



Forensic accounting and fraud control in ASEAN

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ABSTRACT

This study examines the extent to which forensic accounting practices influence fraud detection and fraud prevention across ASEAN countries. Prior studies largely rely on single-country settings and rarely compare multiple dimensions of forensic accounting within an integrated analytical framework, thereby limiting cross-country generalization. To address this gap, the present study simultaneously examines fraud investigation, litigation support, and dispute resolution within a regional ASEAN context. Unlike previous studies that analyse forensic accounting practices separately or within single institutional settings, this study develops an integrated cross-country model that evaluates the relative effects of multiple forensic accounting dimensions on fraud detection and prevention across ASEAN economies. Using a quantitative explanatory research design, data were collected through a structured questionnaire measured on a five-point Likert scale from 350 professionals working in auditing, forensic accounting, internal audit, and compliance functions across ASEAN countries, selected through purposive sampling. The data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM), including tests of validity, reliability, and bootstrapping to evaluate the measurement and structural models. In addition, a Multi-Group Analysis (MGA) was conducted to examine whether the structural relationships differ across ASEAN countries. The results indicate that fraud investigation and litigation support have strong positive effects on both fraud detection and fraud prevention, while dispute resolution shows a weaker yet statistically significant influence. These findings demonstrate the robustness of forensic accounting practices across different ASEAN institutional contexts. From a policy perspective, the results suggest that regulators and organizations in ASEAN should strengthen forensic investigation capacity and legal support mechanisms to enhance fraud control systems. However, the study is limited by its cross-sectional design, suggesting opportunities for future longitudinal research.

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1. INTRODUCTION

Financial fraud has been widely recognized as a persistent threat to organizational sustainability, economic stability, and public trust across jurisdictions. The increasing sophistication of fraudulent schemes, driven by complex financial instruments, cross-border transactions, and rapid digital

transformation, has gradually reduced the efficacy of conventional auditing methodologies in identifying and mitigating fraudulent activities. As a result, greater reliance has been placed on forensic accounting is characterized as a distinct discipline that amalgamates accounting, auditing, investigative methodologies, and legal acumen to more efficiently tackle instances of financial impropriety (Abdullahi & Mansor, 2015; Rezaee & Wang, 2019). This development has encouraged both public and private organizations to incorporate forensic accounting practices into their governance and financial oversight systems.

Recent major fraud scandals across ASEAN further highlight the urgency of strengthening forensic accounting practices. For example, the iMalaysia Development Berhad (iMDB) scandal in Malaysia, involving billions of dollars in misappropriated public funds, exposed weaknesses in financial oversight and investigative mechanisms. Similarly, the PT Asuransi Jiwasraya corruption case in Indonesia, which resulted in losses exceeding USD 1 billion, revealed how complex financial manipulation and governance failures can undermine financial institutions. Other cases, such as the Wirecard-related fraud investigations involving operations in Singapore, also demonstrate the cross-border nature of financial crime in the region. These high-profile cases illustrate how sophisticated fraud schemes increasingly require specialized investigative approaches, thereby reinforcing the importance of forensic accounting in improving fraud detection and prevention mechanisms within ASEAN economies.

Empirical research has predominantly demonstrated that the methodologies employed in forensic accounting play a significant role in enhancing the detection and prevention of fraudulent activities. Prior investigations have systematically recorded that the utilization of forensic accounting methodologies is associated with improved fraud control outcomes, particularly in developing economies (Idrus et al., 2024; Kaur et al., 2022; Sadaf et al., 2018). Practices including fraud examination, legal proceedings assistance, and conflict resolution have been recognized as important mechanisms through which organizations enhance their capacity to respond to financial fraud (Anipiriyorima et al., 2025; Banda, 2025). However, despite the growing number of studies addressing forensic accounting, the development of this literature remains constrained by several unresolved conceptual and empirical limitations.

First, existing research on forensic accounting is predominantly characterized by single-country study designs, each embedded within specific legal, regulatory, and institutional environments. Although such studies provide valuable context-specific insights, they offer limited evidence regarding the broader applicability and generalizability of forensic accounting practices across jurisdictions (Dalwadi, 2023; Nelson, 2025). Comparative or regional-level investigations remain limited, particularly in economically integrated regions such as the Association of Southeast Asian Nations (ASEAN), within which member states demonstrate substantial variation in regulatory enforcement, legal frameworks, and institutional capacity (Idrus et al., 2024). Consequently, empirical evidence on whether forensic accounting practices operate consistently across different ASEAN countries remains insufficient.

Second, prior studies tend to examine forensic accounting practices in a fragmented manner, often focusing on individual practices or single fraud-related outcomes. The relative effectiveness of multiple forensic accounting practices has rarely been assessed within a unified analytical framework. As a result, limited understanding exists regarding which practices fraud investigation, litigation support, or dispute resolution exert stronger explanatory power in enhancing fraud detection and prevention when evaluated simultaneously (Anipiriyorima et al., 2025; Luka, 2025). This gap reduces the practical relevance of existing findings for policymakers and organizations seeking to prioritize forensic accounting interventions.

Third, despite extensive empirical investigation, much of the forensic accounting literature remains weakly grounded in formal theoretical frameworks. Many studies rely primarily on descriptive or practitioner-oriented explanations without explicitly linking forensic accounting practices to established theories of fraud behavior and institutional governance. The limited integration of theoretical perspectives such as the Fraud Triangle and institutional theory constrains

analytical depth and weakens the contribution of existing studies to the broader discourse on financial crime (Mahmod et al., 2024; Ozili, 2018).

Previous studies on forensic accounting have neither examined these practices within a cross-country ASEAN context nor compared the relative explanatory power of multiple the apparatus the role of forensic accounting in clarifying the methodologies employed in fraud detection and the strategies for fraud prevention. This study fills the gap by providing a theory-driven, cross-country empirical assessment of forensic accounting practices across ASEAN countries.

Building upon these research gaps, the primary objective of this study is to examine how different dimensions of forensic accounting practices influence fraud detection and fraud prevention across ASEAN countries. Specifically, this research aims to evaluate the relative effects of fraud investigation, litigation support, and dispute resolution on organizational fraud control outcomes within a cross-country institutional context. By analysing these dimensions simultaneously, the study seeks to provide a more comprehensive understanding of how forensic accounting practices contribute to fraud control mechanisms in environments characterized by varying regulatory frameworks and governance structures.

This study is theoretically anchored in the principles of fraud theory and institutional theory. According to the Fraud Triangle framework, fraudulent behavior emerges from the interaction of pressure, opportunity, and rationalization (Abdullahi and Mansor 2015). Forensic accounting practices function through the diminution of prospects for fraud through enhanced detection mechanisms and by constraining rationalization through strengthened legal accountability. Fraud investigation facilitates the identification of concealed misconduct, while litigation support and dispute resolution reinforce enforcement credibility and prevent financial disputes from escalating into broader fraudulent activities.

This study integrates Fraud Triangle Theory and Institutional Theory to explain how forensic accounting practices influence fraud detection and fraud prevention. According to Fraud Triangle Theory, fraudulent behavior arises from the interaction of pressure, opportunity, and rationalization (Abdullahi & Mansor, 2015). Within this framework, forensic accounting practices primarily operate by reducing opportunities for fraud and increasing the likelihood that fraudulent actions will be detected. Fraud investigation strengthens monitoring and analytical procedures that expose hidden transactions, thereby increasing the probability of detection. Litigation support enhances legal accountability by ensuring that identified fraud cases are supported by credible evidence and can be pursued through enforcement mechanisms. Dispute resolution contributes by clarifying financial irregularities and reducing informational ambiguity that may conceal fraudulent behavior.

Institutional Theory complements this perspective by explaining how the effectiveness of forensic accounting practices depends on the broader governance environment in which organizations operate. Institutional arrangements such as regulatory frameworks, legal enforcement systems, and professional standards shape how fraud control mechanisms are implemented across countries (Yusuf et al., 2020). In cross-country contexts such as ASEAN, variations in institutional strength may influence how organizations adopt and implement forensic accounting practices. Therefore, combining Fraud Triangle Theory and Institutional Theory provides a comprehensive framework for explaining both the behavioral mechanisms of fraud and the institutional conditions that shape fraud control systems.

The causal mechanism linking forensic accounting practices to fraud detection and fraud prevention can be understood through several complementary processes. First, fraud investigation enhances the ability of organizations to identify suspicious transactions, trace financial irregularities, and reconstruct fraudulent schemes through systematic analytical procedures. This investigative capability increases the probability that fraudulent activities will be uncovered, thereby directly improving fraud detection outcomes. Second, litigation support strengthens the legal enforceability of fraud findings by transforming investigative evidence into legally admissible documentation that can support regulatory enforcement and judicial processes. This mechanism increases the perceived cost of fraudulent behavior and reinforces deterrence, which contributes to fraud prevention. Third,

dispute resolution mechanisms promote transparency and clarify financial inconsistencies that may otherwise remain hidden within organizational processes. By reducing information asymmetry and strengthening internal governance, dispute resolution indirectly supports both fraud detection and prevention. Together, these mechanisms illustrate how forensic accounting practices operate as an integrated fraud control system that enhances monitoring capacity, enforcement credibility, and organizational transparency.

Accordingly, this study hypothesises that fraud investigation, litigation support, and dispute resolution exert positive effects on fraud detection (H₁-H₃) and fraud prevention (H₄-H₆). The hypothesised relationships are illustrated in Figure 1.

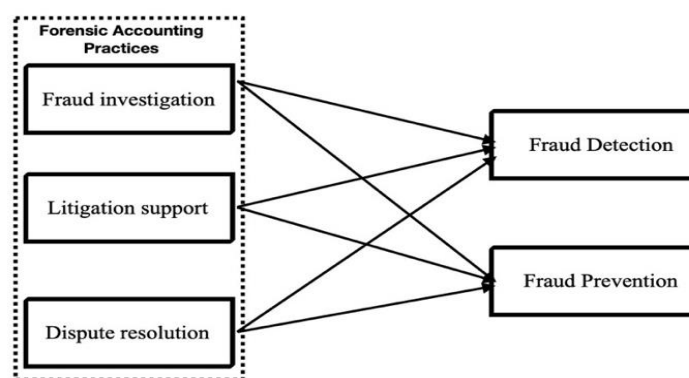


Figure 1. Research model

2. RESEARCH METHOD

This research utilizes a quantitative methodology with an explanatory research framework to examine the influence of forensic accounting methodologies on the identification and prevention of fraudulent activities within ASEAN nations. A quantitative approach is adopted because the study aims to test theoretically derived hypotheses through the analysis of numerical data obtained from structured questionnaires. The explanatory design is appropriate as it allows the study to investigate causal the interplay between independent and dependent variables is to be analyzed, alongside the evaluation of both the strength and orientation of these associations through the application of statistical modeling techniques.

The population of this study comprises professionals employed in audit firms, forensic accounting firms, internal audit units, compliance departments, and related professional bodies across ASEAN countries. This population was selected because these professionals possess direct exposure to fraud investigation, financial reporting processes, and organizational control mechanisms, enabling them to provide informed assessments regarding forensic accounting practices.

A purposive sampling technique was employed to ensure that respondents possessed relevant professional knowledge and experience related to fraud detection and prevention. The selection of respondents was based on several criteria: (1) currently working in professions related to auditing, forensic accounting, internal audit, compliance, risk management, or financial investigation; (2) having at least two years of professional experience in accounting, auditing, or fraud-related functions; (3) being directly involved in financial reporting, internal control, audit procedures, or fraud investigation activities within their organizations; and (4) having sufficient familiarity with forensic accounting practices or fraud control mechanisms within their institutional environment. These criteria were applied to ensure that the collected responses reflected informed professional perspectives rather than general opinions.

The final sample consisted of 350 respondents drawn from several ASEAN countries, including Indonesia, Malaysia, Thailand, Vietnam, the Philippines, Singapore, and other ASEAN

member states. The largest proportions of respondents were obtained from Indonesia and Malaysia, reflecting the relatively larger availability of accounting professionals and stronger professional networks accessible during the data collection process. The distribution of respondents across countries was considered appropriate for cross-country analysis because it provided representation from both larger and smaller ASEAN economies while maintaining an adequate total sample size for Partial Least Squares Structural Equation Modelling (PLS-SEM). Previous methodological literature indicates that PLS-SEM can produce stable estimates with moderate sample sizes and uneven group distributions, particularly in exploratory cross-country research designs.

Furthermore, to ensure analytical robustness in cross-country comparisons, countries with smaller sample sizes were grouped within an “Other ASEAN countries” category during the Multi-Group Analysis (MGA). This grouping approach is commonly adopted in cross-national studies to maintain statistical adequacy while still capturing regional variation across institutional environments.

In addition, the professional background of respondents was recorded as part of the demographic profile, including internal auditors, external auditors, forensic accountants, compliance officers, and other accounting professionals. Differences in professional roles may influence respondents’ perceptions regarding the effectiveness of forensic accounting practices, as each profession is exposed to fraud investigation and control mechanisms at different levels. Although the present study does not explicitly test profession-based differences within the structural model, the diversity of professional backgrounds provides broader perspectives on forensic accounting practices. Future studies may further explore whether perceptions of forensic accounting effectiveness vary significantly across professional groups through multi-group or moderation analysis. The sample size and distribution are considered adequate for Partial Least Squares Structural Equation Modeling (PLS-SEM) and the analysis of multiple groups.

Forensic accounting methodologies are assessed as a multifaceted construct encompassing fraud examination, legal assistance, and conflict resolution. The examination of fraudulent activities is evaluated through specific indicators that encapsulate the capacity to detect dubious financial transactions, reveal concealed or intricate fraudulent schemes, and enhance the precision and efficacy of investigative methodologies (Abdullahi & Mansor, 2015; Anipiriyorima et al., 2025; Idrus et al., 2024; Kaur et al., 2022; Rezaee & Wang, 2019; Sadaf et al., 2018). Litigation support is measured using indicators reflecting the effectiveness of forensic accounting support in legal proceedings, the quality and credibility of evidence prepared for litigation, and the extent of support provided for enforcement and prosecution of fraud cases (Banda, 2025; Mahmud et al., 2024; Ozili, 2023; Rezaee & Wang, 2019). Dispute resolution is captured through indicators measuring the ability to clarify fraud-related financial disputes, enhance transparency in dispute resolution processes, and effectively resolve fraud-related conflicts (Banda, 2025; Luka, 2025; Mahmud et al., 2024; Ozili, 2018).

Fraud detection refers to the organizational capability to identify, uncover, and confirm fraudulent activities through systematic monitoring and investigative procedures. In this study, fraud detection is operationalized using three indicators: (1) the ability of the organization to identify suspicious financial transactions in a timely manner, (2) the effectiveness of investigative procedures in confirming and documenting fraudulent activities, and (3) the extent to which forensic accounting practices contribute to reducing the occurrence of undetected fraud cases within the organization. These indicators capture both the speed and accuracy of fraud identification processes and reflect how effectively organizations utilize forensic accounting techniques to reveal financial misconduct (Dalwadi, 2023; Idrus et al., 2024; Kaur et al., 2022; Nelson, 2025; Rezaee & Wang, 2019; Sadaf et al., 2018).

Fraud prevention refers to the proactive organizational capacity to deter fraudulent behavior by strengthening internal control systems, governance mechanisms, and monitoring processes before fraud occurs. In this study, fraud prevention is operationalized through three indicators: (1) the effectiveness of internal control mechanisms designed to prevent fraudulent activities, (2) the ability of forensic accounting practices to deter potential fraud through increased monitoring and

accountability, and (3) the development of proactive anti-fraud policies and preventive mechanisms within the organization. These indicators reflect the extent to which organizations implement preventive strategies aimed at minimizing fraud risks and promoting ethical financial practices (Abdullahi & Mansor, 2015; Idrus et al., 2024; Mahmud et al., 2024; Ozili, 2018).

Data analysis was conducted employing Partial Least Squares Structural Equation Modelling (PLS-SEM), which is adept at examining intricate models comprising several latent constructs, moderate sample sizes, and limited distributional prerequisites. The examination employed a bifurcated methodological framework comprising measurement model and structural model evaluation. and the evaluation of discriminant validity was achieved through the utilization of both the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT). Structural relationships were evaluated through path coefficients, coefficient of determination (R^2), and bootstrapping procedures to test hypothesis significance at the 5% level. In addition, Multi-Group Analysis (MGA) based on respondents' country of origin was performed using a non-parametric PLS-MGA approach, following measurement invariance assessment, to examine the robustness of structural relationships across ASEAN countries.

3. RESULTS AND DISCUSSIONS

The final sample consisted of 350 respondents from ASEAN countries. Regarding gender demographics, a predominant proportion of participants identified as male (52.00%), succeeded by female participants (45.71%), while a small proportion preferred not to disclose their gender (2.29%). Regarding age distribution, most respondents were between 40 and 49 years (29.71%) and 50-59 years (24.57%), followed by those aged 30-39 years (25.14%). Respondents aged 19-29 years and 60 years or above accounted for 12.00% and 8.57% of the sample, respectively.

In terms of educational qualifications, approximately 48.00% of the participants possessed a bachelor's degree, whereas 27.43% attained a master's degree and 6.29% earned a doctoral degree. The remaining 18.29% indicated that they held a diploma or a qualification of lesser academic standing. In terms of professional experience, the largest proportion of respondents had between 6 and 10 years of experience (27.43%), followed by those with 11-15 years (25.14%) and five years or less (20.57%). Respondents with more than 15 years of experience represented 26.86% of the total sample.

Regarding primary job roles, internal auditors constituted the largest group (35.43%), followed by public accountants or external auditors (21.71%) and forensic accountants (14.86%). Compliance or risk officers accounted for 13.71%, while government or regulatory accountants represented 9.14% of the respondents. Other professional roles comprised 5.14% of the sample. In terms of country of employment, respondents were predominantly from Indonesia (34.29%) and Malaysia (21.43%), followed by Thailand (13.71%), Vietnam (10.29%), the Philippines (9.14%), and Singapore (8.00%). Respondents from other ASEAN countries accounted for 3.14% of the sample.

The outer model evaluation consists of convergent validity, construct reliability, and discriminant validity testing. Convergent validity is assessed by examining the outer loading values of each indicator. An indicator is considered to have adequate convergent validity if its loading value exceeds 0.70. Table 1 delineates the outer loading values corresponding to all indicators.

Table 1. Outer loadings of measurement items

Construct	Indicator	Outer Loading
FI	FI1	0.935
	FI2	0.921
	FI3	0.933
LS	LS1	0.934
	LS2	0.922
	LS3	0.922
DR	DR1	0.919
	DR2	0.919
	DR3	0.939
FD	FD1	0.925

Construct	Indicator	Outer Loading
FP	FD ₂	0.914
	FD ₃	0.933
	FP ₁	0.933
	FP ₂	0.930
	FP ₃	0.925

Construct reliability is evaluated using Composite Reliability (CR), while convergent validity at the construct level is assessed using the Average Variance Extracted (AVE). A CR value above 0.70 and an AVE value above 0.50 indicate acceptable reliability and validity.

Table 2 delineates the composite reliability (CR) and average variance extracted (AVE) metrics for each construct under examination. All CR and AVE metrics surpass the suggested thresholds, thereby affirming the adequacy of construct reliability and the convergent validity of the measurement model.

Table 2. Construct reliability and AVE

Construct	CR	AVE
FI	0.956	0.879
LS	0.954	0.873
DR	0.957	0.882
FD	0.951	0.866
FP	0.949	0.861

Table 3 presents the Fornell-Larcker criterion results for assessing discriminant validity. The diagonal components signify the square root of the average variance extracted (AVE) associated with each construct, which surpasses the relevant inter-construct correlations, thereby demonstrating adequate discriminant validity.

Table 3. Fornell-larcker criterion

Construct	FI	LS	DR	FD	FP
FI	0.937				
LS	0.628	0.934			
DR	0.571	0.602	0.939		
FD	0.639	0.655	0.588	0.931	
FP	0.621	0.647	0.563	0.676	0.928

As an additional assessment of discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) is examined. HTMT values below 0.90 indicate satisfactory discriminant validity.

Table 4. HTMT rasio

Construct Pair	HTMT
FI - LS	0.714
FI - DR	0.652
FI - FD	0.732
FI - FP	0.706
LS - DR	0.689
LS - FD	0.748
LS - FP	0.729
DR - FD	0.671
DR - FP	0.648
FD - FP	0.781

Overall, the outcomes of the assessment of the measurement model suggest that all constructs exhibit significant convergent validity, elevated reliability, and adequate discriminant validity. These results substantiate that the measurement model is robust and appropriate for ensuing analysis of the structural model (inner model).

The structural model is evaluated by examining the path coefficients between latent constructs. The results indicate that all forensic accounting practice dimensions positively influence fraud detection and fraud prevention, although the magnitude of effects varies across paths. Table 5 presents the structural path coefficients between forensic accounting practices and fraud outcomes.

Table 5. Path coefficients

Hypothesis	Path	Path Coefficient
H1	FI → FD	0.393
H2	LS → FD	0.304
H3	DR → FD	0.049
H4	FI → FP	0.285
H5	LS → FP	0.310
H6	DR → FP	0.149

Table 6 presents the coefficients of determination (R^2) pertaining to the endogenous constructs are presented herein. The R^2 values elucidate the extent of variance accounted for by the exogenous variables within the model and illustrate a moderate degree of explanatory efficacy.

Table 6. Coefficient of determination (R^2)

Endogenous Construct	R^2	Interpretation
FD	0.404	Moderate
FP	0.362	Moderate

Although the R^2 values for fraud detection (0.404) and fraud prevention (0.362) indicate moderate explanatory power, these results suggest that forensic accounting practices represent only part of the broader set of factors influencing fraud control outcomes. Fraud detection and prevention are complex organizational processes that may also be influenced by additional variables not included in the present model. For example, prior research indicates that internal control effectiveness, ethical organizational culture, management commitment, whistleblowing systems, and regulatory enforcement strength may significantly affect an organization's ability to detect and prevent fraud. In addition, institutional factors such as legal enforcement quality, governance structures, and anti-corruption regulations may also shape fraud control mechanisms, particularly in cross-country contexts such as ASEAN where regulatory environments differ substantially. Therefore, while the present study confirms the important role of forensic accounting practices, future research may incorporate additional organizational, governance, and institutional variables to improve the explanatory power of the model and provide a more comprehensive understanding of fraud control systems.

Table 7. Coefficient of determination (R^2)

Structural Path	R^2	Effect Size Interpretation
FI → FD	.189	Medium
LS → FD	.122	Small
DR → FD	.008	Very small
FI → FP	.103	Small
LS → FP	.117	Small
DR → FP	.032	Small
Endogenous Construct	R^2	Predictive Relevance
Fraud Detection (FD)	.284	Medium
Fraud Prevention (FP)	.251	Medium

To further evaluate the explanatory power of the structural model, the effect size (f^2) and predictive relevance (Q^2) were also examined. The effect size (f^2) assesses the relative contribution of each exogenous construct to the endogenous constructs. According to the guidelines proposed by Cohen, f^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively. The

results show that fraud investigation exhibits a medium effect on fraud detection, while litigation support demonstrates a small effect. Dispute resolution presents a relatively small effect on both fraud detection and fraud prevention, confirming its complementary role within the forensic accounting framework.

Predictive relevance was evaluated using the Stone-Geisser Q^2 statistic obtained through the blindfolding procedure. The Q^2 values for fraud detection and fraud prevention are greater than zero, indicating that the structural model has satisfactory predictive relevance. These findings suggest that the proposed model possesses adequate predictive capability in explaining how forensic accounting practices contribute to fraud control outcomes within ASEAN organizations.

Figure 2 delineates the findings derived from Partial Least Squares Structural Equation Modelling (PLS-SEM), elucidating the interconnections among forensic accounting methodologies, fraud investigation, litigation support, dispute resolution, as well as fraud detection and prevention strategies.

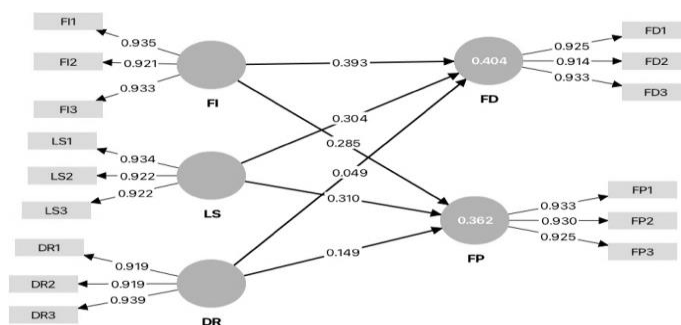


Figure 2. Structural model and measurement results

In order to evaluate the statistical significance of the structural associations, a bootstrapping procedure was conducted using a large number of subsamples. The significance of each hypothesised path was evaluated based on the t-statistic and p-value. A path is considered statistically significant when the t-statistic exceeds 1.96 and the p-value is less than 0.05.

Table 8. Bootstrapping results

Hypothesis	Structural Path	Path Coefficient	t-statistic	p-value	Decision
H1	FI → FD	0.393	6.482	0.000	Supported
H2	LS → FD	0.304	5.117	0.000	Supported
H3	DR → FD	0.049	1.992	0.047	Supported
H4	FI → FP	0.285	4.836	0.000	Supported
H5	LS → FP	0.310	5.403	0.000	Supported
H6	DR → FP	0.149	3.218	0.001	Supported

The bootstrapping results indicate that all hypothesised relationships are statistically supported. The processes of fraud investigation and litigation support exhibit robust and noteworthy impacts on the realms of both fraud detection and fraud prevention. Dispute resolution exhibits a weaker yet statistically significant influence, particularly on fraud detection. Overall, the results confirm the robustness of the proposed structural model.

Table 9 presents the comparison of path coefficients across selected ASEAN countries. The results indicate that, while the direction of all relationships remains positive across countries, the magnitude of the effects varies.

Table 9. Multi-group analysis (MGA) results by country

Structural Path	Indonesia	Malaysia	Thailand	Vietnam	Philippines	MGA Difference
FI → FD	0.412	0.368	0.345	0.321	0.337	Not significant
LS → FD	0.331	0.297	0.289	0.271	0.284	Not significant

Structural Path	Indonesia	Malaysia	Thailand	Vietnam	Philippines	MGA Difference
DR → FD	0.062	0.048	0.041	0.039	0.045	Not significant
FI → FP	0.301	0.269	0.251	0.238	0.246	Not significant
LS → FP	0.326	0.298	0.287	0.274	0.281	Not significant
DR → FP	0.168	0.143	0.139	0.131	0.136	Not significant

The MGA results indicate that forensic accounting practices exert consistently positive effects on fraud detection and fraud prevention across ASEAN countries, supporting the cross-country robustness of the proposed model. Although minor variations in path coefficient magnitudes are observed, none of the differences are statistically significant.

The absence of statistically significant differences across ASEAN countries may be explained by several factors related to the increasing convergence of professional standards and governance practices within the region. First, the accounting and auditing professions in ASEAN countries are increasingly guided by internationally recognized standards, including International Financial Reporting Standards (IFRS), International Standards on Auditing (ISA), and global professional certifications. These shared professional frameworks may reduce institutional differences in how forensic accounting practices are applied in fraud detection and prevention.

Second, many ASEAN countries have strengthened their regulatory and anti-corruption frameworks over the past two decades through institutional reforms and regional cooperation initiatives. As a result, organizations across the region may face similar governance expectations regarding fraud risk management, internal control systems, and accountability mechanisms. This institutional convergence may explain why forensic accounting practices demonstrate relatively consistent effects across countries despite differences in national regulatory environments.

Third, the professional background of the respondents, which largely consists of auditors, forensic accountants, and compliance professionals, may also contribute to the observed consistency. These professionals often operate within transnational professional networks and are trained under similar professional standards, which may lead to relatively uniform perceptions regarding the effectiveness of forensic accounting practices.

These findings also provide important implications for anti-fraud policies in both public organizations and the private sector across ASEAN countries. For public sector institutions, the results suggest that governments and regulatory bodies should strengthen forensic accounting capacity within audit institutions, anti-corruption agencies, and public financial management systems. Strengthening investigative capabilities and litigation support mechanisms can significantly improve the ability of public organizations to detect financial irregularities and enforce accountability. In the private sector, organizations should integrate forensic accounting practices into their corporate governance and internal control frameworks, particularly by enhancing fraud investigation procedures and strengthening collaboration with legal and regulatory authorities. In addition, the consistent effects observed across ASEAN countries indicate that regional cooperation, professional training, and the development of standardized forensic accounting practices may further strengthen anti-fraud frameworks throughout the region.

Discussion

The positive and significant effect of fraud investigation on fraud detection supports Hypothesis 1 (H1) and is well explained by fraud theory, particularly the Fraud Triangle. Fraud investigation constrains the opportunity component by increasing the probability that fraudulent acts are detected and traced (Abdullahi & Mansor, 2015). Strong investigative capabilities raise detection risk, thereby reducing the feasibility of fraud. This finding is consistent with prior studies emphasising the effectiveness of structured investigative techniques in enhancing fraud detection (Kaur et al., 2022; Sule et al., 2019; Thomas & Indriaty, 2023). Extending earlier country-specific research, this study demonstrates that the effectiveness of fraud investigation remains robust across ASEAN countries.

The significant positive relationship between litigation support and fraud detection supports Hypothesis 2 (H2) and highlights the importance of legal enforceability in fraud control. Litigation support enhances fraud detection by transforming accounting findings into legally admissible evidence, reducing the gap between technical identification and formal recognition of fraud (Naz & Khan, 2024). This finding aligns with prior research indicating that legally defensible forensic outputs strengthen enforcement and detection effectiveness (Akinbowale et al., 2020; Kaur et al., 2022; Rehman & Hashim, 2020). The MGA results show that this relationship is consistent across ASEAN countries, supporting the argument that professional litigation support practices mitigate institutional weaknesses and reinforce accountability even in environments with uneven enforcement strength (Rehman & Hashim, 2020).

The weaker yet significant effect of dispute resolution on fraud detection supports Hypothesis 3 (H3) and reflects its indirect role within forensic accounting. Dispute resolution primarily enhances transparency and clarifies contested financial transactions, which may incidentally expose irregularities (Kaur et al., 2022). This result is consistent with empirical evidence suggesting that dispute resolution contributes to information clarity but is less effective as a standalone detection mechanism (Enofe et al., 2016; Ozili, 2023). The MGA findings confirm that this supportive role is consistent across ASEAN countries, reinforcing the view that dispute resolution reduces information asymmetry but requires integration with investigative processes to meaningfully enhance fraud detection (Nelson, 2025).

In addition to statistical significance, the effect size analysis provides further insight into the relative contribution of each forensic accounting practice to fraud control outcomes. The results indicate that fraud investigation demonstrates the strongest explanatory contribution to fraud detection, while litigation support shows a moderate contribution to both fraud detection and fraud prevention. Dispute resolution exhibits a comparatively smaller effect size, reinforcing the view that its role within forensic accounting systems is complementary rather than primary. These findings suggest that investigative capabilities and legal enforcement support constitute the central mechanisms through which forensic accounting practices strengthen fraud control systems, while dispute resolution functions mainly as a supporting governance mechanism that improves transparency and information clarity within organizations.

Regarding fraud prevention, the significant effect of fraud investigation supports Hypothesis 4 (H4) and reinforces the deterrence logic embedded in fraud theory. Effective investigative capacity increases perceived detection risk, discouraging potential offenders by constraining both opportunity and rationalisation (Abdullahi & Mansor, 2015). This finding corroborates prior studies demonstrating that organisations with robust investigative practices experience lower fraud incidence (Idrus et al., 2024; Kaur et al., 2022). The absence of significant MGA differences indicates that the preventive effect of fraud investigation is stable across ASEAN institutional contexts. From an institutional theory perspective, this suggests that investigative professionalism serves as a compensatory mechanism in environments with varying regulatory strength (Bierstaker et al., 2006).

The positive influence of litigation support on fraud prevention supports Hypothesis 5 (H5) and underscores the importance of sanction certainty in deterring fraud. Litigation support increases the perceived cost of misconduct by reinforcing credible legal consequences (Naz & Khan, 2024). This result aligns with empirical findings emphasising the deterrent role of legal enforcement and prosecution support (Aksoy & Uzay, 2021; Drabiak & Wolfson, 2020; Sirajuddin & Anggraini, 2019). The MGA results further demonstrate that this relationship holds across ASEAN countries, indicating that litigation support functions as a legitimacy-enhancing mechanism that strengthens organisational compliance norms regardless of national legal disparities (Nelson, 2025).

Finally, the modest yet significant effect of dispute resolution on fraud prevention supports Hypothesis 6 (H6) and highlights its complementary role in fraud control systems. Dispute resolution contributes to prevention by improving transparency, addressing governance weaknesses, and reducing unresolved conflicts that may create opportunities for fraud (Ganbarova, 2025). Consistent with prior studies, this finding suggests that while dispute resolution enhances

governance quality, it is less effective as a deterrent compared to investigative and enforcement mechanisms (Mahmod et al., 2024).

While the results confirm the important role of forensic accounting practices in improving fraud detection and fraud prevention, the moderate R^2 values suggest that these outcomes are influenced by additional organizational and institutional factors beyond the variables examined in this study. Prior research indicates that elements such as internal control effectiveness, ethical organizational culture, whistleblowing mechanisms, management commitment, and regulatory enforcement may also significantly influence fraud control systems (Bierstaker et al., 2006; Kaur et al., 2022; Ozili, 2018). In particular, strong internal governance structures and effective reporting mechanisms can complement forensic accounting practices by strengthening monitoring and accountability within organizations. Therefore, future studies may integrate these governance and institutional variables to provide a more comprehensive explanation of fraud detection and fraud prevention in different organizational contexts.

From a theoretical perspective, the findings extend the application of Fraud Triangle Theory by demonstrating how specific forensic accounting practices function as organizational mechanisms that constrain fraud opportunities and reduce rationalization. Fraud investigation increases the probability of detection, litigation support strengthens the certainty of legal consequences, and dispute resolution enhances transparency in financial reporting processes. Furthermore, the results contribute to institutional theory by showing that forensic accounting practices operate as governance mechanisms that remain effective across different institutional environments. Despite variations in regulatory enforcement and governance structures among ASEAN countries, the consistent effects observed in the model suggest that professional forensic accounting practices may serve as institutional stabilizers that support fraud control across heterogeneous regulatory contexts.

These findings also provide important implications for anti-fraud policies in both public organizations and the private sector across ASEAN countries. For public sector institutions, governments and regulatory authorities should strengthen forensic accounting capabilities within supreme audit institutions, anti-corruption agencies, and internal government audit units. Enhancing fraud investigation procedures and ensuring strong litigation support mechanisms can improve the ability of public institutions to detect financial irregularities and enforce accountability. In the private sector, organizations should integrate forensic accounting practices into their corporate governance frameworks by strengthening internal control systems, establishing specialized fraud investigation teams, and promoting collaboration between internal auditors, external auditors, and legal professionals. At the regional level, ASEAN policymakers may also encourage professional training programs, regulatory cooperation, and the development of standardized forensic accounting guidelines to strengthen anti-fraud mechanisms across the region.

4. CONCLUSION

This study investigates whether forensic accounting practices matter for fraud detection and fraud prevention across ASEAN countries. By integrating fraud theory and institutional theory and employing a PLS-SEM approach with additional multi-group analysis (MGA), this research offers substantial empirical data regarding the function of forensic accounting across various institutional contexts. The findings provide clear answers to the research problem. First, fraud investigation and litigation support are shown to have strong and significant positive effects on both fraud detection and fraud prevention. These results indicate that investigative capability and legal enforcement support constitute the core mechanisms through which forensic accounting constrains fraud opportunities and strengthens deterrence. Second, dispute resolution also exhibits a positive but relatively weaker effect on fraud detection and fraud prevention, suggesting that its role is complementary rather than primary. Dispute resolution contributes mainly by enhancing transparency, reducing ambiguity, and reinforcing internal governance structures.

The additional MGA confirms that these relationships are consistent across ASEAN countries, with no statistically significant differences in path coefficients. This finding demonstrates that the effectiveness of forensic accounting practices is not confined to specific national legal or

regulatory contexts, but instead reflects the growing convergence of professional standards and governance mechanisms within the ASEAN region.

From a theoretical standpoint, this research advances the conceptual framework of fraud theory by empirically showing how forensic accounting practices simultaneously address opportunity and rationalization elements of fraudulent behavior. It also advances institutional theory by highlighting forensic accounting as a transferable governance mechanism capable of mitigating financial crime across heterogeneous institutional settings.

This study also enriches the literature on forensic accounting and fraud control in several important ways. First, it provides empirical evidence on the relative effectiveness of multiple forensic accounting practices within a unified analytical framework. While prior research often examines forensic accounting in a fragmented manner, focusing on single techniques or specific fraud outcomes, this study simultaneously evaluates fraud investigation, litigation support, and dispute resolution to identify their comparative contributions to fraud detection and prevention. Second, the study expands the geographical scope of forensic accounting research by providing cross-country evidence from ASEAN, a region characterized by diverse institutional environments and regulatory structures. Most existing studies remain limited to single-country contexts; therefore, the present findings contribute to the literature by demonstrating the stability of forensic accounting mechanisms across multiple institutional settings. Third, by integrating fraud theory and institutional theory within a structural modelling framework, this research provides a more comprehensive conceptual explanation of how forensic accounting practices operate as governance mechanisms that enhance fraud control. Collectively, these contributions extend the current understanding of forensic accounting as not only an investigative tool but also a strategic organizational mechanism for strengthening fraud prevention and detection systems.

From a methodological perspective, this study demonstrates the usefulness of Partial Least Squares Structural Equation Modelling (PLS-SEM) for examining complex relationships in cross-country forensic accounting research. The PLS-SEM approach is particularly appropriate for studies involving multiple latent constructs, moderate sample sizes, and heterogeneous institutional contexts, as it does not require strict assumptions of multivariate normality. In addition, the integration of Multi-Group Analysis (MGA) enables researchers to assess whether structural relationships remain consistent across different national environments. The results of this study show that PLS-SEM combined with MGA provides a robust analytical framework for evaluating the stability of forensic accounting mechanisms across countries with varying regulatory systems. Methodologically, this approach contributes to cross-national accounting research by demonstrating how structural models can be tested while simultaneously examining the comparability of relationships across institutional settings.

From a practical perspective, the findings provide several recommendations for organizations, regulators, and the accounting profession in ASEAN. For organizations in both the public and private sectors, strengthening internal fraud investigation capabilities and integrating forensic accounting practices within internal control systems can significantly improve fraud detection and prevention outcomes. Regulatory bodies and government institutions are encouraged to enhance anti-fraud frameworks by promoting the adoption of forensic accounting standards, strengthening collaboration between investigative authorities and auditors, and supporting the development of professional training programs in forensic accounting. Furthermore, the accounting profession, including auditors and forensic specialists, should continue developing specialized competencies in forensic investigation, digital forensic techniques, and litigation support to respond to increasingly sophisticated fraud schemes within the ASEAN region.

Despite its contributions, this study is subject to several limitations that provide opportunities for future research. The reliance on cross-sectional survey data limits the ability to capture changes in forensic accounting effectiveness over time.

Future research may consider adopting mixed-methods approaches that combine quantitative analysis with qualitative insights, such as interviews with forensic accountants, auditors,

and regulators. In addition, organizational case studies may provide deeper insights into how forensic accounting practices are implemented within real institutional contexts and how these practices interact with organizational governance structures. Such approaches would allow researchers to gain a more comprehensive understanding of the practical challenges and effectiveness of forensic accounting in combating fraud across ASEAN countries.

The empirical results indicate that both organizations and regulatory bodies within the ASEAN framework ought to assign precedence to strengthening fraud investigation capabilities and litigation support functions to enhance both detection and prevention outcomes. Investment in professional training, investigative tools, and legal coordination is likely to yield substantial benefits in combating fraud. Dispute resolution mechanisms, while important, should be integrated with investigative and enforcement processes to maximize their effectiveness.

Notwithstanding its contributions, this inquiry is subject to limitations that present opportunities for subsequent investigations. The reliance on cross-sectional survey data constrains the ability to draw causal inferences over time; therefore, forthcoming studies may adopt longitudinal or mixed-method approaches to effectively capture the dynamic alterations in the efficacy of forensic accounting. Furthermore, subsequent research endeavors could integrate country-level institutional variables, such as the quality of regulation or the strength of legal enforcement, as moderating elements to enhance the comprehension of contextual influences. Moreover, broadening the scope to transcend ASEAN and incorporate comparative analyses with other regions would significantly augment the generalizability of the findings.

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