

## ผลกระทบของความสำเร็จการควบคุมภายในที่มีต่อความเชื่อมั่นของนักลงทุน ของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย

### IMPACT OF INTERNAL CONTROL SUCCESS ON INVESTOR CONFIDENCE OF LISTED COMPANIES IN THE STOCK EXCHANGE OF THAILAND (SET)

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#### บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อทดสอบผลกระทบของความสำเร็จการควบคุมภายในที่มีต่อความเชื่อมั่นของนักลงทุน ภายใต้เงื่อนไขที่กำหนดให้คุณภาพการสอบบัญชีเป็นตัวแปรคั้นกลางสำหรับบริษัท จดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย โดยการเก็บรวบรวมข้อมูลจากผู้บริหารสูงสุด จำนวน 301 คน และใช้แบบสอบถามเป็นเครื่องมือ สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ การวิเคราะห์การทดสอบโดยแบบกำลังสองน้อยที่สุด ผลการวิจัย พบว่า 1) ความสำเร็จการควบคุมภายในที่ประกอบด้วย ประสิทธิผลการปฏิบัติงาน ความน่าเชื่อถือทางการเงิน และการปฏิบัติตามกฎระเบียบที่เกี่ยวข้อง มีผลกระทบเชิงบวกต่อคุณภาพ การสอบบัญชีอย่างมีนัยสำคัญทางสถิติ ( $p<0.1$ ) และ 2) คุณภาพการสอบบัญชีเป็นตัวแปรคั้นกลางระหว่าง ความสำเร็จการควบคุมภายในและความเชื่อมั่นของนักลงทุนอย่างมีนัยสำคัญทางสถิติ ( $p<0.05$ ) ดังนั้นการ ตัดสินใจของผู้บริหารทุกระดับและทุกหน้าที่ความรับผิดชอบจำเป็นต้องมุ่งเน้นความสำเร็จการควบคุมภายในที่ สามารถปรับปรุงและพัฒนาประสิทธิผลของคุณภาพการสอบบัญชี เพื่อส่งเสริมให้เกิดความเชื่อมั่นของ นักลงทุนที่เพิ่มขึ้น

**คำสำคัญ:** ความสำเร็จการควบคุมภายใน คุณภาพการสอบบัญชี ความเชื่อมั่นของนักลงทุน

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## Abstract

This article is about the effects of internal control success on investor confidence. The study examines the relationships between internal control success and investor confidence, where audit quality is taken as a mediator. The key participants in this study were chief executive officers (CEO) who participated in Thai listed companies. Of the surveys completed and returned, only 301 were usable. The ordinary least squares (OLS) regression analysis was employed to estimate parameters in hypotheses testing. The findings showed that internal control success, which consists of operational effectiveness, financial reliability, and regulatory compliance, had a positive effect on audit quality significantly ( $p<0.1$ ). Audit quality mediates the relationship between internal control success and investor confidence significantly ( $p<0.05$ ). Therefore, a key decision for managers in all levels and functions is to focus on internal control success that can improve and develop audit quality's effectiveness and reserves increased steeply, boosting investor confidence.

**Keywords:** Internal Control Success, Audit Quality, Investor Confidence

## Background/Objectives and Goals

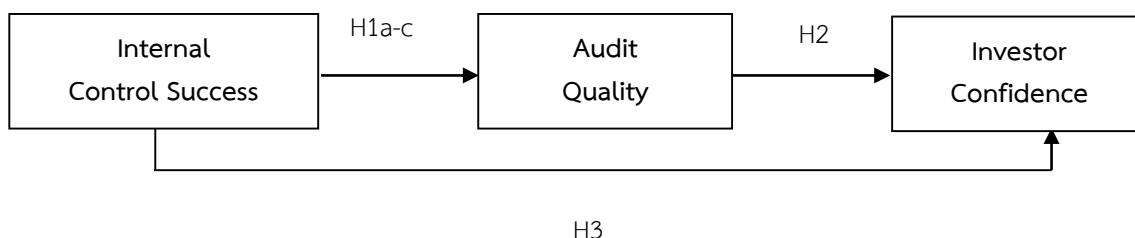
Internal control is a dynamic controller involved in helping organizations achieve their objectives. It is concerned with evaluating and improving the effectiveness of financial reliability, control and governance processes in an organization (Ahmad, et al., 2015). The roles of internal control ensure that management has accurate, timely and complete information within systematically review systems and operations. These reviews are aimed at identifying how well risks are managed including whether the right processes are in place, and whether agreed procedures are being adhered to. Internal control can also identify areas where efficiencies or innovations might be made. Internal control is organized under an ongoing program of review and advisory activity this is based on the strategic needs of an organization (Huang, et al., 2009).

Internal control success, as defined in accounting and auditing, is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, and compliance with laws, regulations and policies (Peng, et al., 2016). A broad concept, internal control involves everything that controls risks to an organization (Peng, et al., 2016). Any kind of practice which allows a business or other organization to maximize the use of their inputs by developing products at a faster pace than competitors or reducing defects. For example, operation effectiveness is often divided into four components. There are leading and controlling functional performance, measuring and improving the process, leveraging and automating process, and continuously improving performance (Rahimi, et al., 2016). Effective internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of

financial statements for external purposes. Regulatory compliance is an organization's adherence to laws, regulations, guidelines and specifications relevant to its business (Zamecnik & Rajnoha, 2015). Violations of regulatory compliance regulations often result in legal punishment, including federal fines.

Developing models for the effects of internal control success on investor confidence via audit quality as mediator is a challenge as the literature on internal control success is vast, varied, and evolving. Yet, there was not any systematic testing about effects of internal control success on investor confidence via audit quality as mediator within Thailand and abroad. These have motivated researchers to continue to develop improved models with research question. This research will offer useful guidance for measuring and implementing internal control success and facilitate further research in this area. The research question of this work is how does the internal control success affect investor confidence via audit quality as mediator? The purposes of this study are to identify the effects of internal control success on audit quality and to determine the impact of internal control success on investor through audit quality of listed company the Stock Exchange of Thailand.

### Relevant Literature Review



**Figure 1** The effects of internal control success on investor confidence of the firms within Thai listed companies

The research model of this study is illustrated in figure 1. It shows the effects of internal control success including operational effectiveness, financial reliability, and regulatory compliance on audit quality. However, the audit quality has a positive relationship with investor confidence. Moreover, internal control success directly affect investor confidence.

#### 1. Effects of Operational Effectiveness

Operational effectiveness refers to any number of practices that allow an organizational to the extent to better utilize its inputs by higher quality, reduced costs or improved customer service such as reducing defects in products or developing better products faster (Madanhire & Mbohwa, 2016). Operational effectiveness is one of the key components of internal control success because it encompasses input, process, output and context conditions and recognizes the multi-level structure of manufacturing and service systems which has a number of limitations from internal control (Praraksa, et al., 2015). Such as

organization that get more from their inputs, or use fewer inputs, to produce higher-quality outputs will be able to offer goods or services at lower cost than their competitors or extract more financial value from these goods and services (Xu, et al., 2016).

Therefore, operational effectiveness is the capability of producing a desired result or expected outcome with an optimized set of business processes, as well as an effective system of internal controls (Madanhire & Mbohwa, 2016). One of the benefits of operational effectiveness is the supplement to document and measure current processes and procedures in order to audit quality. Auditor have a source of data that can be used to the process of identifying, measuring, analyzing and communicating economic information to permit informed judgments and decisions by users of the information (Ahmad, et al., 2015).

Thus, operational effectiveness has a positive relationship with audit quality. Therefore, the following hypotheses are posited:

H1a: Operational effectiveness of internal control success, has positive relationship with audit quality.

## **2. Effects of Financial Reliability**

Financial reliability refers to trustworthiness of the financial statements that can be verified and used consistently by investors and creditors with the same results (Sabouhi, et al., 2016). Financial reliability aims to facilitate the exchange of information and expertise across different department, areas, and companies for the development of complex product and service. Accountants have the primary responsibility in the organization for managing, updating, correcting, and reporting the organization's accounts (Madanhire & Mbohwa, 2016).

Auditors can measure and evaluate the company's financial statement accounts and end up with the same result. The auditors can issue an unqualified opinion when the auditors can verify financial information. Therefore, financial reliability purpose is to generate ideas and promote good practice for those involved in the business of managing risk (Kim, et al., 2016).

Thus, financial reliability has a positive relationship with audit quality. Therefore, we posit the hypotheses as follows:

H1b: Financial reliability of internal control success, has positive relationship with audit quality.

## **3. Effects of Regulatory Compliance**

Regulatory compliance refers to an organization's adherence to laws, regulations, guidelines and specifications relevant to its business. Violations of regulatory compliance often result in legal punishment, including federal fines (Lee, et al., 2016). Regulatory compliance is aware of and takes into steps to comply with relevant laws and regulations. Regulatory compliance is evaluated with internal control and audit. For example, the effectiveness of the compliance management program includes policies and procedures, training, monitoring and consumer complaint response (Ramirez, et al., 2015). Regulatory compliance is often a key

component of internal control examination feedback when specific regulatory violations have occurred.

Regulatory compliance provides feedback to management, the control environment, ongoing compliance and conditions for potential risk (Makris, et al., 2015). Regulatory compliance can transform systems and enable trusted, transparent both product and service information exchange. Auditor can be evaluated transparently for the strength and thoroughness of compliance preparations as well as able to review security polices, user access controls and risk management procedures (Jin, et al., 2016).

Thus, regulatory compliance has a positive relationship with audit quality. Therefore, we posit the hypotheses as follows:

H1c: Regulatory compliance of internal control success seek, has positive relationship with audit quality.

#### **4. Consequences of audit quality**

The accuracy and quality of auditor professional depends on auditor's judgment such as, selecting the auditing evident, decision making for auditor's report (Holm, et al., 2012). Thus, auditors who are concerned with the quality of judgment is the top of audit quality. The audit quality increases information creditability and information quality of financial reporting that also helps users have useful information (Sarwoko & Agoes, 2014).

Audit quality aims to raise awareness of the key elements of audit quality, encourage key stakeholders to challenge themselves to do more to increase audit quality in their particular environments, and facilitate greater dialogue between key stakeholders on the topic (Miko, et al., 2015). Especially, the opportunity promotes a significant improvement in auditor professional by continuous learning that will strengthen audit quality because the concept of continuous learning has become important which it places priority on noticing, adapting and learning from change to investor confident. Investors plan to maintain or increase their allocations to active funds (Rahmina, et al., 2014)

Thus, this research implies that a firm with high audit quality gains high investor confidence. Hence, the following hypotheses are proposed:

H2 : The audit quality has a positive relationship with investor confidence.

#### **5. Effects of Internal Control Success**

This examine is to test the directly effect of internal control success on investor confidence (Wang & Yang, 2016) Internal control activity is an integral part of the management framework to ensure accurate reporting of financial results, compliance with laws and regulations, protection of assets and effective and efficient execution of business operations (Beringer, et al., 2013).

The overall purpose of internal control success is to help a department achieve its mission and accomplish certain goals and objectives (Un Jan, et al., 2016) such as promote efficient and effective operations; produce quality products and services consistent with the

department's mission; safeguard resources against loss due to waste, abuse, mismanagement, errors and fraud; promote adherence to statutes, regulations, bulletins and procedures; develop and maintain reliable financial and management data, and accurately report that data in a timely manner (Joslin & Müller, 2016). These purposes make the best investment decisions about a balance between risk and return.

Thus, this research implies that a firm with high internal control success will gain high investor confidence. Hence, the following hypotheses are proposed:

H3: Internal control success has a positive relationship with investor confidence.

## Research Methods

### 1. Sample

For this research, the sample was selected from the listed companies in SET. A mailed survey was used for data collection. The questionnaire was sent to 887 firms of Thai listed companies. The key participants in this study were chief executive officers (CEO). Of the surveys completed and returned, only 301 were usable. The effective response rate and usable was approximately 33.93% follows Aaker, Kumar and Day (2001). However, the non-response bias did not appear to be a problem in the study on an overall basis.

### 2. Measure

All the variables were obtained from the survey. The independent variables include operational effectiveness, financial reliability, and regulatory compliance. Internal control success was measured on 5-point Likert scales (e.g., 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). Most of the scales employed have been adopted from the existing and validated scales used in the extant literature to fit the current situation. Audit quality raises awareness of the key elements of audit quality, encourage key stakeholders to challenge themselves to do more to increase audit quality in their particular environments, and facilitate greater dialogue between key stakeholders on the topic. It is measured by the mediator variable that deals with accountancy profession knowledge and financial compensation.

Audit quality was measured on 5-point Likert scales (e.g., 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). The dependent variables include investor confidence encompasses three specific areas of firm outcomes, Firstly, financial performance (profits, return on assets, return on investment.). Including, product market performance (sales, market share.); and shareholder return (total shareholder return, economic value added.). Investor confidence was measured on 5-point Likert scales (e.g., 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree).

In addition, the control variables are firm age and size. Firm age was measured by the number of years a firm has been in existence with a dummy variable (e.g., number of years since 1 – 10 = 1, other = 0) (Zahra, Ireland & Hitt, 2000). The firm's size was measured

with the number of employees in a firm with a dummy variable (e.g., number of employees from 1 to 500 = 1, others = 0) (Arora & Fosfuri, 2003).

### 3. Method

Confirmatory factor analysis (CFA) was employed to investigate the validity of constructs. Furthermore, factor scores were used to estimate for regression analysis. This research demonstrates the results of factor loading and Cronbach's alpha coefficients. All factor loadings are greater than 0.6 (Hair et al., 2006) and are statistically significant. Cronbach's alpha of all variables are greater than 0.7 (Nunnally & Berstein, 1994). Overall, the results indicate the reliability and validity of these constructs.

The ordinary least squares (OLS) regression analysis was employed to estimate parameters in hypotheses testing. Three equation models are shown as follows:

$$\text{Equation 1: AQ} = \beta_{01} + \beta_1 \text{OE} + \beta_2 \text{FR} + \beta_3 \text{RC} + \beta_4 \text{FA} + \beta_5 \text{FS} + \epsilon$$

$$\text{Equation 2: IC} = \beta_{02} + \beta_6 \text{AQ} + \beta_7 \text{FA} + \beta_8 \text{FS} + \epsilon$$

$$\text{Equation 3: IC} = \beta_{03} + \beta_9 \text{ICS} + \beta_{10} \text{FA} + \beta_{11} \text{FS} + \epsilon$$

Where ICS is internal control success; OE is operational effectiveness; FR is financial reliability; RC is regulatory compliance; AQ is audit quality; IC is investor confidence; FA is firm age and FS is firm size as measured by dummy variable;  $\epsilon$  is error term.

### Results and Discussion

Table 1 shows the descriptive statistics and correlation matrix. Although it indicates a high correlation between independent variables, it does not have severe multicollinearity problems according to the VIFs range from 1.00 to 7.42 (Hair et al., 2006).

**Table 1** Descriptive Statistics and Correlation Matrix

Constructs	IC	OE	FR	RC	AQ	FA	FS
Mean	3.66	3.67	3.57	3.75	3.72	-	-
Standard Deviation	0.65	0.69	0.68	0.69	0.76	-	-
Investor confidence (IC)							
Operational effectiveness (OE)	0.69*						
Financial reliability (FR)	0.82**	0.63*					
Regulatory compliance (RC)	0.60	0.37	0.37				
Audit quality (AQ)	0.70*	0.93**	0.54	0.65*			
Firm Age (FA)	0.49	0.50	0.47	0.48	0.50		
Firm Size (FS)	0.38	0.38	0.33	0.40	0.34	0.48	

\* Correlation is significant at the 0.05 level (2-tailed)

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

### 1. Impacts of Internal Control Success on Its Consequence

Table 2 presents the results of OLS regression analysis of the relationships between internal control success and audit quality. To inference hypotheses 1a – 1c whether examines the relationship between internal control success (includes operational effectiveness, financial reliability, and regulatory compliance) and audit quality. The result shows that all independent variables consisting of operational effectiveness, financial reliability, and regulatory compliance have a significant positive effect on audit quality ( $b_1 = .073, P < 0.1$ ;  $b_2 = .086, P < 0.1$ ;  $b_3 = .061, P < 0.1$ ).

Hypothesis 1a is supported. Operational effectiveness is the capability of producing a desired result or expected outcome with an optimized set of business processes, as well as an effective system of internal controls (Madanhire & Mbohwa, 2016). Operational effectiveness is the supplement to document and measure current processes and procedures into audit quality.

Hypothesis 1b is supported. Financial reliability aims to facilitate the exchange of information and expertise across different department, areas, and companies for the development of complex product and service. Accountant and auditor can generate ideas and promote good practice for those involved in the business of managing risk (Kim, et al., 2016).

Hypothesis 1c is supported. Auditor ensures transparent and clear assessment about the strength and thoroughness of compliance preparations as well as auditor reviews security polices, user access controls and risk management procedures (Ramirez, et al., 2015).

**Table 2** Results of OLS Regression Analysis

Independent Variables	Dependent variable	
	AQ	
Operational effectiveness (OE)	0.073** (0.031)	
Financial reliability (FR)	0.086* (0.072)	
Regulatory compliance (RC)	0.061* (0.064)	
Firm Age (FA)	0.043** (0.029)	
Firm Size (FS)	0.04** (0.029)	
Adjusted R-square	0.764	

Note: Standard error is in parentheses.

\*\* p< .05

\* p< .10

**Table 3** Results of OLS Regression Analysis

Independent Variables	Dependent variable	
	IC	
Audit quality (AQ)	0.071** (0.053)	
Internal control success (ICS)	0.242* (0.263)	
Firm Age (FA)	0.043** (0.033)	
Firm Size (FS)	0.031** (0.013)	
Adjusted R-square	0.606	

Note: Standard error is in parentheses.

\*\* p< .05

\* p< .10

## 2. Impacts of Audit Quality on Its Consequence

Table 3 presents the results of the relationships between audit quality and investor confidence. To inference hypotheses 2 whether examines the relationship between audit quality and investor confidence. The result shows that audit quality has a significant positive effect on investor confidence ( $b_6 = .071, P < 0.05$ ). That is, hypotheses 2 are supported. The audit quality increases information creditability and information quality of financial reporting that also helps users have useful information (Sarwoko & Agoes, 2014).

## 3. Impacts of Internal Control Success on Investor Confidence

Table 3 presents the results of OLS regression analysis of the relationships between internal control success and investor confidence. To inference hypotheses 3 whether examines the relationship between internal control success and investor confidence. The result shows that an internal control success has a significant positive effect on investor confidence ( $b_9 = .242, P < 0.1$ ).

That is, a hypothesis 3 is supported. Internal control activity is an integral part of the management framework to ensure accurate reporting of financial results, compliance with laws and regulations, protection of assets and effective and efficient execution of business operations. These several information of internal control success makes the best investment decisions about a balance between risk and return (Joslin & Müller, 2016).

## Contributions and Future Research

### 1. Theoretical Contributions and Future Directions for Research

This study provides important theoretical contributions extending on prior studies by incorporating both perspectives of internal control success including operational effectiveness,

financial reliability, and regulatory compliance in the same model and links this internal control success to investor confidence via audit quality as a mediator. Especially, there is significant direct positive relationship between audit quality and investor confidence. Finally, further research should reexamine this research model in other group for more generalized.

## 2. Practical Contributions

For executive managers and firms' owners, this study helps them to understand and know that operational effectiveness is an important factor that motivates the firms within Thai listed companies. Especially, audit quality is the moderating effect of the relationship between operational effectiveness and investor confidence.

## Conclusion

This study investigates the effects of operational effectiveness, financial reliability, and regulatory compliance on investor confidence via audit quality as a mediator. The data was collected from 301 chief executive officers who participated in Thai listed companies. The findings show that operational effectiveness, financial reliability, and regulatory compliance have the most powerful effect on audit quality. Furthermore, the relationship between internal control success and investor confidence via audit quality as a mediator in this empirical research. Interestingly, there is a directly positive relationship between audit quality and investor confidence.

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