

Fraud Investigation, Internal Audit Quality and Organizational Performance: Empirical Evidence from Thai Listed Companies

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Abstract

The objective of this study is to examine the influence of fraud investigation on organizational performance of Thai listed companies through mediating effects of internal audit quality, accounting information transparency and financial effectiveness, and moderating effect of corporate governance. In this study, 333 Thai listed companies are the samples of the study. Both the structural equation model and multiple regression analysis are used to examine the research relationships. The results of this study show that fraud investigation has a significant influence on internal audit quality, accounting information transparency, and financial effectiveness. Internal audit quality significantly influences accounting information transparency, financial effectiveness, and organizational performance while financial effectiveness significantly influences organizational performance. Next, both internal audit quality and financial effectiveness potentially mediate the fraud investigation-organizational performance relationships. In addition, corporate governance critically moderates the fraud investigation-internal audit quality relationships and the fraud investigation-financial effectiveness relationships. In summary, fraud investigation functions as an important valuable technique of internal audit practices. As a result, businesses must build and implement a systematic fraud investigation procedure to generate and improve beneficial outcomes in the short, medium, and long term.

Keywords: Fraud Investigation, Internal Audit Quality, Accounting Information Transparency, Financial Effectiveness, Organizational Performance

JEL Classification Code: M40, M41, M49

1. Introduction

Firms now operate in business environments marked by urgent health conditions, rapid technological progress, complex regulatory requirements, intense worldwide rivalry, and constantly changing client preferences (Nguyen, 2021). To maintain a competitive advantage and maintain organizational performance, they must regularly review and evaluate the growth potential and change in these business contexts. Firms may, however, encounter tough

operations in surroundings that are constantly changing, unclear, and volatile. They may be badly impacted by their surroundings, resulting in inferior business results than their expectations and potential. Firms may use odd processes, unusual procedures, bizarre approaches, and exceptional ways to achieve organizational goals and objectives, such as misbehaviors of business practices, managerial misconducts, and asset theft, which can lead to corruption, bribery, and fraud (Prabowo, 2021). As a result of the fraud triangle, fraudulent behaviors in an organization can develop in the areas of opportunity, pressure, and rationalization of business operations.

Fraud has become a barrier to doing business in the face of demands for company ethics, corporate governance, and corporate social responsibility. In the extant literature, fraud is defined as (a) an intentional perversion of the truth, (b) a dishonest method or device used with the intent to deprive another of property or another right, and (c) a deception used to obtain an unfair or unlawful advantage. (Newman, 2009). It is criminal conduct that involves deception, concealment, or a breach of trust. From origin through disposition, it

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entails the use of deception to acquire unjust or illegal advantages, including misappropriation of cash or inventory, false financial reporting, and money laundering. Firms stay in convoluted times and have sophisticated operations in the fraud contexts to improve business excellence, establish organizational competitiveness, and sustain long-term performance and growth. To intercept and obstruct fraudulent occurrences in an organization, fraud investigation is a strategic valuable tool for improving the reliability and credibility of firms' business operations through committing with corporate governance and promoting corporate social responsibility.

Successful fraud investigation leads to a high level of organizational survival and sustainability in the short, medium, and long term. Fraud investigation is described in this context as a careful fact-finding procedure for resolving fraud claims from origin to conclusion. Through five key steps, including initiation, planning, execution, prosecution, and reflection, it is the principal responsibility of the anti-fraud professional. Furthermore, fraud investigation methodologies use both information gathering and knowledge categorization as major tactics. Information is collected through a variety of methods, including testimony, documentary and physical evidence, and personal observation. Organizational behavior, managerial decision-making, commercial practices, market structures, accounting principles, deviant behaviors, personal motives, law violations, and prior verdicts are all examples of knowledge categories (Prabowo, 2021). Firms that do excellent fraud investigations can effectively provide anti-corruption services, reach remarkable organizational goals, and potentially gain stakeholders' trust. Thus, fraud investigation plays a significant role in determining, driving, and explaining firms' valuable business outcomes.

Internal audit quality, accounting information transparency, financial effectiveness, and organizational performance are the four categories of useful business outcomes identified in this study. To begin, internal audit quality is described as an important component of effective internal controls that provides reasonable assurance regarding the attainment of operational, reporting, and compliance objectives (Boskou et al., 2019). It can aid in the evaluation of a company's efficacy and efficiency, as well as the promotion of continual development. Second, accounting information transparency is defined as the widespread availability of relevant, visible, credible, reliable, and honest information about a publicly-traded company's periodic financial and operational performance, financial position, investment opportunities, accounting policies, governance, value, and risks (Iordache, 2020). It is an important tool for presenting a company's operating outcomes to its stakeholders. Finally, financial effectiveness is described as a company's capacity to use data to make better financial decisions (Vyvyan et al., 2014). It primarily

concerns the financial economy and financial management in businesses, such as cost-intensity of operations and investment profitability. Furthermore, because they can link fraud investigation and organizational performance, all internal audit quality, accounting information transparency, and financial effectiveness are offered as research mediators. Finally, organizational performance is defined as an organization's actual outputs that can be compared to its intended goals and objectives using the right strategy (Hilton et al., 2021). It is the achievement and accomplishment of long-term profitability, revenue growth, job satisfaction, employee productivity, goodwill, and service or product quality goals for a firm. It is a primary outcome of conducting a fraud investigation in a company.

Corporate governance is presented as a moderator of the research relationships to strengthen the fraud investigation-organizational performance relationships. It is defined as the methods, techniques, processes, and structures for leading, managing, and controlling business activities with the ultimate purpose of achieving organizational goals and long-term stakeholder value (Puni & Anlesinya, 2020). It ensures that firm responsibilities are met and exceeded, which helps to facilitate, create, and sustain stakeholder confidence (Garfatta, 2021). Firms with great corporate governance can streamline, control their leadership and effectively increase their competitiveness, performance, success, and sustainability. The more governance of firms is driven, the higher are the chances of a better performance. Accordingly, corporate governance functions as a moderator of the relationships among fraud investigation, internal audit quality, accounting information transparency, financial effectiveness, and organizational performance. It positively moderates the research relationships.

The purpose of this research is to look into the effects of fraud investigations on the organizational performance of Thai publicly traded companies. The research relationships are then believed to be mediated by internal audit quality, accounting information transparency, and financial effectiveness, while corporate governance is speculated to be moderated by the research relationships. The study's relevant samples are Thai publicly traded companies. Internal audit executives who are internal audit directors, internal audit managers, chief internal audit officers, or other heads of internal audit officers from Thai listed companies provide data. They are considered the key informants of the study. In addition, the key research question is how fraud investigation has an influence on organizational performance. The specific research questions are: (1) How fraud investigation has an influence on internal audit quality, accounting information transparency and financial effectiveness, (2) How does internal audit quality has an influence on accounting information transparency, financial effectiveness and organizational performance, (3) How

both accounting information transparency and financial effectiveness have influences on organization performance, (4) How internal audit quality, accounting information transparency and financial effectiveness mediate the fraud investigation-organizational performance relationships, and (5) How corporate governance moderates the relationships among fraud investigation, internal audit quality, accounting information transparency, financial effectiveness, and organizational performance.

The remainder of this study is organized as follows. Section 2 presents the relevant literature reviews of fraud investigation and its consequences. The conceptual model of the research relationships and hypotheses development are provided. Section 3 includes the presentation of data collection and statistical methodologies. Section 4 presents and discusses the empirical results of the study. Finally, Section 5 summarizes the overall study and the potential implications.

2. Literature Review and Hypotheses Development

The fraud triangle hypothesis is a paradigm often used in auditing, internal auditing, and other related professions to explain the reasons behind an individual's decision to commit fraud, and it consists of three elements: opportunity, pressure, and rationalization, according to extant literature (Albrecht, 1991). All three criteria must be present for

fraud to occur. To begin with, the opportunity is typically difficult to see, but it is relatively simple to control through organizational or procedural adjustments. Second, pressure stems from work-related issues; unreasonable performance expectations may provide the motivation to commit fraud. Finally, rationalization focuses on the potential gain from a fraudulent activity that outweighs the risk of detection, as well as justifications such as job dissatisfaction or perceived entitlement, or a current intent to make the victim whole in the future, or saving one's family, possessions, or status. As a result, fraud investigation is offered as a helpful internal audit technique for detecting, preventing, safeguarding, and monitoring fraudulent actions in a business. Successful fraud controls are inextricably linked to excellent fraud investigation. Fraud investigation is an independent variable in this study (Prabowo, 2021). Internal audit quality, accounting information transparency, and financial effectiveness are mediating variables, corporate governance is a moderating variable and organizational performance is a dependent variable.

Figure 1 shows the conceptual model of the fraud investigation-organizational performance relationships.

2.1. Organizational Performance

The main result of properly conducting fraud investigations in an organization is improved organizational performance. It is defined as a combination of financial

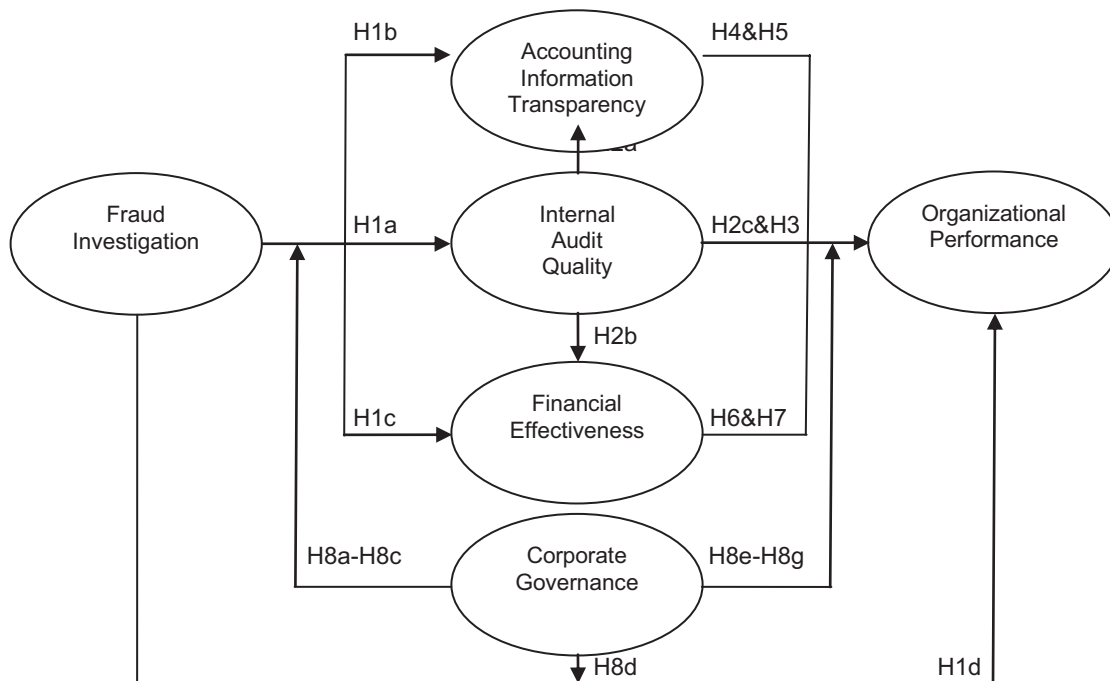


Figure 1: A Conceptual Model of the Fraud Investigation-Organizational Performance Relationships

and non-financial metrics that provide information on the degree to which organizational goals and outcomes have been met (Alaaraj et al., 2018). Furthermore, organizational performance relates to an organization's actual outputs, which can be measured against stated goals and objectives utilizing appropriate strategies for action (Hilton et al., 2021). It entails evaluating the productivity of organizational members in terms of income, profit, growth, development, and expansion. It reflects the effectiveness, efficiency, and adaptability of firms' activities in various business contexts. Firms with great organizational performance can accomplish the objectives and results of increased profits, enhanced quality products, greater market share, superior financial outcomes, and long-term business survival. They tend to achieve a high level of profit, market share, and product quality. Accordingly, organizational performance is the achievement and accomplishment of organizational goals related to long-run profitability, the growth rate of revenues, job satisfaction, employee productivity, goodwill, reputation, and service or product quality.

2.2. Fraud Investigation

Fraud investigation is described as a company's ability to detect and investigate fraud suspicions or allegations to determine whether fraud occurred and who perpetrated it, as well as to report findings that can be utilized in legal proceedings or to recover fraud damages (Albrecht & Hoopes, 2014). It acquires and collects all tangible and oral evidence in accordance with evidence regulations to assure admissibility, analyses the evidence, and presents the evidence in an understandable manner in a place of the firms' choosing. Firms that conduct thorough fraud investigations can produce evidence that can be used in a criminal or other disciplinary action, as well as proof that can be utilized to recover damages from an insurer. They can effectively provide anti-corruption, achieve excellent corporate goals and objectives, and potentially gain stakeholders' trust.

Fraud investigation also refers to the careful fact-finding process of settling fraud claims from inception to conclusion. It is the anti-fraud professional's primary function through five key phases: initiation, planning, execution, prosecution, and reflection. Surprisingly, there are two basic approaches for conducting fraud investigations: data gathering and knowledge categorization. To begin, information is gathered from a variety of sources, including testimony, documentary and physical evidence, and personal observation. Second, knowledge categories cover a wide range of topics, including organizational behavior, management decision-making, commercial practices, market structures, accounting principles, deviant behaviors, personal motives, legal violations, and previous judgments. As a result, fraud investigation has a substantial impact on

the attainment of intended goals and objectives. Successful fraud investigation, according to the available literature, leads to improved internal audit quality, greater accounting information transparency, superior financial decision effectiveness, and higher organizational performance. Thus, fraud investigation is hypothesized to positively influence internal audit quality, accounting information transparency, financial effectiveness, and organizational performance. Therefore,

H1: Fraud investigation positively influences (a) internal audit quality, (b) accounting information transparency, (c) financial effectiveness, and (d) organizational performance.

2.3. Internal Audit Quality

Internal audit quality is a key result of fraud investigation practices in an organization. Better internal audit quality is positively related to more effective fraud investigation. In this study, internal audit quality is defined as the attribute of the internal audit to perform its duties as enshrined in the applicable laws in an independent and professional manner (Kaawaase et al., 2021). It is the effective use of standards, audit methods, and methodologies through the application of accounting principles, risk, and control identification, and management concept comprehension. It has the ability to make financial reporting more productive, governed, and controlled, as well as contribute significantly to the function and process of financial reporting by reflecting transparent accounting information and increasing the value of information.

Internal audit quality, on the other hand, refers to an important component of effective internal controls that provides reasonable assurance about the attainment of operational, reporting, and compliance objectives (Boskou et al., 2019). It can be used to assess a company's efficacy and efficiency, as well as drive continual improvement, based on financial and non-financial outcomes. Internal audit quality can help companies achieve better business results. As a result, they are more likely to accomplish long-term organizational performance and growth. As a result, it is hypothesized that internal audit quality is a determinant of accounting information transparency, financial effectiveness, and organizational performance. Furthermore, internal audit quality is a link between fraud investigation and organizational performance, and its existence explains the relationships between these two variables. As a result, it is offered as a research relationship mediator. Therefore,

H2: Internal audit quality positively influences (a) accounting information transparency, (b) financial effectiveness, and (c) organizational performance.

H3: *Internal audit quality mediates the fraud investigation-organizational performance relationships.*

2.4. Accounting Information Transparency

Accounting information transparency is a critical consequence of firms' application of fraud investigation. Interestingly, accounting information transparency is defined as the widespread availability of relevant, visible, credible, reliable, and honest information about the periodic financial and operational performance, financial position, investment opportunities, the entity's accounting policies, governance, value, and risks related to publicly traded firms (Iordache, 2020). It guarantees that both the economic reality of enterprises and the economic environment in which they operate in a competitive market are well understood. It is an important tool for presenting a company's operating outcomes to its stakeholders. Accounting information transparency is divided into five categories: (a) compliance with laws and regulations, (b) timeliness of disclosure, (3) disclosure of forecasted financial information, (d) disclosure of information in the annual report (financial and operating information, as well as board and ownership structure), and (e) disclosure of the firm's webpage (Chiang & He, 2010).

Accounting information transparency allows firms to verify the public display of accurate, comprehensive, reliable, understandable, and accessible data. As a result, accounting data openness is crucial in determining, motivating, and explaining organizational performance. Accounting information, as a go-between for fraud investigation and organizational performance, is also a mediator of the fraud investigation-organizational performance linkages. This research can trace an arrow from fraud investigation to accounting information transparency, and then from accounting information transparency to organizational performance in a mediating relationship. Therefore,

H4: *Accounting information transparency positively influences organizational performance.*

H5: *Accounting information transparency mediates the fraud investigation-organizational performance relationships.*

2.5. Financial Effectiveness

Successfully applying and employing fraud investigation in a business has a significant financial impact. Financial effectiveness is defined in this study as a company's capacity to use data to make better financial decisions (Vyvyan et al., 2014). It gives you a thorough grasp of the underlying abilities, qualities, and behaviors connected with financial capacity, allowing you to apply analytical tools and make better judgments (Kaufmann et al., 2012). It primarily

concerns the financial economy and financial management in businesses, such as cost-intensity of operations and investment profitability.

Financial results and metrics, such as financial performance, profitability, financial stability, and earnings position, are key areas of financial effectiveness due to the changing conditions of business activities and the diversity of company entities. Financial effectiveness, as a result, has a considerable impact on organizational performance. It has a positive correlation with organizational success. Similarly, financial effectiveness discusses how or why a link between fraud investigation and corporate success has been observed. In a mediating paradigm, fraud investigation does not directly influence organizational performance but rather acts as a middleman through influencing financial effectiveness. As a result, financial effectiveness is thought to be both an independent and a mediating component in the study. Therefore,

H6: *Financial effectiveness positively influences organizational performance.*

H7: *Financial effectiveness mediates the fraud investigation-organizational performance relationships.*

2.6. Corporate Governance

Corporate governance is critical to the development of the aforementioned connections. Corporate governance is described in this study as the systems, methods, processes, and structures for leading, managing, and controlling business activities with the ultimate purpose of accomplishing organizational objectives and long-term stakeholder value (Puni & Anlesinya, 2020). It establishes the mechanisms for setting organizational goals and objectives, as well as the methods for achieving those goals and objectives and tracking performance. It also facilitates, builds, and maintains stakeholder trust by assuring that firm responsibilities are met and exceeded. Effective corporate governance can facilitate successful stakeholder relationships.

In addition, corporate governance refers to a set of processes and systems that, when implemented within a corporation, would streamline leadership and control, resulting in higher performance and value (Pintea et al., 2021). Discipline, transparency, independence, accountability, responsibility, justice, and social duty are all important aspects of an organization. The more a company's governance is driven, the better its chances of succeeding. Corporate governance allows businesses to ensure that their resources. In addition, corporate governance refers to a set of processes and systems that, when implemented within a corporation, would streamline leadership and control, resulting in higher performance and value (Pintea et al., 2021). Discipline, transparency, independence,

accountability, responsibility, justice, and social duty are all important aspects of an organization. The more a company's governance is driven, the better its chances of succeeding. Corporate governance allows businesses to ensure that their resources are managed efficiently and in the best interests of their investors, lowering the danger of resource expropriation by managers. efficiently and in the best interests of their investors, lowering the risk of resource expropriation by managers.

They can lay solid foundations for management oversight, structuring the board to add value, promoting ethical and responsible decision-making, ensuring financial reporting integrity, making timely and balanced disclosure, respecting shareholder rights, recognizing and managing risks, encouraging enhanced performance, remunerating fairly and responsibly, and recognizing the legitimate interests of stakeholders (Tran et al., 2020; Wajeeh & Muneeza, 2012). As a result, it is expected that corporate governance will control the links between fraud investigation, internal audit quality, accounting information transparency, financial effectiveness, and an organization's performance. Therefore,

H8: *Corporate governance moderates*

- (a) *the fraud investigation-internal audit quality relationships,*
- (b) *the fraud investigation-accounting information transparency relationships,*
- (c) *the fraud investigation-financial effectiveness relationships,*
- (d) *the fraud investigation-organizational performance relationships,*
- (e) *the internal audit quality-organizational performance relationships,*
- (f) *the accounting information transparency-organizational performance relationships, and*
- (g) *the financial effectiveness-organizational performance relationships.*

3. Research Design and Methodology

3.1. Data: The Context of the Listed Companies in Thailand

This study examines a sample of Thai listed companies to look at the effects of fraud investigations on organizational performance. The companies on the list are both large-scale corporations and significant public companies that have a significant impact on Thailand's economics, society, and surroundings. Internal audit executives from these companies (internal audit directors, internal audit managers, chief internal audit officers, or other heads of internal audit officers) are significant informants in this study. They are

responsible for providing independent assurance that a company's risk management, governance, and internal control mechanisms are functioning properly. They can provide objective assurance and consulting activities that bring value and improve the operations of an organization. Internal audit executives are thus appropriate key informants because they can assist companies in achieving their strategic goals by applying a methodical, disciplined approach to analyzing and enhancing risk management, control, and governance systems.

3.2. Data Collection and Sample Selection

To collect data, questionnaires will be mailed to 768 publicly traded companies in Thailand between October and December 2020. In terms of the questionnaire mailing, 768 questionnaires were validly mailed, with 343 responses received. Only 333 of the completed and returned questionnaires were usable. Approximately 43.36 percent of people responded effectively. As a result, the usable 333 Thai listed companies were used to empirically examine the research relationships. A comparison of the first and second wave data, as advised by Armstrong and Overton (1977), was done to clarify potential non-response bias. Because there were no statistically significant differences between the first and second groups at a 95 percent confidence level as years in business operations ($t = 0.15, p > 0.05$), the number of employees ($t = 0.17, p > 0.05$), and investment funds ($t = 0.21, p > 0.05$), this study had no response bias issues when testing the research relationships.

3.3. Variables and Measures

These constructs' measurements are self-developed based on current literature. Each construct is measured with multiple items. Despite the fact that all constructs are clearly stated, due to the abstract nature of the construct, it is difficult to directly express or witness the scale (Lohapan, 2021). Variables are, without a doubt, estimated scales based on their definitions, and they were applied based on relevant accounting research and other related publications. They were measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), except for control variables years in business operations, the number of employees, and investment funds. Thus, sources of all variable measurements (fraud investigation, internal audit quality, accounting information transparency, financial effectiveness, corporate governance, and organizational performance) are presented in Table 1.

Control variables were evaluated empirically to corroborate the research findings. In a research project, a control variable is anything that is kept constant or

constrained. It's a variable that has no bearing on the study's objectives, but it's kept under control because it could affect the results. Years in business, the number of employees, and the amount of money invested were all considered control factors in this study. Years in business operations (YO) were calculated using a dummy variable with the following values: fewer than 15 years = 0 and equal to or higher than 15 years = 1.

Next, the number of employees in a firm was calculated using a dummy variable with the values of less than 500 employees = 0 and equal to or higher than 500 employees = 1. Finally, investment funds (IF) were calculated using a dummy variable of less than 10,000 million baht = 0 and equal to or greater than 10,000 million baht = 1 to

represent the amount of money a firm has invested in doing business.

3.4. Convergent and Discriminant Validity

To ensure the model's convergent validity, three criteria are reviewed (Hair et al., 2010). All the factor loadings are more than 0.60. Cronbach alpha coefficients and composite reliability are also attained with a score of greater than 0.07. More crucially, item-total correlations greater than 0.30 indicate that convergent validity has been achieved. All indices can be accepted based on these criteria. The validity and reliability results for the multiple-item scales utilized in this investigation are presented in Table 2.

Table 1: Sources of All Variable Measurements

Variables	Definition	Items	References
Fraud investigation (FI)	An ability of firms to detect and examine suspicions or allegations of fraud by determining whether fraud occurred and who perpetrated it and report findings that may be used in a legal action or to recover fraud losses	12	Albrecht and Hoopes, (2014)
Internal audit quality (IQ)	An essential element of the effective internal controls through providing reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance	9	Boskou et al. (2019); Kaawaase et al. (2021)
Accounting information transparency (AT)	The widespread availability of relevant, visible, credible, reliable, and honest information related to publicly traded firms	9	Chiang and He (2010); lordache (2020)
Financial effectiveness (FE)	A comprehensive understanding of underlying skills, attributes, and behaviors associated with financial capability, applying analytical techniques, and leading to more effective decisions	8	Kaufmann et al. (2012); Vyvyan et al. (2014)
Corporate governance (CG)	the systems and mechanisms of directing and controlling business affairs towards enhancing business prosperity and corporate accountability with the ultimate goal of realizing organizational objectives and long-term stakeholder value	10	Pintea et al. (2021); Puni and Anlesinya (2020)
Organizational performance (OP)	The actual outputs of an organization, which can be measured against intended goals and objectives using relevant strategies for action	7	Alaaraj et al. (2018); Hilton et al. (2021)

Table 2: Results of Measure Validation

Items	Factor Loadings	Item-Total Correlation	Cronbach Alpha
Fraud investigation (FI)	0.74–0.88	0.73–0.86	0.86
Internal audit quality (IQ)	0.78–0.87	0.76–0.83	0.84
Accounting information transparency (AT)	0.71–0.89	0.75–0.89	0.94
Financial effectiveness (FE)	0.85–0.94	0.86–0.94	0.93
Corporate governance (CG)	0.84–0.93	0.85–0.93	0.94
Organizational performance (OP)	0.75–0.84	0.75–0.85	0.92

3.5. Measurement Model

The most essential indicators, such as the comparative fit index (CFI), the goodness of fit index (GFI), the incremental fit index (IFI), and the root mean square error of approximation (RMSEA), were employed to assess the model fit in this study (Awang, 2014). All of the constructs were included in the measuring model. CFI = 0.92, GFI = 0.93, IFI = 0.91, and RMSEA = 0.03 are the model fit indexes. This study might continue if at least three of the indices passed the threshold criteria, according to Hair et al. (2010). As a result, the measurement model's initial test yields an excellent fit for the data.

3.6. Hypotheses Testing

Direct and indirect hypotheses were constructed to study the linkages between fraud investigation, internal audit quality, accounting information transparency, financial effectiveness, and organizational success. Both direct and mediated effects were investigated using a structural equation model. In this study, multiple regression analysis was also used to see if corporate governance had any moderating impacts. The findings of this research are reported in the following section.

4. Results and Discussion

All variables' descriptive statistics and correlation matrices are shown in Table 3. When the inter-correlation in any predict variable is greater than 0.80, multicollinearity may arise, indicating a strong relationship (Hair et al., 2010). At the 0.05 level, the correlations vary from 0.22 to 0.74, indicating that the probable associations of the variables in the conceptual model might be investigated. As a result, there are no significant multicollinearity issues in this study.

The findings of path coefficients and hypothesis testing for the direct and indirect hypotheses are presented in Table 4. The fraud investigation-organizational performance correlations are summarised in Figure 2. Surprisingly, fraud investigation has been shown to be critical in determining and driving internal audit quality, accounting transparency, and financial effectiveness. Internal audit quality ($b = 0.35$, $p < 0.01$), accounting information openness ($b = 0.19$, $p < 0.02$), and financial effectiveness ($b = 0.35$, $p < 0.01$) are all affected. In the existing literature, fraud investigation can detect and examine suspicions or allegations of fraud by determining whether fraud occurred and who perpetrated it and report findings that may be used in a legal action or to recover fraud losses (Albrecht & Hoopes, 2014). It secures and collects all tangible and oral evidence in a manner consistent with the rules of evidence to ensure admissibility, analyzes the evidence, and presents the evidence in an understandable manner in a firms' selection.

Internal audit quality, accounting information transparency, and financial effectiveness can all be achieved by companies that conduct thorough fraud investigations. They do, in fact, have a significant positive impact on these outcomes. Hypotheses 1a–1c are so supported. Surprisingly, the investigation of fraud had little effect on organizational performance ($b = 0.04$, $p < 0.65$). While it may not have a direct impact on organizational performance, it tends to improve internal audit quality, accounting information transparency, and financial effectiveness. Fraud investigation is also one of the internal audit procedures that directly leads to financial reporting quality, resource utilization, regulatory compliance, and fraud prevention, all of which are linked to a firm's overall success. As a result, fraud investigation is not a factor in their overall success. As a result, Hypothesis 1d is unsupported.

Indeed, internal audit quality is a significant driver of accounting information transparency, financial effectiveness

Table 3: Descriptive Statistics and Correlation Matrix

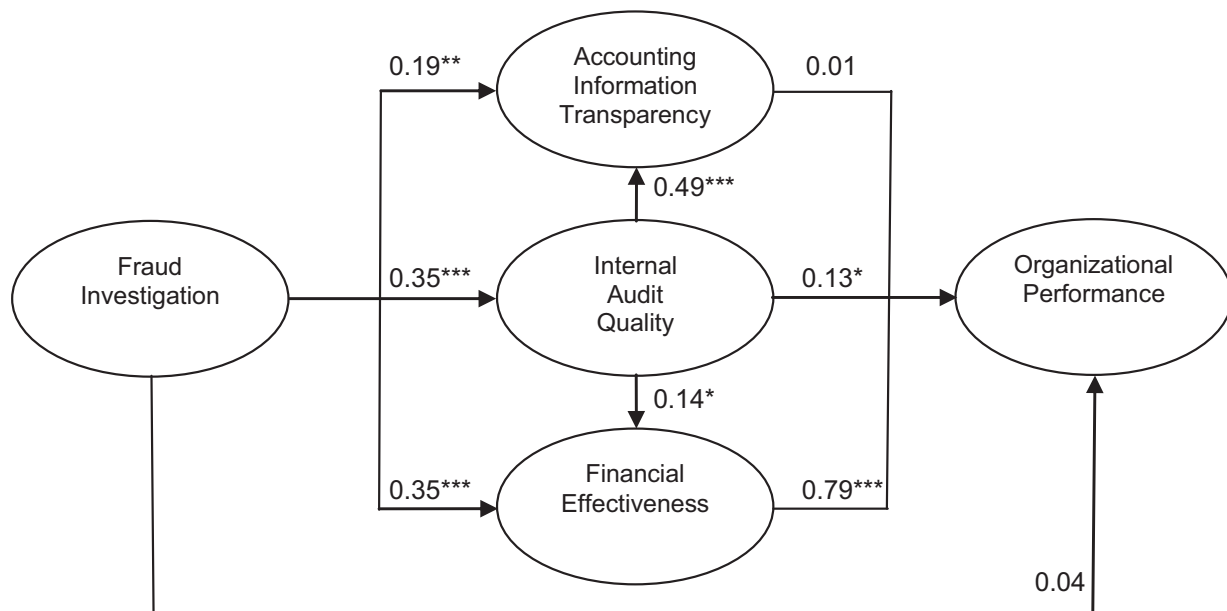
Variables	FI	IQ	AT	FE	CG	OP
Mean	4.10	4.46	4.36	4.04	4.42	3.93
s.d.	0.59	0.82	0.50	0.55	0.49	0.59
FI						
IQ	0.22**					
AT	0.44***	0.42***				
FE	0.48***	0.24**	0.41***			
CG	0.40***	0.40***	0.58***	0.48***		
OP	0.37***	0.32***	0.35***	0.74***	0.55***	

** $p < 0.05$, *** $p < 0.01$.

Table 4: Results of Path Coefficients and Hypotheses Testing

Hypotheses	Relationships	Coefficients	t-value	Results
H1a	FI → IQ	0.35***	4.43	Supported
H1b	FI → AT	0.19**	2.33	Supported
H1c	FI → FE	0.35***	3.78	Supported
H1d	FI → OP	0.04	0.46	Not supported
H2a	IQ → AT	0.49***	4.74	Supported
H2b	IQ → FE	0.14*	1.85	Supported
H2c	IQ → OP	0.13*	1.11	Supported
H3	FI → IQ	0.35***	4.43	Supported
	IQ → OP	0.13*	1.11	
H4	AT → OP	0.01	0.03	Not supported
H5	FI → AT	0.19**	2.33	Not supported
	AT → OP	0.01	0.03	
H6	FE → OP	0.79***	6.48	Supported
H7	FI → FE	0.35***	3.78	Supported
	FE → OP	0.79***	6.48	

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, CFI = 0.92; GFI = 0.93; IFI = 0.91; RMSEA = 0.03.



* $p < .10$, ** $p < .05$, *** $p < .01$

Figure 2: A Summary of the Fraud Investigation-Organizational Performance Relationships

and organizational performance. It positively leads to accounting information transparency ($b = 0.49, p < 0.01$), financial effectiveness ($b = 0.14, p < 0.06$) and organizational performance ($b = 0.13, p < 0.07$).

Internal audit quality is defined as the effective use of standards, audit methods, and methodologies to execute accounting principles, detect risks and controls, and comprehend management ideas (Kaawaase et al., 2021). It has the ability to be more productive, managed, and controlled, as well as make a significant contribution to the function and process of financial reporting, reflecting clear accounting data and enhanced information value. Internal audit quality can help businesses improve accounting information transparency, financial efficiency, and organizational performance. Hypotheses 2a–2c are so supported. Internal audit quality plays a crucial role in associating fraud investigation with organizational performance to examine the mediating effects. It is a significant result of doing a fraud investigation. It's also a possible determinant of a company's organizational performance. As a result, the relationship between fraud investigation and organizational performance is mediated by internal audit quality. As a result, Hypothesis 3 is accepted.

The impact of accounting information transparency on organizational performance is also investigated in this study. Organizational performance is unrelated to accounting information transparency ($b = 0.01, p < 0.98$). Accounting information transparency ensures a good grasp of both the economic reality of firms and the economic environment in which firms engage in a competitive market, according to extant research (Iordache, 2020). It is a basic approach for presenting a company's operating outcomes to its stakeholders. Accounting information openness helps businesses achieve long-term success and growth. They are likely to perform admirably in the workplace. However, the result of this study shows that accounting information transparency does not lead to organizational performance. It could not directly affect organizational performance, but there may be possible mediators which could like it to this performance. Competitive advantage, operational efficiency, decision effectiveness, and business excellence are examples of mediators. As a result, accounting data openness is not a predictor of organizational performance. As a result, Hypothesis 4 is unsupported. Furthermore, a mediator (Baron & Kenny, 1986) explains the how and why of an observed link between two variables, but accounting information transparency is not a go-between for fraud investigation and organizational success. As a result, the research relationships are not mediated by accounting information transparency. As a result, Hypothesis 5 is unsupported.

The importance of financial effectiveness in determining a firm's organizational performance has also been demonstrated. It may have an impact on their organization's

performance ($b = 0.79, p < 0.01$). Financially effective companies can provide a comprehensive understanding of the underlying abilities, qualities, and behaviors connected with financial capacity, allowing them to apply analytical approaches and make better decisions (Kaufmann et al., 2012). They can achieve financial economy and financial management success, such as cost-intensity of performed activities and investment profitability. As a result, financial efficiency is directly linked to organizational performance. Superior organizational performance is associated with high financial effectiveness. As a result, Hypothesis 6 is accepted. Furthermore, a mediator is a variable that connects the independent and dependent variables and explains the relationship between the two variables. Because it can link fraud investigation with organizational success, financial effectiveness is the mediator of the research interactions in this case. It has a substantial impact on the relationship between fraud investigation and organizational performance. As a result, Hypothesis 7 is accepted.

Finally, the moderating impacts of corporate governance on research relationships are investigated in this study. Table 5 shows the findings of the moderating research relationships' multiple regression analysis and hypotheses testing. Corporate governance is hypothesized to be the study's moderator in this research. It increases the fraud investigation-internal audit quality ($b = 0.17, p < 0.06$) and fraud investigation-financial effectiveness ($b = 0.16, p < 0.08$) connections directly. According to current literature, corporate governance refers to the methods, techniques, processes, and structures for leading, managing, and controlling business affairs with the ultimate purpose of achieving organizational objectives and long-term stakeholder value (Puni & Anlesinya, 2020). It provides the structures through which organizational goals and objectives are set and the means of attaining those goals and objectives and monitoring performance and facilitates, builds, and maintains stakeholder trust by assuring that firm responsibilities are met and exceeded.

Firms with effective corporate governance can facilitate successful stakeholder relationships and achieve sustainable organizational performance and growth (Table 6). *Therefore, Hypotheses 8a and 8c are supported.* Interestingly, corporate governance has no effect on the fraud investigation-accounting information transparency relationships ($b = 0.02, p < 0.82$), the fraud investigation-organizational performance relationships ($b = 0.03, p < 0.71$), the internal audit quality-organizational performance relationships ($b = 0.06, p < 0.53$), the accounting information transparency-organizational performance relationships ($b = 0.05, p < 0.58$), and the financial effectiveness-organizational performance relationships ($b = 0.02, p < 0.72$). It is not a significant moderator in the strengthening of all study connections in which organizational performance is a dependent variable. It does not assist in

Table 5: Results of Multiple Regression Analysis and Hypotheses Testing^a

Independent Variables	Dependent Variables						
	IQ	AT	FE	OP	OP	OP	OP
FI	0.34*** (0.09)	0.26*** (0.09)	0.31*** (0.09)	0.19** (0.09)			
IQ					0.16* (0.09)		
AT						0.04 (0.10)	
FE							0.59*** (0.08)
CG	0.34*** (0.09)	0.48*** (0.09)	0.36*** (0.09)	0.49*** (0.09)	0.49*** (0.09)	0.56*** (0.10)	0.29*** (0.07)
FI*CG	0.17* (0.09)	0.02 (0.08)	0.16* (0.09)	0.03 (0.09)			
IQ*CG					0.06 (0.09)		
AT*CG						0.05 (0.09)	
FE*CG							0.02 (0.06)
YO	0.01 (0.07)	0.06 (0.07)	0.11 (0.07)	0.18 (0.07)	0.18 (0.07)	0.19 (0.07)	0.11 (0.05)
NE	0.07 (0.07)	0.06 (0.06)	0.03 (0.06)	0.09 (0.06)	0.09 (0.06)	0.08 (0.06)	0.07 (0.05)
IF	0.04 (0.06)	0.03 (0.06)	0.02 (0.06)	0.02 (0.06)	0.01 (0.06)	0.02 (0.06)	0.01 (0.05)
Adjusted R^2	0.30	0.37	0.34	0.35	0.34	0.32	0.60

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, ^a Beta coefficient with standard errors in parenthesis.

the promotion of these research collaborations. Corporate governance is increasingly becoming a driving force behind other research collaborations. *Hypotheses 8b, 8d, 8e, 8f, and 8g are supported.*

5. Implications and Directions for Future Research

5.1. Theoretical Implication and Directions for Future Research

This research backs up the fraud triangle theory. Fraud investigation is a strategic instrument that can help businesses gain a competitive advantage and achieve long-term performance and growth. Excellent fraud investigation is linked to beneficial company outcomes. Future research may need to examine the reconceptualized relationships between fraud investigation and organizational performance and between accounting information transparency and organizational performance using an in-depth literature review and synthesized existing literature to verify and expand the current research relationships. Next, this research does not look at the many aspects of fraud investigation. Future research may need to use grounded theory and inductive research as effective research approaches to find its aspects. Furthermore, corporate governance has a limited role in regulating research collaborations. Future research

may need to rethink corporate governance principles and identify new research linkages moderators. Future studies may need to include antecedents with regard to fraud investigation implementation in the conceptual model to increase research relationships. Internal and external elements of fraud investigation implementation are among the antecedents. Finally, for testing research hypotheses, this work employs both structural equation modeling and multiple regression analysis. For future research, another statistical tool, such as partial least squares regression, may be required to test the research relationships.

5.2. Managerial Implication

Fraud investigation is an important part of an organization's internal auditing operations. Firms must promote key fraud investigation operations by investing in, constructing, and developing a useable fraud investigation system, and encouraging employees to understand and learn about this system and successfully apply it to achieve more effective business results. Furthermore, businesses must seek out techniques for detecting and eliminating fraud sources such as opportunity, pressure, and rationalization. These operations need firms to invest their assets and resources. Firms must determine and implement their visions and policies relating to business ethics, corporate governance, transparency, and corporate social responsibility to reduce fraudulent activities, and encourage all business operations to align with these visions and policies to improve long-term

Table 6: A Summary of Hypotheses Testing

Hypotheses	Relationships	Results
H1a	Fraud investigation positively influences internal audit quality.	Supported
H1b	Fraud investigation positively influences accounting information transparency.	Supported
H1c	Fraud investigation positively influences financial effectiveness.	Supported
H1d	Fraud investigation positively influences organizational performance.	Not supported
H2a	Internal audit quality positively influences accounting information transparency.	Supported
H2b	Internal audit quality positively influences financial effectiveness.	Supported
H2c	Internal audit quality positively influences organizational performance.	Supported
H3	Internal audit quality mediates the fraud investigation-organizational performance relationships.	Supported
H4	Accounting information transparency positively influences organizational performance.	Not supported
H5	Accounting information transparency mediates the fraud investigation- organizational performance relationships.	Not supported
H6	Financial effectiveness positively influences organizational performance.	Supported
H7	Financial effectiveness mediates the fraud investigation-organizational performance relationships.	Supported
H8a	Corporate governance moderates the fraud investigation-internal audit quality relationships.	Supported
H8b	Corporate governance moderates the fraud investigation-accounting information transparency relationships.	Not supported
H8c	Corporate governance moderates the fraud investigation-financial effectiveness relationships.	Supported
H8d	Corporate governance moderates the fraud investigation-organizational performance relationships.	Not supported
H8e	Corporate governance moderates the internal audit quality-organizational performance relationships.	Not supported
H8f	Corporate governance moderates the accounting information transparency-organizational performance relationships.	Not supported
H8g	Corporate governance moderates the financial effectiveness-organizational performance relationships.	Not supported

organizational performance and growth. In conclusion, businesses must use fraud investigation to assist in providing optimal business practices and producing excellent long-term and future business results.

6. Conclusion

Fraud investigation has become a strategic important instrument for offering strong company operations, activities, and practices in today's changing and uncertain corporate contexts. It has the ability to improve organizational results, performance, and growth. The purpose of this research is to look into the effects of fraud investigations on the organizational performance of Thai publicly traded companies. Internal audit quality, accounting information transparency, and financial effectiveness are offered as research relationship mediators, whereas corporate governance is proposed as a

research relationship moderator. 333 Thai listed firms are the samples of the study. The structural equation model is used to examine the study relationships' direct and indirect impacts. Furthermore, the research linkages are examined using multiple regression analysis in this study. Fraud investigation has a considerable impact on internal audit quality, accounting information transparency, and financial effectiveness, according to the findings of this study, but has no impact on organizational performance. Following that, the quality of internal auditing has a significant impact on accounting information transparency, financial efficiency, and organizational performance. It explicitly mediates the links between fraud investigation and organizational performance.

Furthermore, accounting information transparency has no impact on assessing organizational performance or mediating fraud investigation-performance linkages.

Finally, financial effectiveness has a significant impact on organizational performance and also serves as a mediator between fraud investigation and organizational performance. Corporate governance is the moderator of the fraud investigation-internal audit quality relationships and the fraud investigation-financial effectiveness relationships when assessing moderating effects. The rest of the study relationships, however, are not moderated by corporate governance. In conclusion, businesses must invest and deploy their assets and resources to develop and improve all operations and methods for preventing and eradicating fraudulent actions in their organizations. They must encourage their staff to learn about the causes of fraud as well as fraud detection, prevention, protection, and monitoring. Future research may need to rethink fraud investigation-organizational performance relationships and accounting information transparency-organizational performance relationships, search for their dimensions using grounded theory and inductive research, rethink corporate governance concepts and find other moderators, and use another statistical method such as partial least squares regression to test the findings.

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