THE ROLES OF FORENSIC ACCOUNTANTS IN INSURANCE CLAIMS: FRAUD DETECTION, LOSS QUANTIFICATION, AND LITIGATION SUPPORT

Prof Bassey Bassey
Emelumba Peace Obiageliaku
Department of Accounting
Faculty of Management Sciences
University of Calabar, Calabar, Nigeria
peaceemelumba@gmail.com
Corresponding Author: peaceemelumba@gmail.com
DOI: https://doi.org/10.57233/ijamer.v2i3.014

Article History: Received: 20 July 2026 | **Revised:** 2 September 2026 | **Accepted:** 15 September 2026 | **Published:** 25 September 2026

How to Cite This Article:
Emelumba, P. O. (2026). The roles of forensic accountants in insurance claims: Fraud detection, loss quantification, and litigation support. *International Journal of Accounting, Management and Economic Review, 2*(3). https://doi.org/10.57233/ijamer.v2i3.014

Abstract
Insurance claims management increasingly involves complex financial records, disputed losses, suspicious transactions, and evidential requirements that may extend beyond routine claims assessment. This study examines the roles of forensic accountants in insurance claims, focusing on claim verification, fraud detection and prevention, financial loss quantification, and litigation and dispute support. The study adopts a structured integrative literature review design based on 10 substantive scholarly sources addressing forensic accounting, insurance claims, insurance fraud, financial-loss assessment, technology-enabled investigation, and litigation support. The sources were selected based on their relevance to the research problem, scholarly or professional credibility, and contribution to one or more of the study's analytical themes. Evidence was extracted and thematically mapped according to research context, methodological orientation, forensic accounting function, principal contribution, limitations, and relevance to insurance claims. The findings show that forensic accountants create value at different stages of the claims process by improving the evidential reliability of claims, investigating suspicious financial activities, reconstructing financial information for loss assessment, and translating complex financial evidence into forms usable in negotiation, dispute resolution, and litigation. The evidence is strongest for fraud detection and investigation, particularly where analytical and network-based techniques are applied, while evidence relating specifically to claim verification and loss quantification in insurance remains comparatively narrower. The study further finds that forensic accounting is not a substitute for loss adjusters, actuaries, lawyers, engineers, or other specialists. Rather, its value increases with the financial complexity, evidential uncertainty, and dispute potential of a claim. The study concludes that forensic accounting should be deployed selectively and on a risk-based basis, particularly for complex, high-value, disputed, or suspicious claims. Its effectiveness depends on evidence quality, professional competence, technological capability, independence, and multidisciplinary cooperation.

Keywords: Claim verification, forensic accounting, insurance claims, insurance fraud, litigation support, loss quantification.

1.0 Introduction

Insurance performs an important economic function by transferring specified risks from individuals and organizations to insurers in exchange for premiums. The effectiveness of this arrangement depends substantially on the credibility and efficiency of the claims process. When an insured event occurs, the insurer must determine whether the reported event is covered by the policy, whether the circumstances surrounding the loss are consistent with available evidence, and the extent of the financial loss that can reasonably be attributed to the insured event. These decisions become particularly difficult where claims contain incomplete documentation,

inconsistent financial information, suspected exaggeration, complex transactions, or potential evidence of fraud.

Forensic accounting has become increasingly relevant to these circumstances because it combines accounting knowledge with investigative, analytical, and evidential skills. Unlike conventional financial reporting, forensic accounting is concerned with examining the underlying circumstances surrounding financial information and producing findings that can support managerial, regulatory, dispute-resolution, or judicial decisions (Honigsberg, 2020). Its relevance to insurance therefore extends beyond conventional fraud detection to include verification of financial evidence, reconstruction of financial information, assessment of economic losses, and communication of financial findings in contentious situations.

The need for specialized financial investigation is particularly important because insurance fraud is not necessarily confined to obviously fabricated claims. Fraudulent conduct may involve exaggeration of genuine losses, manipulation of documents, concealment of relevant information, staged events, false representations, or coordinated activities among claimants, intermediaries, service providers, and other participants. The complexity of these relationships means that a suspicious claim may not be identifiable from a single document or transaction. Instead, indicators may emerge from inconsistencies across financial records, claimant information, transaction histories, timing, or relationships between parties.

The literature provides evidence that forensic accounting can contribute to the investigation of fraudulent activities. Kaur et al. (2022), in a systematic review, reported a positive relationship between forensic accounting and fraud detection and prevention while emphasizing that fraud investigations are inherently complex. This evidence is important because it provides broader support than individual organizational studies. However, its principal focus is fraud detection and prevention rather than the complete insurance-claims process. This distinction is important because a forensic accountant may be involved even when fraud is not ultimately established.

Insurance-specific research also demonstrates the growing importance of analytical approaches. Liang et al. (2019) applied network learning to identify potential insurance-fraud conspiracies, demonstrating that relationships among parties can provide information beyond conventional claim-level variables. Similarly, Óskarsdóttir et al. (2022) showed that network-derived features can improve the detection and prioritization of suspicious motor-insurance claims. These studies demonstrate the potential of technology to improve investigative targeting, but they do not imply that an analytical alert is equivalent to proof of fraud. Professional interpretation and corroboration remain necessary.

The financial dimension of claims creates another area of forensic accounting relevance. Some losses are directly observable, such as the replacement cost of a damaged physical asset. Others are more difficult to establish. Business interruption, loss of income, employee dishonesty, and other commercial claims may require historical financial analysis, transaction reconstruction, comparison of actual and expected performance, and consideration of alternative explanations for financial changes. Caruana et al. (2020) found that forensic auditors were useful participants in insurance processes while identifying the need for collaboration with other specialists in complex compensation assessments.

Forensic accounting may also become relevant when an insurance claim develops into a dispute. Disagreements may concern whether a loss occurred, whether the loss falls within policy

coverage, the amount of the loss, the interpretation of financial records, or the reliability of evidence presented by either party. In such situations, forensic accountants can analyse financial evidence, quantify disputed losses, prepare reports, assist legal teams, and, where appropriate, provide expert evidence. Nigerian literature supports the relevance of forensic accounting to litigation and the presentation of complex financial evidence (Micah et al., 2023; Osunwole et al., 2024).

Despite these contributions, the literature remains fragmented. Some studies focus on fraud detection; others examine the general insurance process, technology-enabled fraud analytics, litigation support, or the broader value of forensic accounting. Consequently, the literature does not always explain how these functions relate to one another across the different stages of an insurance claim. A claim may move from verification to fraud investigation, from investigation to loss reconstruction, and eventually to negotiation or litigation. Treating each role as an isolated function may therefore obscure the cumulative value of forensic accounting.

A second problem concerns the strength of the available evidence. The literature does not provide equally strong support for all four functions. Evidence concerning fraud detection is comparatively developed, particularly in systematic-review and technology-oriented research, whereas direct insurance-specific evidence concerning loss quantification and claim verification is more limited. Litigation-support evidence is also relevant but is frequently drawn from broader financial disputes rather than insurance claims specifically. These differences require a critical synthesis rather than a simple listing of the expected functions of forensic accountants.

The purpose of this study is therefore to examine the roles of forensic accountants in insurance claims by integrating evidence concerning claim verification, fraud detection and prevention, loss quantification, and litigation and dispute support. Specifically, the study seeks to determine how forensic accountants contribute to these four areas, the conditions under which their involvement creates value, and the limitations affecting their effectiveness.

2.0 Literature Review

The empirical literature on forensic accounting and insurance claims demonstrates that forensic accountants perform several interconnected functions, particularly in claim verification, fraud detection and prevention, loss quantification, and litigation support. However, the strength of evidence varies across these functions, with relatively stronger evidence available on fraud detection and comparatively limited insurance-specific evidence on loss quantification and litigation. The following empirical studies provide the basis for understanding these roles.

Ajemunigbohun, Yusuf, and Alli (2018) examined insurance claims management among selected insurance companies in Nigeria. The study focused on the effectiveness of claims-handling practices and their implications for insurance operations. Using an empirical research approach, the authors examined the processes through which insurance companies receive, investigate, assess, and settle claims. The study found that effective claims management is important to the performance and credibility of insurance companies because weaknesses in claims handling can contribute to delays, disputes, and inappropriate claims payments. Although the study did not specifically investigate forensic accountants, its findings are relevant to the present study because claim verification and evidence assessment constitute important stages of claims management in which forensic accounting expertise may be required. The limitation, however, is that the study concentrated on general claims management rather than examining the specific contribution of forensic accountants.

Caruana et al. (2020) investigated the effectiveness of forensic auditors in the insurance process. The study specifically examined the usefulness of forensic auditors in insurance-related activities and considered their contribution to claims assessment and risk management. The findings indicated that respondents generally perceived forensic auditors as useful participants in the insurance process, particularly where specialized financial investigation was required. However, the study also identified limitations concerning compensation assessment and indicated that forensic accountants may need to collaborate with loss adjusters, lawyers, actuaries, and other specialists. The study is particularly relevant because it provides direct empirical evidence concerning the application of forensic accounting within insurance. Its major implication for the present study is that forensic accountants should be viewed as complementary specialists rather than substitutes for other professionals involved in complex claims.

Haruna, Adefisayo, and Ibrahim (2021) examined forensic accounting techniques and fraud prevention in listed insurance companies in Nigeria. The study focused on the application of specialized accounting and investigative techniques to fraud-related risks within the Nigerian insurance industry. The findings indicated that forensic accounting techniques are relevant to fraud prevention and can strengthen the ability of insurance organizations to identify and respond to fraudulent activities. The study is particularly important to the Nigerian context because it provides sector-specific evidence that forensic accounting can contribute to addressing fraud risks within insurance companies. However, because the study relied primarily on reported perceptions and relationships, its findings provide limited evidence concerning the actual monetary value of fraud detected or losses recovered through forensic accounting interventions. Thus, while the study establishes the relevance of forensic accounting to fraud prevention, it does not fully demonstrate its financial impact on insurance claims.

Liang et al. (2019) investigated the use of network learning to identify insurance fraud conspiracies. The study employed a network-based analytical approach to examine relationships among participants in insurance claims and identify potentially organized fraudulent activities. The study demonstrated that network-learning techniques could reveal relationships and patterns associated with groups of potentially organized insurance fraudsters. The finding is important because fraudulent insurance activities may not always be identifiable by examining individual claims in isolation. Instead, relationships among claimants, service providers, and other participants may provide additional indicators of suspicious activity. The study therefore demonstrates how technology can strengthen forensic investigation by improving the identification and prioritization of suspicious claims. Nevertheless, network-learning techniques identify suspicious patterns rather than independently establishing fraudulent intent, making professional forensic investigation and corroboration necessary.

Óskarsdóttir et al. (2022) examined the application of social network analytics to supervised fraud detection in insurance. The study investigated whether information derived from relationships among participants could improve the detection of suspicious insurance claims. The findings demonstrated that network-derived features could enhance fraud-detection models by incorporating information concerning relationships among claim participants. The study therefore provides empirical support for the argument that insurance fraud can have a relational dimension that may not be captured by conventional claim-level variables. Its relevance to forensic accounting lies in the ability of analytical techniques to identify claims requiring closer financial and documentary investigation. However, as with Liang et al. (2019), the analytical

model serves primarily as a screening and prioritization mechanism; it does not replace the professional investigation required to establish whether fraudulent conduct actually occurred.

Kaur, Sood, and Grima (2022) conducted a systematic review of forensic accounting and its contribution to fraud detection and prevention. Rather than examining a single insurance company, the authors synthesized existing research concerning the relationship between forensic accounting and fraud-related activities. The review found a positive contribution of forensic accounting to fraud detection and prevention and emphasized the importance of appropriate investigative techniques in addressing increasingly complex forms of fraud. The importance of this study lies in the breadth of evidence it provides compared with individual organizational studies. It supports the argument that forensic accounting can strengthen fraud investigation through financial analysis, evidence examination, and investigative procedures. However, because it is a systematic review rather than a primary empirical investigation of insurance claims, its findings have less direct applicability to specific insurance-claims outcomes.

Micah, Adinnu, and Ibitomi (2023) examined forensic accounting and litigation support, with particular attention to the role of expert witnesses in legal proceedings. The study considered how forensic accounting expertise can assist in the investigation and presentation of complex financial evidence in legal settings. The findings indicate that forensic accountants can contribute to litigation by analysing financial records, explaining complex transactions, preparing financial evidence, and supporting legal decision-making. The study is relevant to insurance claims because disputed claims may progress from routine claims assessment to negotiation, arbitration, or litigation where the financial evidence supporting a claim is challenged. However, the study was not specifically focused on insurance litigation, thereby limiting the extent to which its findings can be generalized directly to insurance claims.

Osunwole et al. (2024) investigated the influence of forensic accounting on litigation support and engagement in Nigeria. The study examined the relevance of forensic accounting expertise in legal and dispute-resolution environments and found that forensic accounting contributes to the preparation, interpretation, and presentation of financial evidence during litigation. The findings support the argument that forensic accountants can extend their role beyond the initial financial investigation by helping legal practitioners and other decision-makers understand complex financial information. The study is relevant to insurance because disputes over claim validity, financial evidence, and the amount of compensation may require specialist financial analysis. Nevertheless, its broader litigation focus means that it provides contextual rather than direct insurance-specific evidence.

Guellim et al. (2024) conducted a systematic review evaluating the perceived value of forensic accounting. Although the study was not specifically restricted to insurance claims, it synthesized evidence concerning the growing application of forensic accounting to investigation, fraud-related activities, and decision support. The review highlights the expanding scope of forensic accounting and the importance of combining accounting expertise with investigative and analytical capabilities. The study provides useful support for viewing forensic accounting as a multidimensional professional function rather than one limited to fraud detection. However, because it is a systematic review of broader forensic accounting applications, its findings do not directly establish the effectiveness of forensic accountants in particular insurance-claims outcomes.

Honigsberg (2020) examined forensic accounting from an interdisciplinary perspective and positioned the field at the intersection of accounting, law, and investigation. Although the study is not an empirical insurance study, it provides an important conceptual basis for understanding why forensic accountants may be involved in financial misconduct investigations and disputes. The study emphasizes the evidential nature of forensic accounting and its application to circumstances in which financial information must be investigated, interpreted, and communicated for decision-making or legal purposes. Its relevance to insurance claims is that complex claims may require financial evidence that extends beyond conventional accounting procedures. However, because Honigsberg (2020) is a scholarly review rather than an empirical insurance study, its contribution is primarily conceptual.

The empirical evidence reviewed indicates that forensic accounting contributes to insurance claims through several interconnected functions. First, evidence from Caruana et al. (2020) suggests that forensic accountants can strengthen claim verification where financial information is complex, disputed, or requires specialized investigation. This complements the broader claims-management findings of Ajemunigbohun et al. (2018), which demonstrate the importance of effective claims-handling procedures. The combined evidence suggests that forensic accounting is most useful where routine claims assessment is insufficient to establish the reliability and completeness of financial information.

Second, the evidence for fraud detection and prevention is comparatively stronger. Haruna et al. (2021) provide insurance-specific Nigerian evidence concerning forensic accounting and fraud prevention, while Kaur et al. (2022) provide broader systematic evidence supporting the contribution of forensic accounting to fraud detection and prevention. Liang et al. (2019) and Óskarsdóttir et al. (2022) further demonstrate that technology-enabled network analysis can improve the identification of suspicious insurance relationships and patterns. Taken together, these studies suggest that forensic accountants can combine financial investigation with analytical technologies to identify suspicious claims and investigate potential fraudulent activities. However, the evidence also indicates that analytical alerts should be treated as indicators requiring further investigation rather than as proof of fraudulent intent.

Third, the evidence concerning loss quantification is more limited. Caruana et al. (2020) provides direct insurance-specific evidence that forensic auditors can contribute to the insurance process but also indicates that compensation assessment may require collaboration with other specialists. This suggests that forensic accountants can contribute to financial reconstruction, examination of historical records, and determination of the financial consequences of an insured event, particularly where losses are complex. However, the reviewed empirical literature does not provide sufficient evidence to quantify the extent to which forensic accounting reduces overpayment, improves settlement accuracy, or reduces claims leakage. This represents an important gap in the existing literature.

Fourth, the evidence supports the role of forensic accountants in litigation and dispute support. Micah et al. (2023) and Osunwole et al. (2024) demonstrate the relevance of forensic accounting to the analysis and presentation of financial evidence in legal proceedings. Although these studies are not specifically focused on insurance claims, their findings are applicable to situations in which insurance disputes involve contested financial information, disputed losses, or disagreements over compensation. The evidence therefore suggests that forensic accountants

may continue to provide value after the initial claims investigation where financial evidence becomes subject to negotiation, arbitration, or litigation.

A further finding across the reviewed studies is the increasing importance of technology. Liang et al. (2019) and Óskarsdóttir et al. (2022) demonstrate that network analysis and related analytical techniques can improve the identification of suspicious insurance activities. This indicates that contemporary forensic accounting increasingly requires the ability to work with large volumes of digital information and interpret analytical outputs. Nevertheless, the studies do not support replacing professional judgment with automated systems. Instead, technology appears to be most valuable when used to identify patterns and prioritize cases for subsequent professional investigation.

The reviewed studies also demonstrate the importance of multidisciplinary collaboration. Caruana et al. (2020) specifically indicates that complex insurance claims may require forensic accountants to work with loss adjusters, actuaries, lawyers, and other specialists. This finding is important because claim assessment may involve several distinct questions. A forensic accountant may establish the financial consequences of a loss, while an engineer may determine its technical cause, a loss adjuster may assess physical damage, an actuary may evaluate financial projections, and a lawyer may address contractual and legal questions. The evidence therefore suggests that forensic accounting should be integrated into, rather than separated from, the wider insurance claims-management process.

Overall, the empirical literature reveals an important gap that provides justification for the present study. Existing studies have examined insurance claims management (Ajemunigbohun et al., 2018), forensic auditors in insurance (Caruana et al., 2020), forensic accounting and fraud prevention in Nigerian insurance companies (Haruna et al., 2021), technology-enabled insurance-fraud detection (Liang et al., 2019; Óskarsdóttir et al., 2022), broader forensic accounting and fraud detection (Kaur et al., 2022), and litigation support (Micah et al., 2023; Osunwole et al., 2024). However, these studies remain fragmented across different aspects of the claims process.

In particular, the literature does not sufficiently integrate the four major functions of forensic accountants claim verification, fraud detection and prevention, loss quantification, and litigation support, within a single analytical framework. Furthermore, the available evidence is uneven: fraud detection has comparatively stronger empirical support, while insurance-specific evidence concerning loss quantification and litigation remains limited. There is also insufficient evidence concerning the circumstances in which forensic accounting may produce limited additional value relative to its cost. This gap is important because forensic accounting is not necessarily appropriate for every insurance claim. Routine, low-value claims with complete documentation may not justify specialist forensic intervention, whereas complex, high-value, suspicious, or disputed claims may benefit substantially from it.

Fraud Triangle Theory

The theoretical foundation of the study is the Fraud Triangle Theory associated with Cressey (1953). The theory identifies pressure, opportunity, and rationalization as conditions associated with fraudulent behaviour. In insurance, pressure may arise from financial difficulty or the desire to obtain benefits beyond legitimate entitlement. Opportunity may be created by inadequate documentation, weak verification procedures, poor segregation of duties, limited monitoring, or

weaknesses in information systems. Rationalization refers to the process through which individuals justify dishonest conduct.

The Fraud Triangle Theory is particularly relevant to the fraud-detection and prevention dimension of the study. It helps explain why forensic examination of claims documentation, internal controls, transactions, and relationships may be necessary. However, the theory does not independently explain how a forensic accountant calculates an economic loss, verifies documentary evidence, or communicates financial evidence during litigation.

The study therefore uses the Fraud Triangle as the fraud-risk lens while employing a broader analytical framework to organize forensic accounting activities across the claims process. The framework conceptualizes forensic accounting as an interconnected evidential chain comprising claim verification, fraud investigation, loss quantification, and dispute or litigation support. The relationship is not strictly linear because evidence discovered during verification may trigger investigation, investigation may require financial reconstruction, and loss quantification may subsequently become evidence in dispute resolution.

The present study therefore builds on the existing empirical literature by synthesizing these fragmented findings into an integrated examination of the role of forensic accountants throughout the insurance claims process. Rather than assuming that forensic accounting is universally effective, the study considers the specific functions it performs, the evidence supporting each function, the contribution of technology and multidisciplinary collaboration, and the limitations that may affect its practical value.

3.0 Methodology

The study adopted a structured integrative literature review design. This approach was selected because the objective was to bring together evidence from different methodological and disciplinary perspectives concerning forensic accounting and insurance claims. The evidence base includes systematic reviews, empirical studies, technology-oriented insurance-fraud research, qualitative research, and conceptual literature. No meta-analysis was undertaken because the reviewed studies differ substantially in research questions, contexts, designs, variables, and outcome measures.

The analysis draws on 10 substantive scholarly sources from the evidence base of the original manuscript. A separate foundational source, Cressey (1953), was retained for theoretical purposes. Sources were considered relevant where they addressed forensic accounting, forensic auditing, insurance claims, insurance fraud, financial-loss assessment, or litigation support and contributed evidence or conceptual analysis relevant to at least one of the study's four principal functions. Peer-reviewed scholarly publications and systematic reviews were prioritized, while technology-oriented studies were included where their findings had direct implications for forensic investigation in insurance.

The analysis did not treat the reviewed sources as an exhaustive population of all publications on the subject. This limitation is necessary because the original research materials did not preserve a complete database search history and screening log. Accordingly, the study is presented as a structured integrative literature review rather than as a fully reproducible systematic review.Each substantive source was mapped according to publication year, research context, methodological orientation, principal forensic accounting function, relevance to insurance claims, principal finding, practical contribution, and reported or identifiable limitation. The evidence was then

organized into four principal functions: claim verification, fraud detection and prevention, loss quantification, and litigation and dispute support. Technology-enabled investigation and multidisciplinary collaboration were treated as cross-cutting conditions.

Thematic analysis proceeded through initial coding, category development, comparative synthesis, and refinement. During initial coding, statements concerning verification, investigation, quantification, litigation, technology, and collaboration were identified. Similar codes were subsequently grouped under the four principal functions. Findings from different sources were then compared according to research context, evidence type, directness to insurance claims, and principal limitations. Overlapping categories were consolidated, while technology and multidisciplinary collaboration were repositioned as enabling dimensions rather than independent principal roles.

Evidence strength was assessed using three dimensions: directness, methodological contribution, and consistency. Directness refers to how closely a source addresses insurance claims. Methodological contribution refers to the extent to which the research design permits credible interpretation. Consistency refers to the degree to which a finding converges with findings from other sources. On this basis, the study distinguishes between stronger supporting evidence, moderate supporting evidence, and contextual or illustrative evidence.

The methodology has important limitations. Since the study is based entirely on secondary evidence, it does not estimate the financial amount of fraud detected, the percentage reduction in claims leakage, or the return on investment from forensic accounting interventions. It also does not statistically test causal relationships. The findings should therefore be interpreted as an evidence-based conceptual synthesis rather than as a statistical estimate of the effectiveness of forensic accountants.

4.0 Presentation of Results and Discussions

The evidence profile comprises 10 substantive publications addressing forensic accounting generally, insurance claims, insurance fraud, technology-enabled fraud detection, and litigation support. The evidence reveals an important imbalance in the literature. Insurance-specific studies provide relatively direct evidence for claims management and fraud investigation, while litigation evidence is more frequently drawn from broader financial disputes. General forensic accounting reviews provide conceptual breadth but are less specific to insurance claims.

Table 1:

Evidence Profile of the Reviewed Literature

Source	Main Context	Evidence Orientation	Principal Contribution	Directness to Insurance Claims
Ajemunigbohun et al. (2018)	Nigerian insurance	Insurance claims-management study	Highlights importance of claims-handling practices	High
Caruana et al. (2020)	Insurance process	Empirical study	Examines usefulness of forensic auditors and specialist collaboration	High
Guellim et al. (2024)	Forensic accounting	Systematic review	Synthesizes perceived value and applications of forensic accounting	Moderate
Haruna et al. (2021)	Nigerian insurance	Survey study	Examines forensic accounting techniques and	High

Source	Main Context	Evidence Orientation	Principal Contribution	Directness to Insurance Claims
			fraud prevention	
Honigsberg (2020)	Forensic accounting	Scholarly review	Establishes interdisciplinary scope of forensic accounting	Moderate
Kaur et al. (2022)	Forensic accounting/fraud	Systematic review	Provides broad evidence linking forensic accounting with fraud detection and prevention	Moderate
Liang et al. (2019)	Insurance fraud	Technology/application study	Demonstrates network learning for organized insurance-fraud detection	High
Óskarsdóttir et al. (2022)	Insurance fraud	Empirical analytical study	Demonstrates value of network-derived features in fraud detection	High
Micah et al. (2023)	Litigation support	Qualitative secondary-source study	Examines forensic accounting and expert evidence in legal proceedings	Moderate
Osunwole et al. (2024)	Nigeria/litigation	Empirical study	Examines forensic accounting and litigation support	Moderate

Source: Author's Synthesis of the Reviewed Literature.

The first major finding is that forensic accountants contribute to claim verification primarily through detailed examination and reconciliation of financial evidence. The evidence is strongest where claims involve complex financial documentation or disputed amounts. Caruana et al. (2020) directly support the usefulness of forensic auditors in insurance processes, while Ajemunigbohun et al. (2018) establish the broader importance of effective claims-handling processes in the Nigerian insurance context. However, the evidence does not support the claim that forensic accounting is necessary for every claim. Its incremental value appears greater when claim complexity, financial exposure, or evidential uncertainty is high. The evidence for this role is therefore assessed as moderate-to-strong, with direct insurance support but limited outcome-based measurement.

The second and most strongly supported finding concerns fraud detection and prevention. Kaur et al. (2022) provide systematic-review evidence supporting the relationship between forensic accounting and fraud detection and prevention. Haruna et al. (2021) provide insurance-specific Nigerian evidence, while Liang et al. (2019) and Óskarsdóttir et al. (2022) demonstrate the usefulness of network-based approaches in identifying suspicious insurance activity. The convergence across these studies strengthens the conclusion that forensic accounting can improve fraud investigation. However, detection technology should be understood as a screening and prioritization mechanism rather than conclusive evidence of fraud. The evidence for this function is therefore the strongest among the four roles.

The third finding concerns loss quantification. The literature supports the role of forensic accountants in reconstructing financial information and establishing the financial consequences of insured events. Caruana et al. (2020) provide direct evidence concerning insurance processes

but also indicate that compensation assessment may require collaboration with other specialists. The evidence is consequently supportive but comparatively limited. There is insufficient evidence in the reviewed literature to quantify the extent to which forensic accounting reduces overpayment, improves settlement accuracy, or shortens claim-processing time. The evidence for this function is therefore assessed as moderate.

The fourth finding concerns litigation and dispute support. The literature indicates that forensic accountants contribute to litigation by translating complex financial information into defensible evidence. Micah et al. (2023) provide qualitative evidence concerning the role of forensic accounting and expert witnesses in legal proceedings, while Osunwole et al. (2024) provide Nigerian evidence supporting the relationship between forensic accounting and litigation support. However, the direct relevance of this evidence to insurance litigation is lower than the evidence for fraud detection because the studies concern broader financial disputes and legal proceedings. The evidence is therefore assessed as moderate, with strong conceptual relevance but limited insurance-specific empirical evidence.

Technology emerges as a cross-cutting enabler rather than a separate forensic accounting function. Liang et al. (2019) and Óskarsdóttir et al. (2022) demonstrate that network-based approaches can improve the identification of suspicious insurance activity. Nevertheless, analytical systems can identify patterns but cannot independently determine fraudulent intent. Consequently, technological capability creates the greatest value when combined with forensic expertise. The evidence is strong for investigative targeting but insufficient to justify complete automation of fraud determination.

Multidisciplinary collaboration also emerges as an important enabling condition. Complex insurance claims may involve financial, technical, legal, actuarial, and physical-damage questions. Caruana et al. (2020) specifically highlight the importance of cooperation with other specialists. Honigsberg (2020) similarly emphasizes the interdisciplinary nature of forensic accounting. The evidence suggests that collaboration is not merely an administrative preference but a substantive requirement where questions of financial loss, physical causation, valuation, actuarial projections, and contractual interpretation intersect.

The discussion of the findings indicates that the four forensic accounting roles should not be understood as independent services. They form an interconnected evidential chain. Claim verification establishes whether the financial information supplied in a claim can be relied upon. Where verification reveals inconsistencies, further investigation may be required. Fraud investigation may then require transaction tracing and financial reconstruction. The resulting reconstruction may be used to quantify the actual financial loss. If disagreement persists, the financial analysis may become part of negotiation, arbitration, or litigation.

This perspective extends the existing literature by explaining how forensic accountants create value across the claims lifecycle rather than merely identifying what forensic accountants do. It also demonstrates that the value of forensic accounting is risk-dependent. For straightforward claims, conventional claims procedures may be more efficient. For complex commercial claims, however, the cost of forensic investigation may be justified by the financial and legal consequences of an incorrect decision. The appropriate question for insurers is therefore not simply whether forensic accounting is effective, but whether the expected evidential and financial benefits of intervention exceed its costs.

The findings further demonstrate a progression from automated detection to professional investigation. Network analytics and other technologies can improve screening by identifying unusual relationships or patterns. However, suspiciousness is not equivalent to fraud. A forensic accountant must investigate the underlying circumstances, corroborate information, evaluate documentary evidence, and distinguish intentional deception from legitimate anomalies. This finding is consistent with the broader forensic accounting literature emphasizing the complexity of fraud investigations (Kaur et al., 2022).

The findings concerning loss quantification demonstrate the need for interdisciplinary evidence. A forensic accountant may reconstruct the financial consequences of an insured event, but determining causation or technical damage may require engineers or other specialists. Actuaries may be needed where assumptions about future outcomes are material, while loss adjusters may provide expertise concerning physical damage. The value of forensic accounting therefore lies partly in providing a reliable financial component within a wider evidence system.

The litigation-support function reveals another dimension of forensic accounting: evidence translation. A financial analysis may be technically correct but still have limited value if decision-makers cannot understand its assumptions, evidence, calculations, and implications. The forensic accountant therefore creates value by converting complex financial information into reports, schedules, explanations, and expert evidence that can be evaluated by non-accounting decision-makers.

The theoretical implication of the findings is that Fraud Triangle Theory should not be treated as an explanation for every activity performed by forensic accountants. The theory is most directly applicable to fraud-risk assessment. It explains how pressure, opportunity, and rationalization may create conditions for fraudulent insurance claims. Forensic accounting then provides the investigative mechanism through which weaknesses, inconsistencies, and suspicious financial activities can be examined.

The review identifies three major evidence gaps. First, relatively few studies directly measure the financial impact of forensic accountants on insurance claims. Evidence that forensic accountants are useful does not necessarily demonstrate the amount of fraud prevented, loss recovered, or claims cost avoided. Second, the evidence is geographically uneven. Nigerian studies provide important local context, but several technology and fraud-detection studies are based on non-Nigerian insurance environments. Third, evidence concerning loss quantification and insurance-specific litigation remains less developed than evidence concerning fraud detection.

5.0 Conclusions and Recommendations

The study examined the roles of forensic accountants in insurance claims based on a structured review of the existing literature. The findings show that forensic accountants contribute mainly through claim verification, fraud detection and prevention, loss quantification, and litigation support. Among these, the strongest evidence supports their role in fraud detection, while their contribution to complex claims is enhanced by technology and collaboration with other specialists. The study concludes that forensic accounting should be viewed as a risk-based and complementary function rather than a universal solution to insurance claims problems. Its greatest value is likely to occur in high-value, complex, disputed, or potentially fraudulent claims. Routine claims may not justify the additional cost of forensic intervention, while poor records,

inadequate expertise, weak technology, and excessive reliance on automated alerts can reduce its effectiveness.

Based on the findings, insurance companies should establish risk-based criteria and clear referral procedures for involving forensic accountants in complex or suspicious claims. Insurers should also strengthen the use of appropriate data-analytics tools while ensuring that technological alerts are subjected to professional investigation and corroboration. Complex claims should be handled through multidisciplinary teams involving forensic accountants, loss adjusters, actuaries, lawyers, and other relevant specialists. Insurers should further improve claims documentation, digital record management, evidence preservation, and staff training in forensic investigation and data analytics. They should also monitor the costs and outcomes of forensic interventions to determine whether the benefits justify the resources committed.

The study is limited by its reliance on secondary literature and the relatively small and heterogeneous evidence base. Insurance-specific evidence is stronger for fraud detection than for loss quantification and litigation support. Future research should therefore use primary insurance-claims data to examine the actual effects of forensic accounting on fraud detection, claims leakage, settlement accuracy, investigation costs, and litigation outcomes.

References

Ajemunigbohun, S. S., Yusuf, T. O., & Alli, G. N. (2018). A critical review of insurance claims management: A study of selected insurance companies in Nigeria. *Spoudai Journal of Economics and Business, 68*(4), 5-20.

Caruana, Y., Grima, S., Thalassinos, Y., & Baldacchino, P. J. (2020). The effectiveness of forensic auditors in the insurance process. *International Journal of Finance, Insurance and Risk Management, 10*(4), 134-158. https://doi.org/10.35808/ijfirm/244

Cressey, D. R. (1953). *Other people's money: A study in the social psychology of embezzlement*. Free Press.

Guellim, N., Yami, N., Freihat, A. F., Alshurafat, H., Alkababji, M. W., Alzahrane, M., Nasr-El-dein Gad, W., Ibrahim, M. S., & Abdou Mostafa, R. M. (2024). Evaluating the perceived value of forensic accounting: A systematic review method. *Discover Sustainability, 5*, Article 351. https://doi.org/10.1007/s43621-024-00431-y

Haruna, R. A., Adefisayo, A., & Ibrahim, K. M. (2021). Forensic accounting techniques and fraud prevention in listed insurance companies in Nigeria. *Journal of Forensic Accounting & Fraud Investigation, 6*(1), 56-82.

Honigsberg, C. (2020). Forensic accounting. *Annual Review of Law and Social Science, 16*, 147–164. https://doi.org/10.1146/annurev-lawsocsci-020320-022159

Kassem, R., & Higson, A. (2012). The new fraud triangle model. *Journal of Emerging Trends in Economics and Management Sciences, 3*(3), 191–195. https://doi.org/10.10520/EJC132216

Kaur, B., Sood, K., & Grima, S. (2022). A systematic review on forensic accounting and its contribution towards fraud detection and prevention. *Journal of Financial Regulation and Compliance, 31*(1), 60-95. https://doi.org/10.1108/JFRC-02-2022-0015

Liang, C., Liu, Z., Liu, B., Zhou, J., Li, X., Yang, S., & Qi, Y. (2019). Uncovering insurance fraud conspiracy with network learning. In *Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval*, 1181-1184. Association for Computing Machinery. https://doi.org/10.1145/3331184.3331372

Micah, E. E. M., Adinnu, P. O., & Ibitomi, T. (2023). Forensic accounting and litigation support: The role of expert witnesses in legal proceedings. *European Journal of Accounting,*

Auditing and Finance Research, 11(8), 15–26. https://doi.org/10.37745/ejaafr.2013/vol11n81526

Óskarsdóttir, M., Ahmed, W., Antonio, K., Baesens, B., Dendievel, R., Donas, T., & Reynkens, T. (2022). Social network analytics for supervised fraud detection in insurance. *Risk Analysis, 42*(8), 1872–1890. https://doi.org/10.1111/risa.13693

Osunwole, O. O., Adewumi, A. A., Adeyemi, O. A., & Adekanye, T. (2024). Influence of forensic accounting on litigation support and engagement in Nigeria. *FUDMA Journal of Accounting and Finance Research, 2*(3), 63-72. https://doi.org/10.33003/fujafr-2024.v2i3.109.63-72