + \beta_{197} ALC + \beta_{198} APO + \\
 & \beta_{199}AMT + \beta_{200} APC + \beta_{201} ACV \\
 & + \beta_{202}IAL + \beta_{203}(ALC *IAL) + \\
 & \beta_{204}(APO *IAL) + \beta_{205}(AMT *IAL) \\
 & + \beta_{206}(APC *IAL) + \beta_{207}(ACV *IAL) \\
 & + \beta_{208}FS + \beta_{209}FA + \varepsilon_{22}
 \end{aligned}$$

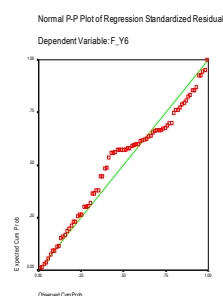


**Model 23**

$$\begin{aligned}
 BDM = & \alpha_{23} + \beta_{210} ALC + \beta_{211} APO \\
 & + \beta_{212} AMT + \beta_{213} APC + \beta_{214} ACV \\
 & + \beta_{215} IAL + \beta_{216} (ALC * IAL) + \\
 & \beta_{217} (APO * IAL) + \beta_{218} (AMT * IAL) \\
 & + \beta_{219} (APC * IAL) + \beta_{220} (ACV * IAL) \\
 & + \beta_{221} FS + \beta_{222} FA + \varepsilon_{23}
 \end{aligned}$$

**Model 24**

$$\begin{aligned}
 FGA = & \alpha_{24} + \beta_{223} ALC + \beta_{224} APO \\
 & + \beta_{225} AMT + \beta_{226} APC + \beta_{227} ACV \\
 & + \beta_{228} IAL + \beta_{229} (ALC * IAL) + \\
 & \beta_{230} (APO * IAL) + \beta_{231} (AMT * IAL) \\
 & + \beta_{232} (APC * IAL) + \beta_{233} (ACV * IAL) \\
 & + \beta_{234} FS + \beta_{235} FA + \varepsilon_{24}
 \end{aligned}$$



## **APPENDIX G**

### **Cover Letters and Questionnaire: English Version**





**Questionnaire to the Ph.D. Dissertation**  
**Research entitled “Internal Audit Transparency and Firm Goal Achievement :  
 An Empirical Investigation of Financial Businesses in Thailand”**

---

**Dear Sir,**

This research is a part of doctoral dissertation of Mrs.Varipin Mongkolsamai at the Maharakham Business School, Maharakham University, Thailand. The objective of this research is to investigate the relationships between internal audit transparency and firm goal achievement of financial businesses in Thailand. The questionnaire is divided into 7 parts

**Part1:** General information of internal audit manager of financial businesses in Thailand

**Part2:** General Information of financial businesses in Thailand

**Part3:** Opinions in internal audit transparency of financial businesses in Thailand

**Part4:** Opinions in consequences of internal audit transparency of financial businesses in Thailand

**Part5:** Opinions in internal factor that influence to internal audit of financial businesses in Thailand

**Part6:** Opinions in external factor that influence to internal audit of financial businesses in Thailand

**Part7:** Recommendation and suggestions in internal audit transparency

Your answer will be kept as confidentiality and your information will not be shared with any outsider party without your permission.

If you want a summary of this research, please indicate your E-mail address or attach your business card with this questionnaire. The summary will be mailed to you as soon as the analysis is completed.

Thank you for your time answering all the questions. I have no doubt that your answer will provide valuable information for academic advancement. If you have any questions with respect to this research, please contact me directly.

Sincerely yours,

(Mrs Varipin Mongkolsamai)  
 Ph.D. Student in Accounting  
 Maharakham Business School  
 Maharakham University, Thailand

Contact Info:

Office No: 043-754333

Fax No: 043-754322

Mobile phone: 081-8832508

E-mail: [Varipin1@hotmail.com](mailto:Varipin1@hotmail.com)



**Section 1: General information of Internal Audit Manager of financial businesses in Thailand**

## 1. Gender

 Male Female

## 2. Age

 Less than 30 years old 30 - 40 years old 41- 50 years old More than 50 years old

## 3. Marital status

 Single Married Divorced

## 4. Education levels

 Bachelor's degree or lower Higher than bachelor's degree

## 5. Work experience

 Less than 5 years 5-10 years 11 - 15 years more than 15 years

## 6. Average revenues per month

 Less than 50,000 Baht 50,000 - 70,000 Baht 70,001 - 90,000 Baht More than 90,000 Baht

## 7. Working position at present

 Internal audit director Internal audit manager Others.....

## Section2: General Information of financial businesses in Thailand

1. Industrial category
 

<input type="checkbox"/> Thai commercial bank	<input type="checkbox"/> Foreign bank representatives
<input type="checkbox"/> Foreign banks branches	<input type="checkbox"/> Assets management companies
<input type="checkbox"/> Finance companies	<input type="checkbox"/> Specialized financial institutions
<input type="checkbox"/> Credit fanciers	<input type="checkbox"/> Credit card Company
<input type="checkbox"/> Life Insurance Company	<input type="checkbox"/> Insurance Company
<input type="checkbox"/> Personal Loan Company	
<input type="checkbox"/> Others.....	
  
2. Authorized capitals of the firm at present
 

<input type="checkbox"/> Less than 1,000,000,000 Baht	<input type="checkbox"/> 1,000,000,000 - 5,000,000,000 Baht
<input type="checkbox"/> 5,000,000,001- 90,000,000,000 Baht	<input type="checkbox"/> More than 9,000,000,000 Baht
  
3. Total assets of the firm at present
 

<input type="checkbox"/> Less than 10,000,000,000 Baht	<input type="checkbox"/> 10,000,000,000 - 50,000,000,000 Baht
<input type="checkbox"/> 50,000,000,001 - 90,000,000,000 Baht	<input type="checkbox"/> More than 90,000,000,000 Baht
  
4. The period of time in operating business
 

<input type="checkbox"/> Less than 5 years	<input type="checkbox"/> 5-10 years
<input type="checkbox"/> 11-15 years	<input type="checkbox"/> More than 15 years
  
5. Number of employees at present
 

<input type="checkbox"/> Less than 100	<input type="checkbox"/> 100 - 500
<input type="checkbox"/> 501 – 900	<input type="checkbox"/> More than 900



### Section 3: Opinions in internal audit transparency of financial businesses in Thailand

Internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
<b><u>Internal Audit Legitimacy Compliance</u></b>					
1. Firm focuses on internal audit practices that follow with professional standard and regulation for efficient internal audit practices.	5	4	3	2	1
2. Firm strongly adheres to consistent internal audit practices with professional standard and regulation for confident to internal audit quality.	5	4	3	2	1
3. Firm emphasizes to internal audit practices with tracking of new professional standard and regulation to improve the for appropriate internal audit practices.	5	4	3	2	1
4. Firm trusts on internal audit practices that follow with professional standard and regulation will lead to be acceptable and reliable from stakeholders.	5	4	3	2	1
<b><u>Internal Audit Process Openness</u></b>					
5. Firm relies on the internal audit plan is prepared clearly and covers all activities of the organization in its entirety.	5	4	3	2	1
6. Firm strongly adheres to prepare audit plan which can help to find potential risk timely and help to deal those risks efficiently.	5	4	3	2	1
7. Firm relies on the internal audit plan is prepared clearly and can be used to determine the audit scope and planning.	5	4	3	2	1
8. Firm relies on the internal audit plan can be used to determine the audit time and necessary audit resources systematically and concisely.	5	4	3	2	1
9. Firm focuses on disclose the internal audit plan for the stakeholders to gain an acceptable and reliable result.	5	4	3	2	1
<b><u>Internal Audit Method Trust</u></b>					
10. Firm relies on the guideline in audit program can be used to determine the audit procedures clearly.	5	4	3	2	1





## Section 3 (Continued)

Internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
11. Firm relies on the audit program can be used to determine the audit procedures which cover the audit scope and audit objective.	5	4	3	2	1
12. Firm realizes the importance of audit program which is the well instruction for staff to audit clearly and concisely.	5	4	3	2	1
13. Firm believes that the audit program can help to determine the necessary time, place, and staff to audit work.	5	4	3	2	1
14. Firm believes that the audit program can help to control audit work honestly, independently, and completely and be acceptable and reliable from stakeholders.	5	4	3	2	1
<b><u>Internal Audit Practice Clarity</u></b>					
15. Firm focuses on internal audit practices that follow with professional standard and regulation that lead to organized and clear work.	5	4	3	2	1
16. Firm relies on the internal auditor performs work accurately cause to acquire audit scope and audit objective.	5	4	3	2	1
17. Firm relies on the internal auditor performs work to the guideline in audit program can gain an adequate and appropriate evidences.	5	4	3	2	1
18. Firm relies on the internal auditor performs work and record the audit finding continuously and consistently cause to acquire audit evidence accurately and completeness.	5	4	3	2	1
19. Firm trusts on professional standard and regulation practices that lead to acceptable and reliable for stakeholders.	5	4	3	2	1
<b><u>Internal Audit Communication Visibility</u></b>					
20. Firm emphases to communicate audit outcomes accurately and completely which cause to acquire audit objectives.	5	4	3	2	1
21. Firm focuses on the positive communication to stakeholders to maximize the awareness and understanding audit outcomes.	5	4	3	2	1



### Section 3 (Continued)

Internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
22. Firm emphases to communicate audit outcomes openly and timely which lead to be high benefit for users.	5	4	3	2	1
23. Firm emphases to communicate audit outcomes to stakeholders as directly and orderly which lead to be benefit for users.	5	4	3	2	1
24. Firm emphases to communicate audit outcomes to stakeholders as frankly for confident of internal audit report.	5	4	3	2	1

### Section 4: Opinions in consequences of internal audit transparency of financial businesses in Thailand

Consequences of internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
<b><u>Internal Audit Quality</u></b>					
1. Firm enables to achieve the objective and goals of internal audit as well.	5	4	3	2	1
2. Firm enables to perform clear guideline in audit plan which can be used to practice concisely.	5	4	3	2	1
3. Firm can operate in accordance with the professional standard conforming and regulation cause to increase firm value and improve performance of firm.	5	4	3	2	1
4. Firm can convey audit outcomes to stakeholders clearly and timely.	5	4	3	2	1
<b><u>Internal Audit Reliability</u></b>					
5. Firm enables to perform clear guideline in audit plan which can use to practice in accordance with the audit scope and audit objective.	5	4	3	2	1
6. Firm enables to perform internal audit work independently cause to increase firm value and improve performance of firm.	5	4	3	2	1
7. Firm can perform internal audit work completely in accordance with professional standard and regulation.	5	4	3	2	1



## Section 4 (Continued)

Internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
8. Firm can perform internal audit work clearly and completely cause to acquire audit outcomes that is neutrality and free from bias.	5	4	3	2	1
<b><u>Internal Audit Usefulness</u></b>					
9. Firm can collect all information relevant to the decision of stakeholders to use information quickly and timely.	5	4	3	2	1
10. Firm can increase firm value and improve perform of firm.	5	4	3	2	1
11. Firm can find potential risks timely and deal those risks efficiently.	5	4	3	2	1
12. Firm can help stakeholders to make accurate decision.	5	4	3	2	1
<b><u>Information Value</u></b>					
13. Firm presented the crucial and relevant information which stakeholders can use to make accurate decision.	5	4	3	2	1
14. Firm presented the fast and appropriate information which respond stakeholders requirement timely.	5	4	3	2	1
15. Firm presented the information which demonstrate the real performance of business.	5	4	3	2	1
16. Firm presented information that is neutrality and free from bias which stakeholders can use to make efficient decision.	5	4	3	2	1
<b><u>Best Decision Making</u></b>					
17. Firm decides all issues with effectively and efficiently.	5	4	3	2	1
18. Firm has information for decisions in all activities in accordance with goals achievement.	5	4	3	2	1
19. Firm has judgment and considers systems in all issues that are important for business operations.	5	4	3	2	1
20. Firm can immediately use information for correct decision making and timeliness.	5	4	3	2	1
<b><u>Firm Goal Achievement</u></b>					
21. Firm enabled to achieve the objective and goals of organization as well.	5	4	3	2	1



#### Section 4 (Continued)

Internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
22. Firm has gained more monetary and non-monetary performance.	5	4	3	2	1
23. Firm confident that financial position and performance of firm are strong and stable.	5	4	3	2	1
24. Firm has the growth rate or market share increasingly.	5	4	3	2	1
25. Firm confident that firm has the ability and potential to maintain growth and survive in the future.	5	4	3	2	1

#### Section 5: Opinions in internal factor that influence to internal audit transparency of financial businesses in Thailand

Internal factor that influence to internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
<b><u>Governance Awareness</u></b>					
1. Firm believes that corporate governance can drive an organization to enhance the firm performance.	5	4	3	2	1
2. Firm emphasizes and strongly adheres to operating with disclosure and fairness to all parties.	5	4	3	2	1
3. Firm encourages people to participate in governance to achieve transparent operation.	5	4	3	2	1
4. Firm promotes setting a guideline and best practices to ensure accuracy are straight forward which help establish the recognized of the stakeholders.	5	4	3	2	1
<b><u>Internal Audit Professional</u></b>					
5. Firm focuses on complying professional standard that help internal audit achieve completely audit plan.	5	4	3	2	1
6. Firm strongly adheres to consistent internal audit practices with professional standard for confident of internal audit quality.	5	4	3	2	1
7. Firm focuses on internal audit practices that follow with professional standard for efficient internal audit practices.	5	4	3	2	1



## Section 5 (Continued)

Internal factor that influence to internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
8. Firm trusts on internal audit practices that follow with professional standard will lead to acceptable and reliable.	5	4	3	2	1
<b>Internal Audit Ethics</b>					
9. Firm focuses on internal audit practices that follow with code of ethics for neutrality and free from bias practices.	5	4	3	2	1
10. Firm focuses on internal audit practices that follow with code of ethics in accordance with necessary knowledge, skill, and experience.	5	4	3	2	1
11. Firm relies on internal audit practices that follow with code of ethics will lead to acceptable for stakeholders.	5	4	3	2	1
12. Firm relies on internal audit practices that follow with code of ethics will encourage the firm to disclose all relevant information for the decision of stakeholders.	5	4	3	2	1
<b>Morality Climate</b>					
13. Firm supports staffs within the organization commitment to moral principle.	5	4	3	2	1
14. Firm believes that moral principle can ensure the honest and sincere practices.	5	4	3	2	1
15. Firm believes that the administration under moral principle can strengthen the credibility for the organization and acceptable from stakeholders.	5	4	3	2	1
16. Firm believes that the administration under moral principle can help firm succeed.	5	4	3	2	1
<b>Internal Audit Learning</b>					
17. Firm believes that new knowledge can help firm succeed as well.	5	4	3	2	1
18. Firm focuses on learning and understanding all activities of organization in its entirety in order to get efficient audit work.	5	4	3	2	1
19. Firm focuses on learning and understanding available information technology can help firm to improve internal audit work as well.	5	4	3	2	1



## Section 5 (Continued)

External factor that influence to internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
20. Firm focuses on learning and understanding the situation changes in order to plan and improve internal audit practices appropriately.	5	4	3	2	1

## Section 6: Opinions in external factor that influence to internal audit transparency of financial businesses in Thailand

External factor that influence to internal audit transparency	Opinion Levels				
	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1
<b><u>Regulation Force</u></b>					
1. Many current regulations have an effect on improvement operational appropriate of firm.	5	4	3	2	1
2. Various current regulations have an effect on tracking and changing operational appropriate of firm.	5	4	3	2	1
3. Current stringent regulations cause firm to improve appropriate operational trend.	5	4	3	2	1
4. Current regulations have more stringent penalty that impacts firm to continuously operate quality.	5	4	3	2	1
<b><u>Environmental Uncertainty</u></b>					
5. Business environment intense changes impact firm to develop new strategy to increase competitive advantage.	5	4	3	2	1
6. Information technology rapidly changes impact firm to develop new strategy to maintain market share.	5	4	3	2	1
7. Many regulations impact firm to improve operational appropriate of firm.	5	4	3	2	1
8. Many current expectation of stakeholders impact firm to determine the operational of firm that focuses on the benefit and need of stakeholders.	5	4	3	2	1





## **APPENDIX H**

### **Cover Letters and Questionnaire: Thai Version**







ที่ ศธ 0530.10/419

คณะกรรมการบัญชีและการจัดการ  
มหาวิทยาลัยมหาสารคาม  
สำนักงานทรัพย์สินฯ จังหวัดมหาสารคาม  
44150

25 มีนาคม 2557

เรื่อง ขอความอนุเคราะห์กรอกแบบสอบถาม

เรียน ผู้อำนวยการฝ่ายตรวจสอบภายใน/ผู้จัดการฝ่ายตรวจสอบภายใน

ด้วย นางวาริพิน มงคลสมัย นิติระดับปริญญาเอก คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง “การดำเนินงานการตรวจสอบภายในของธุรกิจการเงินในประเทศไทย” ซึ่งเป็นส่วนหนึ่งของการทำวิทยานิพนธ์ หลักสูตรปริญญาโทบัณฑิต (ปร.ศ.) สาขาวิชาการบัญชี และการศึกษาในครั้งนี้ ได้เน้นให้บัณฑิตศึกษาข้อมูลด้วยตนเอง ดังนั้น เพื่อให้การจัดทำวิทยานิพนธ์ เป็นไปด้วยความเรียบร้อยและบรรลุวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขออนุญาตให้ นางวาริพิน มงคลสมัย ศึกษาและเก็บรวบรวมในรายละเอียดตามแบบสอบถามที่แนบมาพร้อมนี้

คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม หวังเป็นอย่างยิ่งว่าจะได้รับความอนุเคราะห์จากท่านในการให้ข้อมูลในครั้งนี้เป็นอย่างยิ่ง และขอขอบคุณมา ณ โอกาสนี้

ขอแสดงความนับถือ

(อาจารย์สิระพอล ศึกษานุกุล)

รองคณบดีฝ่ายพัฒนานิสิตและอาคารสถานที่ รักษาการแทน

คณบดีคณะกรรมการบัญชีและการจัดการ

มหาวิทยาลัยมหาสารคาม

สำนักบริหารหลักสูตรระดับบัณฑิตศึกษาและวิจัย

คณะกรรมการบัญชีและการจัดการ โทรศัพท์ (043) 754333 ต่อ 3410





## แบบสอบถามเพื่อการวิจัย

เรื่อง ความโปร่งใสของการตรวจสอบภายใน และความสามารถในการบรรลุผลสำเร็จตามเป้าหมาย:  
การตรวจสอบเชิงประจักษ์จากธุรกิจการเงินในประเทศไทย

### คำชี้แจง

โครงการวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาวิจัยเรื่อง “ความโปร่งใสของการตรวจสอบภายใน และความสามารถในการบรรลุผลสำเร็จตามเป้าหมาย: การตรวจสอบเชิงประจักษ์จากธุรกิจการเงินในประเทศไทย” เพื่อใช้เป็นข้อมูลในการจัดทำวิทยานิพนธ์ในระดับปริญญาเอกของผู้วิจัยในหลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาการบัญชี คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม มหาสารคาม โทรศัพท์ 043-754333

ข้าพเจ้าใคร่ขอความอนุเคราะห์จากท่านผู้ตอบแบบสอบถาม ได้โปรดตอบแบบสอบถามชุดนี้ โดยรายละเอียดของแบบสอบถามประกอบด้วยส่วนคำถาม 7 ตอน ดังนี้

ตอนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้บริหารฝ่ายตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจการเงินในประเทศไทย

ตอนที่ 3 ความคิดเห็นเกี่ยวกับความโปร่งใสของการตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจการเงินในประเทศไทย

ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่มีผลต่อการตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

ไทย

ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่มีผลต่อการตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

ไทย

ตอนที่ 7 ข้อคิดเห็นและข้อเสนอแนะเกี่ยวกับการตรวจสอบภายในและประเด็นที่เกี่ยวข้องธุรกิจการเงินในประเทศไทย

คำตอบของท่านจะถูกเก็บรักษาเป็นความลับ และจะไม่มีการใช้ข้อมูลใดๆ ที่เปิดเผยเกี่ยวกับตัวท่านในการรายงานข้อมูล รวมทั้งจะไม่มีการร่วมใช้ข้อมูลดังกล่าวกับบุคคลภายนอกอื่นใด โดยไม่ได้รับอนุญาตจากท่าน ท่านต้องการรายงานสรุปผลการวิจัยหรือไม่

( ) ต้องการ E - mail \_\_\_\_\_ ( ) ไม่ต้องการ

ผู้วิจัยขอขอบพระคุณที่ท่านได้กรุณาเสียสละเวลาในการตอบแบบสอบถามชุดนี้อย่างถูกต้องครบถ้วน และหวังเป็นอย่างยิ่งว่าข้อมูลที่ได้รับจากท่านจะเป็นประโยชน์อย่างยิ่งต่อการวิจัยในครั้งนี้ และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้ หากท่านมีข้อสงสัยประการใดเกี่ยวกับแบบสอบถาม โปรดติดต่อผู้วิจัย นางวาริพิน มงคลสมัย โทรศัพท์เคลื่อนที่ 081-8832508 หรือ E - mail : [varipin1@hotmail.com](mailto:varipin1@hotmail.com)

(นางวาริพิน มงคลสมัย)

นิติระดับปริญญาเอก สาขาวิชาการบัญชี

คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม



**ตอนที่ 1** ข้อมูลทั่วไปของผู้บริหารฝ่ายตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

1. เพศ

ชาย

หญิง

2. อายุ

น้อยกว่า 30 ปี

30 – 40 ปี

41 – 50 ปี

มากกว่า 50 ปี

3. สถานภาพ

โสด

สมรส

หม้าย/หย่าร้าง

4. ระดับการศึกษา

ปริญญาตรีหรือเทียบเท่า

สูงกว่าปริญญาตรี

5. ประสบการณ์ในการทำงาน

น้อยกว่า 5 ปี

5 – 10 ปี

11 – 15 ปี

มากกว่า 15 ปี

6. รายได้เฉลี่ยต่อเดือน

ต่ำกว่า 50,000 บาท

50,000-70,000 บาท

70,001-90,000 บาท

มากกว่า 90,000 บาท

7. ตำแหน่งงานในปัจจุบัน

ผู้อำนวยการฝ่ายตรวจสอบภายใน

ผู้จัดการฝ่ายตรวจสอบภายใน

อื่น ๆ (โปรดระบุ).....



## ตอนที่ 2 ข้อมูลทั่วไปของธุรกิจการเงินในประเทศไทย

### 1. ประเภทธุรกิจ

- |   |  |
|---|--|
| <input type="checkbox"/> ธนาคารพาณิชย์ไทย                                     | <input type="checkbox"/> สำนักงานผู้แทนธนาคารพาณิชย์ต่างประเทศ |
| <input type="checkbox"/> สาขาของธนาคารต่างประเทศ                              | <input type="checkbox"/> บริษัทบริหารสินทรัพย์                 |
| <input type="checkbox"/> บริษัทเงินทุน  | <input type="checkbox"/> สถาบันการเงินเฉพาะกิจ                 |
| <input type="checkbox"/> บริษัทเครดิตฟองซิเอร์                                | <input type="checkbox"/> บริษัทผู้ประกอบธุรกิจบัตรเครดิต       |
| <input type="checkbox"/> บริษัทประกันชีวิต                                    | <input type="checkbox"/> บริษัทประกันภัย                       |
| <input type="checkbox"/> บริษัทผู้ประกอบธุรกิจสินเชื่อส่วนบุคคลภายใต้การกำกับ |  |
| <input type="checkbox"/> อื่นๆ (ระบุ).....                                    |  |

### 2. ทุนจดทะเบียน

- |  |  |
|--|--|
| <input type="checkbox"/> ต่ำกว่า 1,000,000,000 บาท           | <input type="checkbox"/> 1,000,000,000 บาท-5,000,000,000 บาท |
| <input type="checkbox"/> 5,000,000,001 บาท-9,000,000,000 บาท | <input type="checkbox"/> มากกว่า 9,000,000,000 บาท           |

### 3. มูลค่าสินทรัพย์รวม

- |  |  |
|--|--|
| <input type="checkbox"/> ต่ำกว่า 10,000,000,000 บาท        | <input type="checkbox"/> 10,000,000,000-50,000,000,000 บาท |
| <input type="checkbox"/> 50,000,000,001-90,000,000,000 บาท | <input type="checkbox"/> มากกว่า 90,000,000,000 บาท        |

### 4. ระยะเวลาในการดำเนินธุรกิจ

- |  |  |
|--|--|
| <input type="checkbox"/> น้อยกว่า 5 ปี | <input type="checkbox"/> 5 – 10 ปี     |
| <input type="checkbox"/> 11 – 15 ปี    | <input type="checkbox"/> มากกว่า 15 ปี |

### 5. จำนวนพนักงานทั้งหมดในปัจจุบัน

- |  |   |
|--|---|
| <input type="checkbox"/> น้อยกว่า 100 คน | <input type="checkbox"/> 100 - 500 คน   |
| <input type="checkbox"/> 501 - 900 คน    | <input type="checkbox"/> มากกว่า 900 คน |



**ตอนที่ 3** ความคิดเห็นเกี่ยวกับความโปร่งใสของการตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

ความโปร่งใสของการตรวจสอบภายใน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
<b>การปฏิบัติตามมาตรฐานและกฎระเบียบของการตรวจสอบภายใน (Internal Audit Legitimacy Compliance)</b>					
1. กิจการมุ่งเน้นให้มีการปฏิบัติงานตรวจสอบภายในให้เป็นไปตามมาตรฐานและกฎระเบียบที่เกี่ยวข้องอย่างครบถ้วน เพื่อให้การปฏิบัติงานตรวจสอบภายในมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
2. กิจการยึดมั่นในการปฏิบัติงานตรวจสอบภายในที่สอดคล้องตามมาตรฐานและกฎระเบียบที่เกี่ยวข้องอย่างเคร่งครัด เพื่อให้การปฏิบัติงานตรวจสอบภายในมีคุณภาพอย่างน่าเชื่อถือ	5	4	3	2	1
3. กิจการมุ่งเน้นให้มีการปฏิบัติงานตรวจสอบภายในที่มีการติดตามการเปลี่ยนแปลงของมาตรฐานและกฎระเบียบที่เกี่ยวข้อง เพื่อให้มีการกำหนดวิธีการตรวจสอบภายในอย่างเหมาะสม	5	4	3	2	1
4. กิจการเชื่อมั่นว่าการปฏิบัติงานตรวจสอบภายในตามมาตรฐานและกฎระเบียบที่เกี่ยวข้อง จะทำให้ได้รับการยอมรับและเชื่อถือจากผู้ที่มีส่วนเกี่ยวข้อง	5	4	3	2	1
<b>การเปิดเผยขั้นตอนการตรวจสอบภายใน (Internal Audit Process Openness)</b>					
5. กิจการเชื่อมั่นว่าแผนการตรวจสอบภายใน (Audit Plan) ที่จัดทำขึ้นมีความชัดเจนและครอบคลุมในทุกกิจกรรมการดำเนินงานขององค์กร	5	4	3	2	1
6. กิจการมุ่งมั่นในการกำหนดแผนงานตรวจสอบภายในที่เหมาะสม เพื่อให้สามารถตรวจพบความเสี่ยงได้อย่างทันเวลาและช่วยในการจัดการควบคุมความเสี่ยงนั้นได้อย่างมีประสิทธิภาพ	5	4	3	2	1
7. กิจการเชื่อมั่นว่าแผนการตรวจสอบภายในที่จัดทำขึ้น ช่วยให้กิจการสามารถกำหนดขอบเขตและวัตถุประสงค์การตรวจสอบภายในได้อย่างชัดเจน	5	4	3	2	1
8. กิจการมั่นใจว่าแผนการตรวจสอบภายในที่จัดทำขึ้น ช่วยให้กิจการสามารถกำหนดเวลาและทรัพยากรในการปฏิบัติงานตรวจสอบได้อย่างเป็นระบบและรัดกุม	5	4	3	2	1
9. กิจการตระหนักถึงความสำคัญของการเปิดเผยแผนการตรวจสอบภายในให้ผู้ที่มีส่วนเกี่ยวข้อง เพื่อให้เกิดการยอมรับและความน่าเชื่อถือ	5	4	3	2	1
<b>ความเชื่อมั่นของวิธีการตรวจสอบภายใน (Internal Audit Method Trust)</b>					
10. กิจการเชื่อมั่นว่าแนวทางการตรวจสอบภายใน (Audit Program) ที่จัดทำขึ้น ช่วยให้กิจการสามารถกำหนดวิธีการตรวจสอบภายในได้อย่างชัดเจน	5	4	3	2	1



## ตอนที่ 3 (ต่อ)

ความโปร่งใสของการตรวจสอบภายใน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
11. กิจการมั่นใจว่าแนวทางการตรวจสอบภายในที่จัดทำขึ้น ช่วยให้กิจการสามารถกำหนดวิธีการตรวจสอบภายในที่ครอบคลุมขอบเขตและวัตถุประสงค์ของการตรวจสอบภายใน	5	4	3	2	1
12. กิจการตระหนักถึงความสำคัญของการกำหนดแนวทางการตรวจสอบภายใน เพื่อใช้เป็นคำสั่งให้พนักงานตรวจสอบปฏิบัติตามอย่างชัดเจนและรัดกุม	5	4	3	2	1
13. กิจการเชื่อมั่นว่าแนวทางการตรวจสอบภายในที่จัดทำขึ้น ช่วยให้กิจการสามารถกำหนดเวลา สถานที่ และบุคลากรที่จำเป็นในการปฏิบัติงานตรวจสอบภายในได้อย่างชัดเจน	5	4	3	2	1
14. กิจการมั่นใจว่าแนวทางการตรวจสอบภายในที่จัดทำขึ้น ช่วยให้กิจการสามารถควบคุมงานตรวจสอบภายในให้เป็นไปอย่างชัดเจน มีอิสระ และครบถ้วน ทำให้เกิดการยอมรับและความเชื่อมั่นแก่ผู้ที่เกี่ยวข้อง	5	4	3	2	1
<b>ความชัดเจนของการปฏิบัติงานตรวจสอบภายใน (Internal Audit Practice Clarity)</b>					
15. กิจการมุ่งเน้นให้มีการปฏิบัติงานตรวจสอบภายในเป็นไปตามมาตรฐานทางวิชาชีพและกฎระเบียบที่เกี่ยวข้อง จะทำให้การปฏิบัติงานเป็นไปอย่างมีรูปแบบและชัดเจน	5	4	3	2	1
16. กิจการเชื่อมั่นว่าผู้ปฏิบัติงานตรวจสอบภายในได้ปฏิบัติงานตรวจสอบอย่างถูกต้องและครอบคลุมขอบเขตและวัตถุประสงค์ของการตรวจสอบภายใน	5	4	3	2	1
17. กิจการมั่นใจว่าผู้ปฏิบัติงานตรวจสอบภายในได้ปฏิบัติงานตรวจสอบตามแนวทางการตรวจสอบอย่างชัดเจน จะทำให้ได้หลักฐานการตรวจสอบที่เพียงพอและเหมาะสม	5	4	3	2	1
18. กิจการเชื่อมั่นว่าผู้ปฏิบัติงานตรวจสอบภายในได้บันทึกผลการปฏิบัติงานตรวจสอบไว้อย่างชัดเจน ต่อเนื่อง และสม่ำเสมอ	5	4	3	2	1
19. กิจการตระหนักว่าการปฏิบัติงานตรวจสอบภายในตามมาตรฐานทางวิชาชีพและกฎระเบียบที่เกี่ยวข้อง จะทำให้ได้รับการยอมรับและความเชื่อถือจากผู้ที่เกี่ยวข้อง	5	4	3	2	1
<b>ความเห็นชัดของการสื่อสารของการตรวจสอบภายใน (Internal Audit Communication Visibility)</b>					
20. กิจการให้ความสำคัญกับการรายงานผลการตรวจสอบภายในอย่างถูกต้อง สมบูรณ์ และครอบคลุมวัตถุประสงค์ของการตรวจสอบภายใน	5	4	3	2	1
21. กิจการมุ่งเน้นให้มีวิธีการสื่อสารเชิงบวกแก่ผู้ที่เกี่ยวข้อง เพื่อให้เกิดการรับรู้และเข้าใจในการทำงานระหว่างกันได้เป็นอย่างดี	5	4	3	2	1



**ตอนที่ 3 (ต่อ)**

ความโปร่งใสของการตรวจสอบภายใน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
22. กิจการตระหนักถึงความสำคัญของการรายงานผลการตรวจสอบภายในอย่างเปิดเผยและทันเวลา เพื่อให้เกิดประโยชน์สูงสุดแก่ผู้ใช้รายงาน	5	4	3	2	1
23. กิจการมุ่งเน้นให้มีการรายงานผลการตรวจสอบภายในแก่ผู้ที่เกี่ยวข้องโดยตรง และเป็นไปตามลำดับ เพื่อให้สามารถใช้ประโยชน์ได้เป็นอย่างดี	5	4	3	2	1
24. กิจการให้ความสำคัญกับการรายงานผลการตรวจสอบภายในอย่างตรงไปตรงมา เพื่อให้เกิดความเชื่อมั่นในรายงานการตรวจสอบ	5	4	3	2	1

**ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจการเงินในประเทศไทย**

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
<b>คุณภาพของการตรวจสอบภายใน (Internal Audit Quality)</b>					
1. กิจการสามารถบรรลุวัตถุประสงค์และเป้าหมายของการตรวจสอบภายในได้เป็นอย่างดี	5	4	3	2	1
2. กิจการสามารถปฏิบัติงานตรวจสอบตามมาตรฐานและกฎระเบียบที่เกี่ยวข้อง ซึ่งสามารถเพิ่มคุณค่าและปรับปรุงการดำเนินงานขององค์กรได้	5	4	3	2	1
3. กิจการสามารถสื่อสารผลการตรวจสอบภายในให้แก่ผู้ที่เกี่ยวข้องได้อย่างชัดเจนและทันเวลา	5	4	3	2	1
4. กิจการสามารถนำผลการตรวจสอบไปปรับปรุงการดำเนินงานขององค์กรให้มีประสิทธิภาพ	5	4	3	2	1
<b>ความน่าเชื่อถือของการตรวจสอบภายใน (Internal Audit Reliability)</b>					
5. กิจการสามารถปฏิบัติงานตรวจสอบภายในตรวจสอบได้อย่างชัดเจน โดยการปฏิบัติงานตรวจสอบบรรลุวัตถุประสงค์และเป้าหมายของการตรวจสอบภายในได้เป็นอย่างดี	5	4	3	2	1
6. กิจการสามารถปฏิบัติงานตรวจสอบภายในอย่างเป็นอิสระ โดยสามารถเพิ่มคุณค่าและปรับปรุงการดำเนินงานขององค์กรได้	5	4	3	2	1
7. กิจการสามารถปฏิบัติงานตรวจสอบภายในอย่างครบถ้วนสมบูรณ์ตามมาตรฐานและกฎระเบียบที่เกี่ยวข้อง	5	4	3	2	1



## ตอนที่ 4 (ต่อ)

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
8. กิจการสามารถปฏิบัติงานตรวจสอบอย่างชัดเจนและครบถ้วน โดยเน้นความเป็นกลางและปราศจากความลำเอียง	5	4	3	2	1
<b>ประโยชน์ของการตรวจสอบภายใน (Internal Audit Usefulness)</b>					
9. กิจการมีข้อมูลสำหรับใช้ในการตัดสินใจได้อย่างรวดเร็วและทันเวลา	5	4	3	2	1
10. กิจการสามารถเพิ่มคุณค่าและปรับปรุงการดำเนินงานขององค์กร	5	4	3	2	1
11. กิจการสามารถตรวจพบความเสี่ยงได้อย่างทันเวลาและจัดการควบคุมความเสี่ยงนั้นได้อย่างมีประสิทธิภาพ	5	4	3	2	1
12. กิจการมีผลการตรวจสอบภายในที่ช่วยให้ผู้ที่เกี่ยวข้องสามารถนำผลการตรวจสอบไปใช้ในการตัดสินใจได้อย่างถูกต้อง	5	4	3	2	1
<b>คุณค่าของข้อมูล (Information Value)</b>					
13. กิจการมีการนำเสนอข้อมูลที่เป็นสาระสำคัญและตรงกับความต้องการของผู้ที่เกี่ยวข้องในการนำไปใช้ในการตัดสินใจได้อย่างถูกต้อง	5	4	3	2	1
14. กิจการมีการนำเสนอข้อมูลอย่างรวดเร็วและเหมาะสม ซึ่งสามารถตอบสนองความต้องการของผู้ที่เกี่ยวข้องได้อย่างทันเวลา	5	4	3	2	1
15. กิจการนำเสนอข้อมูลที่แสดงให้เห็นผลการดำเนินงานที่แท้จริงของกิจการ	5	4	3	2	1
16. กิจการนำเสนอข้อมูลที่มีความเป็นกลางและปราศจากความลำเอียง ซึ่งสามารถนำไปใช้ในการตัดสินใจได้อย่างมีประสิทธิภาพ	5	4	3	2	1
<b>การตัดสินใจที่ดีที่สุด (Best Decision Making)</b>					
17. กิจการมีการตัดสินใจในประเด็นต่าง ๆ อย่างมีประสิทธิภาพและมีประสิทธิผล	5	4	3	2	1
18. กิจการมีข้อมูลสำหรับใช้ในการตัดสินใจในทางเลือกต่าง ๆ ทำให้กิจการสามารถบรรลุเป้าหมายในการดำเนินงาน	5	4	3	2	1
19. กิจการมีระบบการพิจารณาในประเด็นต่าง ๆ ที่มีความสำคัญต่อการดำเนินงานของกิจการ	5	4	3	2	1
20. กิจการสามารถเรียกใช้ข้อมูลสำหรับการตัดสินใจได้อย่างถูกต้องและทันเวลา	5	4	3	2	1
<b>ความสามารถในการบรรลุผลสำเร็จตามเป้าหมาย (Firm Goal Achievement)</b>					
21. กิจการสามารถบรรลุเป้าหมายในการดำเนินงานและวัตถุประสงค์ขององค์กรได้เป็นอย่างดี	5	4	3	2	1
22. กิจการมีผลการดำเนินงานที่ดีขึ้นทั้งในรูปของตัวเงินและไม่เป็นตัวเงิน	5	4	3	2	1
23. กิจการมีฐานะการเงินและผลการดำเนินงานที่มั่นคงและมีเสถียรภาพ	5	4	3	2	1





**ตอนที่ 4 (ต่อ)**

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
	5	4	3	2	1
24. กิจการมีอัตราการเจริญเติบโต/ส่วนแบ่งทางการตลาดเพิ่มขึ้น	5	4	3	2	1
25. กิจการมั่นใจว่ากิจการมีศักยภาพเพียงพอที่จะรักษาระดับการเจริญเติบโตได้ในอนาคต	5	4	3	2	1

**ตอนที่ 5** ความคิดเห็นเกี่ยวกับปัจจัยภายในที่มีผลต่อการตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

ปัจจัยภายในที่มีผลต่อการตรวจสอบภายใน	ระดับความคิดเห็น				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
	5	4	3	2	1
<b>การตระหนักรู้ในการกำกับกิจการที่ดี (Governance Awareness)</b>					
1. กิจการเชื่อมั่นว่าการดำเนินงานที่ยึดมั่นกับการกำกับดูแลกิจการที่ดี จะช่วยให้กิจการสามารถบรรลุเป้าหมายในการดำเนินงาน	5	4	3	2	1
2. กิจการตระหนักและยึดมั่นถึงการดำเนินงานที่เปิดเผยและเป็นธรรมกับทุกฝ่าย	5	4	3	2	1
3. กิจการสนับสนุนให้บุคลากรเข้ามามีส่วนร่วมในการกำกับดูแลกิจการ เพื่อให้การดำเนินงานมีความโปร่งใส	5	4	3	2	1
4. กิจการส่งเสริมให้มีการกำหนดแนวทางและวิธีปฏิบัติงานให้สามารถตรวจสอบความถูกต้องได้อย่างตรงไปตรงมา เพื่อให้กิจการได้รับการยอมรับจากผู้ที่เกี่ยวข้อง	5	4	3	2	1
<b>ความเป็นมืออาชีพของการตรวจสอบภายใน (Internal Audit Professional)</b>					
5. กิจการให้ความสำคัญกับมาตรฐานของวิชาชีพการตรวจสอบภายใน ซึ่งจะช่วยให้การตรวจสอบครอบคลุมแผนการตรวจสอบ ได้อย่างครบถ้วน	5	4	3	2	1
6. กิจการยึดมั่นการปฏิบัติงานที่สอดคล้องตามมาตรฐานของวิชาชีพการตรวจสอบภายในอย่างเคร่งครัด เพื่อให้การปฏิบัติงานตรวจสอบภายใน มีคุณภาพที่น่าเชื่อถือ	5	4	3	2	1
7. กิจการมุ่งเน้นให้มีการปฏิบัติงานตรวจสอบภายในให้เป็นไปตามมาตรฐานของวิชาชีพการตรวจสอบภายในอย่างครบถ้วน เพื่อให้การปฏิบัติงานตรวจสอบภายใน มีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1



## ตอนที่ 5 (ต่อ)

ปัจจัยภายในที่มีผลต่อการตรวจสอบภายใน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
8. กิจการเชื่อมั่นว่าการปฏิบัติงานตามมาตรฐานของวิชาชีพการตรวจสอบภายใน จะทำให้ได้รับการยอมรับและเชื่อถือจากผู้ที่เกี่ยวข้อง	5	4	3	2	1
<b>จริยธรรมการตรวจสอบภายใน (Internal Audit Ethics)</b>					
9. กิจการมุ่งเน้นให้มีการปฏิบัติงานตรวจสอบภายในตามจริยธรรมการตรวจสอบภายใน เพื่อให้สามารถปฏิบัติงานตรวจสอบอย่างเป็นกลางและไม่ลำเอียง	5	4	3	2	1
10. กิจการส่งเสริมให้มีการปฏิบัติงานตรวจสอบภายในตามจริยธรรมการตรวจสอบภายใน เพื่อให้สามารถปฏิบัติงานตรวจสอบโดยใช้ความรู้ ทักษะ และประสบการณ์ที่จำเป็น	5	4	3	2	1
11. กิจการเชื่อมั่นว่าการปฏิบัติตามจริยธรรมการตรวจสอบภายใน จะทำให้กิจการได้รับการยอมรับจากผู้ที่เกี่ยวข้อง	5	4	3	2	1
12. กิจการมั่นใจว่าการปฏิบัติตามจริยธรรมการตรวจสอบภายใน จะทำให้กิจการเปิดเผยข้อมูลทุกรายการที่เกี่ยวข้องกับการตัดสินใจ เพื่อให้ผู้ที่เกี่ยวข้องได้ใช้ข้อมูลอย่างมีประสิทธิภาพ	5	4	3	2	1
<b>บรรยากาศหลักคุณธรรม (Morality Climate)</b>					
13. กิจการสนับสนุนให้บุคลากรภายในองค์กรยึดมั่นในหลักคุณธรรม	5	4	3	2	1
14. กิจการเชื่อมั่นว่าหลักคุณธรรม จะเสริมสร้างความซื่อสัตย์และความจริงใจในการปฏิบัติงาน	5	4	3	2	1
15. กิจการมั่นใจว่าการบริหารงานตามหลักคุณธรรม จะเสริมสร้างความน่าเชื่อถือให้กับองค์กรและได้รับการยอมรับจากผู้ที่เกี่ยวข้อง	5	4	3	2	1
16. กิจการเชื่อมั่นว่าการบริหารงานตามหลักคุณธรรม จะช่วยให้องค์กรประสบความสำเร็จได้	5	4	3	2	1
<b>การเรียนรู้ของการตรวจสอบภายใน (Internal Audit Learning)</b>					
17. กิจการมั่นใจว่าความรู้สมัยใหม่ช่วยให้กิจการประสบความสำเร็จได้ดียิ่งขึ้น	5	4	3	2	1
18. กิจการเชื่อมั่นว่าการเรียนรู้ลักษณะการดำเนินงานและวิธีปฏิบัติงานภายในองค์กร จะช่วยให้การตรวจสอบภายในมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
19. กิจการเชื่อมั่นว่าความรู้และความเข้าใจทางด้านเทคโนโลยีต่าง ๆ จะช่วยให้กิจการสามารถปรับปรุงวิธีการตรวจสอบภายในได้ดียิ่งขึ้น	5	4	3	2	1
20. กิจการสนับสนุนให้มีการเรียนรู้และทำความเข้าใจการเปลี่ยนแปลงที่เกิดขึ้น เพื่อนำมาวางแผนและพัฒนาวิธีการตรวจสอบอย่างเหมาะสม	5	4	3	2	1



**ตอนที่ 6** ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่มีผลต่อการตรวจสอบภายในของธุรกิจการเงินในประเทศไทย

ปัจจัยภายนอกที่มีผลต่อการตรวจสอบภายใน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
<b>การบังคับใช้กฎข้อบังคับ (Regulation Force)</b>					
1. ในปัจจุบันมีกฎระเบียบและข้อบังคับเป็นจำนวนมาก ทำให้กิจการต่าง ๆ ต้องปรับปรุงวิธีการปฏิบัติงานให้เหมาะสมอยู่เสมอ	5	4	3	2	1
2. ในปัจจุบันมีกฎระเบียบและข้อบังคับที่หลากหลาย ทำให้กิจการต่าง ๆ ต้องติดตามและเปลี่ยนแปลงวิธีการปฏิบัติงานให้เหมาะสมอยู่เสมอ	5	4	3	2	1
3. ในปัจจุบันมีกฎระเบียบและข้อบังคับที่เคร่งครัดมากขึ้น ทำให้กิจการต่าง ๆ ต้องปรับปรุงแนวทางในการปฏิบัติงานให้สอดคล้องและเหมาะสมอยู่เสมอ	5	4	3	2	1
4. กฎระเบียบและข้อบังคับต่าง ๆ ที่มีอยู่ในปัจจุบันกำหนดบทลงโทษที่เข้มงวดมากขึ้น ทำให้กิจการต่าง ๆ ต้องมุ่งมั่นในการปฏิบัติงานให้มีคุณภาพอย่างต่อเนื่อง	5	4	3	2	1
<b>ความไม่แน่นอนของสภาพแวดล้อม (Environmental Uncertainty)</b>					
5. สภาพแวดล้อมทางธุรกิจในปัจจุบันมีความผันผวนอย่างมาก ทำให้กิจการต่าง ๆ มุ่งแสวงหากลยุทธ์ในการแข่งขัน เพื่อสร้างความได้เปรียบในการแข่งขัน	5	4	3	2	1
6. สภาพแวดล้อมทางด้านเทคโนโลยีที่เปลี่ยนแปลงอย่างรวดเร็ว ทำให้กิจการต่าง ๆ ต้องมีกลยุทธ์ที่เหมาะสม เพื่อรักษาส่วนแบ่งการตลาดของกิจการ	5	4	3	2	1
7. สภาพแวดล้อมทางกฎระเบียบข้อบังคับต่าง ๆ ที่เพิ่มขึ้น ทำให้กิจการต่าง ๆ ต้องกำหนดวิธีปฏิบัติงานให้เหมาะสมอยู่เสมอ	5	4	3	2	1
8. ในปัจจุบันผู้ที่เกี่ยวข้องกับกิจการมีความคาดหวังในการปฏิบัติงานของกิจการมากขึ้น ทำให้กิจการต่าง ๆ ต้องกำหนดแนวทางการดำเนินงานโดยมุ่งเน้นประโยชน์และความต้องการของผู้ที่เกี่ยวข้องกับกิจการ	5	4	3	2	1

**ตอนที่ 7** ข้อคิดเห็นและข้อเสนอแนะเพิ่มเติมเกี่ยวกับการตรวจสอบภายในและประเด็นที่เกี่ยวข้อง

หากท่านมีข้อเสนอแนะเพิ่มเติมเกี่ยวกับแบบสอบถาม ได้โปรดเสนอแนะในช่องว่างข้างล่างนี้

.....

.....

.....

.....

.....

ขอขอบพระคุณท่านที่ได้สละเวลาตอบแบบสอบถาม

..... Thank you for your participation .....



## VITA



## VITA

**NAME** Mrs. Varipin Mongkolsamai  
**DATE OF BIRTH** November 19, 1965  
**PLACE OF BIRTH** Nakornsawan  
**ADDRESS** 81 Wangsingkam Road, Mueang Chiang Mai District,  
Chiang Mai Province, Thailand  
**POSITION** Lecturer  
**OFFICE** Faculty of Management sciences Chiangmai Rajabhat  
University, Thailand

### EDUCATION BACKGROUND

1987 Bachelor of Accountancy  
Chiang Mai University, Thailand  
1993 Master of Accountancy (Financial Accounting)  
Chulalongkorn University, Thailand  
2015 Doctor of Philosophy (Accounting)  
Maharakham University, Thailand

### RESEARCH

2012 Varipin Mongkolsamai, Phapruek Ussahawanitchakit and  
Sutana Boonlua. (2012). Impacts of Internal Control Strategy  
on Efficiency Operation of Organization : An Empirical  
Investigation of Thai Listed Firms. *International Journal of  
Business Strategy*, 12(3), 22-35.  
2014 Varipin Mongkolsamai, Phapruekbaramee Ussahawanitchakit  
and Sutana Boonlua. (2014). Internal Audit Transparency and  
Firm Goal Achievement : An Empirical Investigation of  
Financial Businesses in Thailand. *International Journal of  
Business Strategy*, 14(3), 151-172.

