RISK PERCEPTIONS OF MOTOR-INSURANCE FRAUD IN NIGERIA: INSIGHTS FROM INDUSTRY EXPERTS

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ABSTRACT

Motor insurance fraud poses a critical threat to the insurer solvency and market integrity, particularly in developing economies where regulatory enforcement and data infrastructure remain weak. In Nigeria, both opportunistic exaggerations ("soft" fraud) and deliberate schemes ("hard" fraud) distort claims performance and erode public confidence in insurance. This study investigates how industry professionals perceive the scale and consequences of fraud, drawing on behavioural and institutional perspectives. Using an expert elicitation methodology, data were obtained through a structured questionnaire administered to 120 insurance experts, including underwriters, claims managers, brokers, and regulators. The findings reveal that systemic weaknesses, such as weak enforcement and cultural tolerance for minor deception, amplify fraud risks. Respondents viewed soft fraud as more frequent but harder to prove, while hard fraud was perceived as less common yet more financially damaging. These results extend existing literature by providing context-specific, empirically grounded evidence from a sub-Saharan African market where reliable claims data are scarce. The study contributes to risk research by demonstrating how perceptions of fraud are shaped by institutional capacity, and it offers actionable implications for enhancing regulatory oversight, improving insurer resilience, and strengthening governance frameworks in emerging insurance markets.

Keywords: Risk perception, motor insurance fraud, fraud triangle, institutional theory, solvency

INTRODUCTION

Insurance fraud, particularly within the motor insurance sector, represents a persistent challenge to insurers worldwide. By undermining the principle of *uberrimae fidei* (utmost good faith) on which insurance contracts are founded, fraudulent behaviour introduces deception into risk-sharing arrangements, distorts risk pooling, and threatens insurer solvency and market stability (OECD, 2021; EIOPA 2020; Anifalaje, 2019; Insurance Europe 2019; Yusof & Razak, 2019). Evidence from advanced insurance markets illustrates the scale of the problem. In the United States, up to 17 per cent of auto claims payments have been estimated to involve fraudulent elements (Insurance Research Council 2015), while in the United Kingdom, detected insurance fraud has imposed substantial costs on insurers and policyholders alike (Association of British Insurers 2020). Rather than isolated incidents, these figures reflect the systemic and transnational nature of insurance fraud and its capacity to erode public trust in insurance institutions.

The susceptibility of motor insurance to fraud is particularly pronounced in emerging markets, where regulatory enforcement is often uneven, data infrastructures remain fragmented, and socio-cultural norms may shape both opportunities for deception and its tolerance (OECD, 2021; EIOPA 2020; Insurance Europe 2019; Yusof & Razak, 2019). Nigeria exemplifies these conditions. Although motor insurance is compulsory, enforcement capacity is limited, and insurance penetration remains persistently low. This combination creates an environment in which fraudulent claims can flourish within formal insurance markets (Agbo et al., 2025; Imo & Chilekezie 2025). While industry practitioners widely acknowledge fraud as a significant operational challenge, the absence of reliable claims data means that perceptions and experiential knowledge continue to dominate assessments of fraud prevalence, typologies, and impacts. This raises important questions about how fraud is understood, differentiated, and managed in contexts characterised by institutional constraints.

Existing research on insurance fraud has largely focused on advanced economies, where access to large, high-quality datasets has enabled sophisticated actuarial modelling, detection algorithms, and behavioural profiling (Tennyson, 2002; Derrig 2002). These studies have substantially advanced the technical understanding of fraud detection and prevention. However, their reliance on extensive claims databases limits their applicability in developing contexts, where such data are scarce or incomplete. Empirical evidence from sub-Saharan Africa remains limited, and available studies, such as Akotey and Abor (2017) in Ghana, highlight how informal practices, weak enforcement, and systemic vulnerabilities shape both the incidence and recognition of fraud. These contextual differences raise concerns about the direct transferability of anti-fraud strategies developed in high-income settings.

To address these gaps, the present study integrates four complementary theoretical perspectives. Fraud Triangle Theory (Cressey, 1953) explains fraudulent behaviour through the interaction of pressure, opportunity, and rationalisation. Routine Activities Theory (Cohen & Felson, 1979) adds a situational dimension, emphasising the convergence of motivated offenders, suitable targets, and weak guardianship. Rational Choice Theory (Clarke & Cornish, 1985) conceptualises fraud as a calculated response to perceived costs and benefits, while Institutional Theory (North, 1990) situates fraud within broader governance frameworks, enforcement capacity, and cultural norms. Together, these lenses frame insurance fraud as both an individual behavioural act and a systemic governance

challenge. They also align with risk perception research, which emphasises that risk assessments are socially mediated and shaped by institutional experience, trust, and information flows (Power 2004; Slovic, 2000). In data-scarce environments, expert perceptions therefore constitute a critical source of insight into operational realities and institutional weaknesses.

Methodologically, this study responds to Nigeria's data constraints by adopting an expert-based risk assessment approach. Drawing on survey responses from 120 industry professionals, including underwriters, claims managers, brokers, regulators, and consultants, the study captures informed judgements on fraud prevalence, the relative importance of soft and hard fraud, and perceived implications for insurer solvency.

The research pursues three objectives: to assess whether fraud is perceived to have reached levels that threaten the functioning of Nigeria's motor insurance market; to examine how experts distinguish between soft and hard fraud, a distinction widely observed internationally (ABI 2021; Šubelj et al. 2011); and to evaluate whether fraud is perceived to undermine insurers' financial resilience, as documented in other emerging markets (Akomea-Frimpong et al. 2016; Gour & Gupta 2012). By addressing these aims, the study contributes to the literature by extending empirical evidence beyond developed markets, integrating behavioural and institutional theories with risk perception, and offering policy-relevant insights for regulators, insurers, and investors operating in high-uncertainty insurance environments.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Conceptualising Insurance Fraud

Insurance fraud is widely recognised as a pervasive and costly challenge to financial systems. It undermines the principle of *uberrimae fidei* (utmost good faith), on which insurance contracts rest, by introducing deception into risk-sharing arrangements (Lookman & Balasubramanian, 2013; Clarke, 1989). In motor insurance, fraud manifests primarily in two forms. Soft fraud occurs opportunistically when policyholders exaggerate legitimate claims, for example, by inflating repair costs or submitting multiple claims for the same incident. Hard fraud involves premeditated schemes such as staged accidents, fabricated injuries, or collusion between claimants and intermediaries (IAIS, 2007; Viaene & Dedene, 2004).

Soft fraud tends to be more prevalent due to its opportunistic and socially rationalised nature. Claimants often perceive minor exaggerations as justified compensation for paying premiums, and many do not consider such practices a serious crime (ABI, 2021; Šubelj et al., 2011). Hard fraud, while less frequent, imposes disproportionately inflated costs due to its deliberate and often organised character. Together, both forms of fraud contribute to higher claim costs, reduced profitability, and inflated premiums for honest policyholders.

2.2 Theoretical Perspectives on Fraud and Risk Perception

The persistence of insurance fraud can be understood through multiple theoretical frameworks. Cressey's (1953) Fraud Triangle identifies three enabling conditions: pressure (often financial need), opportunity (gaps in controls), and rationalisation (justifications for dishonest conduct). This framework is widely applied in criminology and financial governance, offering a behavioural lens on individual motivations.

Complementing this, Routine Activities Theory (Cohen & Felson, 1979) explains crime as the convergence of motivated offenders, suitable targets, and weak guardianship. In motor insurance, this convergence is evident when claimants exploit weak claims-verification systems or collude with intermediaries. Rational Choice Theory (Clarke & Cornish, 1985) further emphasises the cost–benefit calculations underpinning fraudulent behaviour, underscoring how weak sanctions and limited detection capacity increase incentives to commit fraud.

Beyond behavioural accounts, Institutional Theory (North, 1990) shifts attention to the broader governance environment. Fraud is more prevalent where institutions lack enforcement capacity, data infrastructure, and regulatory credibility. In such contexts, informal norms may even normalise fraudulent practices, framing them as customary or socially acceptable (Yusof & Razak, 2018).

Critically, fraud is also a question of risk perception. Slovic (2000) and Power (2004) argue that risks are not only objective probabilities, but also socially constructed phenomena shaped by trust, institutional experience, and information flows. In insurance, perceptions of fraud prevalence and severity influence how professionals design controls, investigate claims, and assess solvency risk. This is particularly salient in environments with limited actuarial data, where expert judgement substitutes for quantitative benchmarks. Together, these theories suggest that insurance fraud is best understood as both an individual behavioural problem and a systemic risk shaped by institutions and perceptions.

2.3 Global Evidence: Fraud in Advanced Economies

In advanced economies, research has largely focused on quantifying fraud and developing detection systems. Studies in the U.S. highlight both the scale of fraudulent activity and the technological innovations designed to combat it. Derrig and Weisberg (2004) pioneered statistical modelling of claims to identify suspicious patterns, while Šubelj et al. (2011) demonstrated the use of social network analysis to uncover organised fraud rings. More recent approaches employ machine learning and artificial intelligence to detect anomalies in claims databases, though challenges remain around interpretability, data imbalance, and evolving fraud strategies (Altuntas, Berry-Stölzle & Hoyt, 2011).

Regulatory and industry responses in advanced markets emphasise collective intelligence. In the U.K., the Insurance Fraud Bureau coordinates data-sharing across insurers, while ABI reports provide annual benchmarks of detected fraud. Similarly, in the U.S., the National Insurance Crime Bureau maintains centralised databases of suspected fraud cases and facilitates public–private partnerships in enforcement. Across Europe, Insurance Europe (2019) and the European Insurance and Occupational Pensions Authority (EIOPA) stress the importance of cross-border cooperation and digitalisation in fraud governance. Importantly, global evidence consistently shows that soft fraud is more prevalent than hard fraud. The National Association of Insurance Commissioners (2024) describes soft fraud as "the more common" form; Deloitte (2025) estimates that soft fraud accounts for roughly 60% of detected cases; and the Claims and Litigation Management Alliance (2023) reports that it is about 15 times more prevalent than hard fraud. These findings reinforce the need to test whether similar patterns are perceived in Nigeria.

2.4 Emerging Market Evidence: Behavioural and Institutional Dimensions

Fraud dynamics in emerging economies differ significantly due to weaker enforcement, limited claims databases, and stronger cultural rationalisations. In Ghana, Akomea-Frimpong

et al. (2016) found that fraud eroded insurers' return on assets, with contributing factors including weak control systems, poorly monitored intermediaries, and delayed agent remuneration. In India, Gour and Gupta (2012) showed that fraud undermined solvency margins, while Bashir et al. (2013) highlighted the burden of fraudulent accident claims on household and firm-level premiums.

In Malaysia, Yusof and Razak (2018) observed that subjective norms and peer pressure significantly influenced fraud intentions, suggesting that rationalisation is culturally embedded. Similarly, Salaton et al. (2019) argued that macroeconomic pressures such as inflation amplify fraudulent behaviour in Kenya, as households view fraudulent claims as coping strategies. These findings suggest that fraud in emerging economies cannot be explained solely by individual behaviour but must be situated within broader institutional, economic, and cultural contexts.

A recurring theme is the perception–action gap: industry professionals often acknowledge high levels of fraud, but limited resources, fragmented data, and weak enforcement constrain their ability to act effectively.

2.5 Insurance Fraud in Nigeria

Nigeria presents a distinctive context for studying insurance fraud. Motor insurance is the most widely purchased policy because it is compulsory under the Motor Vehicles Act of 1945. Despite several waves of recapitalisation and regulatory reform, including the establishment of the National Insurance Commission (NAICOM) in 1997, the industry continues to struggle with weak claims databases, inconsistent reporting, and limited investment in fraud-detection systems (Soye & Momoh, 2021; Oke, 2012).

Empirical research on fraud in Nigeria remains sparse. Yusuf and Babalola (2009) emphasised the anecdotal nature of fraud evidence, while Ajemunigbohun and Oreshile (2014) examined risk attitudes among policyholders but not fraud directly. Industry commentary frequently points to fraudulent claims as a leading driver of high loss ratios, yet there are no comprehensive datasets or regulatory statistics to confirm these perceptions.

These challenges must also be situated within Nigeria's institutional and cultural context. Informal practices such as isusu or akawo (i.e., rotating savings and credit associations in which community members periodically contribute to a pooled fund and take turns receiving the lump sum) coexist alongside formal insurance (Osiki, 2020; Ayodele, 2015; Osabuohien & Ola-David, n.d). Rooted in reciprocity and trust, these indigenous mechanisms highlight how Nigerians historically manage risk through community-based arrangements, sometimes in preference to formal insurance.

In this environment, structured expert elicitation offers a valid method for capturing professional judgements about fraud prevalence, typologies, and solvency implications (Rowe & Wright, 2001). Expert perceptions serve as both a proxy for missing actuarial data and an indicator of how fraud is understood, tolerated, or contested within the industry.

2.6 Synthesis and Hypotheses Development

The literature review reveals three insights. First, fraud is universally acknowledged as problematic, but its severity and impacts vary according to institutional capacity. Second, soft fraud dominates in most markets, though organised hard fraud poses a disproportionate threat to solvency in low-capacity settings. Third, advanced economies demonstrate how

institutionalised governance (data sharing, coordinated intelligence, regulatory oversight) translates perceptions into effective controls, while emerging economies reveal a perception–action gap where fraud is recognised but inadequately addressed. Nigeria exemplifies the latter case: compulsory motor insurance creates high risk exposure, but weak institutions and scarce data leave fraud governance reliant on expert perceptions. Figure 1 illustrates the conceptual model, showing how fraud arises from the interaction of behavioural drivers (Fraud Triangle) and institutional arrangements, which together shape expert perceptions of fraud prevalence, typologies, and impacts. These perceptions, in turn, influence industry outcomes such as claims costs, solvency, and public trust. On this basis, the following hypotheses are proposed (Table 1):

H1: *Insurance experts in Nigeria perceive fraud levels in the motor-insurance industry to be problematic.*

H2: *Experts perceive soft fraud to be more prevalent than hard fraud.*

H3: *Experts perceive fraud as materially impairing the solvency of Nigerian motor insurers.*

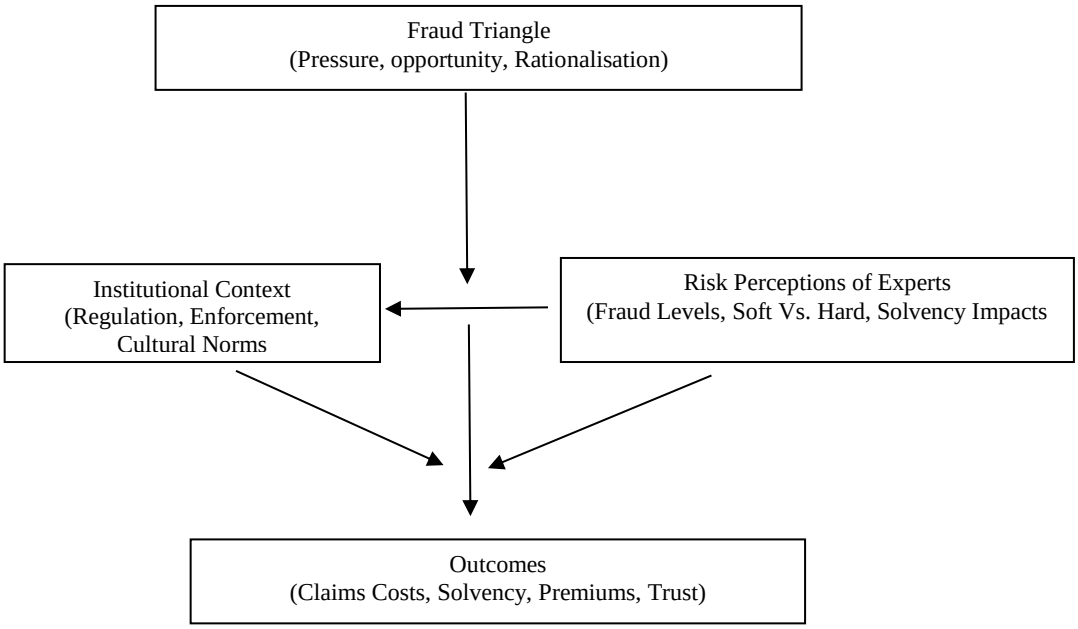

Figure 1. Conceptual Model: Fraud Drivers, Perceptions, and Outcomes.

***Table 1**: Research Hypothesis Statement*

Hypothesis	Statement	Rationale
H1	Insurance experts in Nigeria perceive fraud levels in the motor-insurance industry to be problematic.	Fraud Triangle theory highlights pressures and opportunities as enabling conditions; prior evidence indicates pervasive fraud in low-enforcement settings (Cressey, 1953; Derrig, 2002; Akotey & Abor, 2017).
H2	Experts perceive soft fraud to be more prevalent than hard fraud.	International research consistently shows opportunistic exaggeration dominates motor-insurance fraud (NAIC, 2024; Deloitte, 2025; CLM Alliance, 2023).
H3	Experts perceive fraud as materially impairing the solvency of Nigerian motor insurers.	Emerging-market studies link fraud to declining performance and solvency erosion (Akomea-Frimpong et al., 2016; Gour & Gupta, 2012).

3. METHODS

3.1 Participants and Sampling

Participants were drawn from four professional strata: underwriters, claims handlers, insurance brokers, and regulators – the National Insurance Commission (NAICOM) and the Nigerian Insurers Association (NIA). These groups were selected because fraud in motor insurance is most directly encountered and managed through underwriting decisions, claims processing, and regulatory oversight. Although a stratified random sampling design was initially considered, the absence of a comprehensive industry employee register made this approach impracticable. Consequently, a combination of purposive and snowball sampling was adopted.

Purposive sampling was used to identify experienced professionals with demonstrable expertise in motor-insurance operations and fraud-related issues, drawing on industry networks, professional associations, and senior management referrals. This approach is appropriate in specialised research contexts where informed judgement is required (Martinez-Mesa et al., 2016). Snowball sampling was subsequently employed to broaden coverage, with initial participants recommending peers who met the inclusion criteria of professional qualification and at least 5 years' experience in motor insurance–related roles. In total, 155 responses were received. Following data screening, 35 cases were excluded due to incomplete responses, failure on professional-knowledge validation items, or insufficient experience, resulting in a final analytical sample of 120 experts.

The final sample comprised 45 underwriters, 40 claims handlers, 25 insurance brokers, and 10 regulatory professionals. Most respondents occupied middle- to senior-level positions, including senior underwriters, claims managers, compliance officers, and supervisory regulators. The sample size was selected to balance analytical adequacy with the practical constraints of accessing senior professionals and is consistent with expert-elicitation research that prioritises depth of domain expertise over large respondent numbers (O'Hagan, 2019; Cooke, 1991). Respondents ranged in age from 35 to 62 years, with substantial post-qualification experience, and the gender distribution broadly reflected industry demographics (NAICOM, 2021).

3.2 Materials and Measures

Data were collected using a structured questionnaire comprising six sections. Most items employed five-point Likert scales ranging from strongly disagree (1) to strongly agree (5). Other formats included percentage estimates, single-choice, and multiple-choice responses. The survey instrument was pretested through a pilot involving a group of 10 insurance professionals with roles comparable to those of the main sample. Feedback from the pilot informed minor revisions to item wording and structure, improving clarity and consistency prior to full administration. Likert-type scales were used to measure perceptual constructs because they are well-suited to capturing subjective judgements and attitudes, allowing respondents to express degrees of intensity in a consistent and analytically tractable manner. Such scales are widely used in risk perception and behavioural research, and they facilitate reliability assessment and multivariate statistical analysis (Likert, 1932; Dawes, 2008). The first section contained three professional-knowledge items (PK1–PK3), designed to assess familiarity with standard motor-insurance practices in Nigeria.

Drawing on Rowe and Wright's (2001) principles of ecological validity and learnability in expert elicitation, these questions ensured that only respondents with sufficient expertise contributed to the dataset. Participants who failed any of these validation items were excluded from analysis. The second section (EF1–EF4) measured perceptions of fraud in motor-insurance claims. The third and fourth sections focused on perceptions of soft and hard fraud, respectively. Soft fraud (SF1–SF5) was defined as opportunistic exaggerations of genuine claims, while hard fraud (HF1–HF4) encompassed staged accidents or fabricated losses. The fifth section assessed perceptions of fraud's impacts (FI1–FI5), with two items—FI4 ("impact on solvency") and FI5 ("impact of investigation costs")—serving as focal measures of financial consequences. The final section collected demographic information, including gender, age, years of experience, role, and educational background.

3.3 Justification of Design

The research design reflects the dual challenges of studying insurance fraud in Nigeria: the absence of reliable claims data and the sensitivity of fraudulent practices. Expert elicitation has long been recognised as a valid method under such conditions, providing systematic access to informed professional judgements when observational data are unavailable (Rowe & Wright, 2001). The use of purposive and snowball sampling ensured access to highly qualified respondents across diverse organisational settings, while the inclusion of professional-knowledge validation questions safeguarded against the participation of underqualified individuals.

3.4 Analytical Strategy

Data analysis proceeded in three stages. First, descriptive statistics summarised participants' demographic characteristics and overall perceptions of fraud existence, typologies, and impacts. Second, exploratory factor analysis (EFA) was undertaken to validate the measurement model for fraud perceptions. Because two items (SF5 and HF4) were recorded as percentage estimates rather than Likert ratings, they were excluded from factor analysis to maintain measurement consistency. The analysis therefore included EF1–EF4, SF1–SF4, HF1–HF3, and FI4–FI5. Sampling adequacy was assessed using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's test of sphericity. Factors were extracted using principal components analysis with varimax rotation. Reliability was evaluated using Cronbach's alpha,

with $\alpha \geq 0.70$ considered acceptable. Finally, independent-samples t-tests and one-way ANOVAs were used to examine whether perceptions varied significantly across demographic subgroups, providing a robustness check against potential sampling bias.

4. RESULTS

4.1 Factor Structure and Reliability

The EFA confirmed the expected four-factor structure. Sampling adequacy was acceptable (KMO = 0.728), and Bartlett's test of sphericity was significant ($\chi^2(78) = 386.77$, $p < .001$). Four factors with eigenvalues greater than one (1) were retained, together accounting for 62.2% of total variance. The rotated solution largely recovered the theorised dimensions: fraud existence (EF), soft fraud (SF), hard fraud (HF), and fraud impacts (FI). EF and HF items loaded strongly on their intended factors, while SF3 and SF4 showed modest cross-loadings on HF but remained more strongly associated with SF. The two FI items formed a distinct factor. Communalities ranged from 0.41 to 0.75, indicating adequate shared variance. *Table 2* presents the rotated factor loadings. Items with loadings below 0.40 are suppressed for clarity. Reliability analysis indicated acceptable internal consistency for three scales: fraud existence ($\alpha = 0.718$), soft fraud ($\alpha = 0.719$), and hard fraud ($\alpha = 0.733$).

Table 2*. Rotated factor loadings (varimax, loadings < 0.40 suppressed)*

Item	Factor 1 (Hard fraud)	Factor 2 (Soft fraud)	Factor 3 (Impacts)	Factor 4 (Existence)
HF1	0.79			
HF2	0.77			
HF3	0.75			
SF1		0.78		
SF2		0.87		
SF3	0.40	0.61		
SF4	0.42	0.46		
FI4			0.84	
FI5			0.80	
EF1				0.65
EF2				0.72
EF3				0.80
EF4				0.68

Note. Extraction = principal components; rotation = varimax.

Although the fraud-impacts scale achieved a Cronbach's α of 0.582 (below the conventional 0.70 threshold), it comprises only two items but as empirical psychometric literature shows, two-item scales typically produce lower α values due to the small number of items (Eisinga et al., 2012; Taber, 2018). Given the theoretical importance of the impact construct within this

study and the acceptable inter-item correlation observed, retention of the scale is justified on both theoretical (construct relevance) and practical (scale brevity) grounds.

Several items exhibited modest cross-loadings across factors, which is not uncommon in exploratory factor analysis of perceptual constructs that are conceptually related. In this study, cross-loadings were interpreted in light of the underlying theoretical framework, recognising that perceptions of fraud prevalence, typologies, and institutional drivers are interdependent rather than strictly orthogonal. Items were retained on the factor where they demonstrated the strongest theoretical alignment and highest primary loading. None of the observed cross-loadings exceeded accepted thresholds that would warrant item exclusion, and the overall factor structure remained interpretable and theoretically coherent.

4.2 Descriptive Statistics

Descriptive analyses reinforced the perception that fraud is both widespread and consequential in the Nigerian motor-insurance sector. On the five-point scale, mean scores for fraud existence were high (M = 4.21, SD = 0.63), with most experts agreeing that fraudulent claims are pervasive. To enhance statistical robustness, 95% confidence intervals were computed for key mean estimates, indicating the precision of respondents' perceptions and enabling comparisons across constructs. Perceptions of soft fraud (M = 4.05, SD = 0.58) exceeded those of hard fraud (M = 3.12, SD = 0.71), mirroring international findings that opportunistic exaggerations are more common than organised fraud schemes. For instance, the Insurance Research Council reports that the majority of U.S. auto-insurance fraud arises from claim padding rather than staged accidents (Irvin, 2019), while Deloitte (2025) estimates that soft fraud accounts for approximately 60% of detected cases worldwide. Experts also rated the financial consequences of fraud as severe. Perceived impacts on solvency were high (M = 4.18, SD = 0.67), reinforcing the consensus that fraud is not only an operational nuisance but also a systemic threat to insurers' financial stability. This is consistent with evidence from Ghana (Akomea-Frimpong et al., 2016) and India (Gour & Gupta, 2012), where fraud has been shown to erode solvency margins and profitability.

4.3 Subgroup Analyses

To assess the robustness of the findings and explore potential heterogeneity in perceptions, subgroup comparisons were conducted by gender, organisational role, age, and years of professional experience. Independent-samples t-tests indicated no significant gender differences in perceptions of fraud existence ($t(118) = –0.23$, $p = .815$), soft fraud ($t(118) = 1.16$, $p = .250$), hard fraud ($t(118) = –0.74$, $p = .459$), or fraud impacts ($t(118) = 0.06$, $p = .950$). Mean scores were highly similar across male and female respondents, suggesting broadly shared perceptions across genders. One-way ANOVAs examined variation by organisational role. While no significant differences emerged for perceptions of fraud existence ($F(3,116) = 1.86$, $p = .140$) or soft fraud ($F(3,116) = 1.17$, $p = .324$), there were significant role-based differences in perceptions of hard fraud ($F(3,116) = 2.93$, $p = .037$) and fraud impacts ($F(3,116) = 3.61$, $p = .015$).

Post-hoc inspection (Tukey's HSD) suggested that respondents in regulatory agencies and consulting roles tended to rate both the severity of hard fraud and its financial consequences higher than their counterparts in underwriting or broking, consistent with their broader oversight responsibilities. Age and experience were treated as continuous variables and correlated with fraud perceptions. Age was weakly and non-significantly associated with most fraud scales. However, a modest positive correlation was observed with fraud impacts ($r = .23$, $p = .010$), suggesting that older professionals perceived solvency risks as more acute. Years of

experience were negatively correlated with perceptions of fraud existence ($r = –.23$, $p = .011$), indicating that more experienced experts were somewhat less likely to report fraud as highly prevalent. By contrast, experience correlated positively with perceptions of fraud's financial impacts ($r = .34$, $p < .001$), reinforcing the view that seasoned professionals recognise fraud as a material threat to solvency even if they report lower prevalence in day-to-day claims handling.

5. DISCUSSION AND IMPLICATIONS

This study examined expert perceptions of motor-insurance fraud in Nigeria, focusing on its prevalence, typologies, and consequences for insurer solvency. Drawing on Fraud Triangle Theory and Institutional Theory, the analysis revealed how behavioural pressures intersect with institutional weaknesses to shape perceptions of fraud as both widespread and financially consequential.

5.1 Fraud Prevalence (H1)

Consistent with H1, respondents overwhelmingly agreed that fraud is pervasive in Nigeria's motor-insurance market ($M = 4.21$). This resonates with international studies documenting insurance fraud as a systemic and costly risk (Insurance Research Council, 2015; ABI, 2020). In the Nigerian case, the absence of reliable claims databases means that expert perceptions serve as the primary evidence base. Subgroup analyses showed no gender differences, but more experienced professionals were marginally less likely to describe fraud as pervasive. One interpretation is that senior staff, having adapted to systemic conditions, perceive fraud as "business as usual" rather than as an acute anomaly (Power, 2004). Even so, the broad consensus that fraud is problematic underscores the industry-wide recognition of its threat.

5.2 Soft versus Hard Fraud (H2)

The results also supported H2. Soft fraud was perceived as significantly more common ($M = 4.05$) than hard fraud ($M = 3.12$). This aligns with global findings that opportunistic exaggerations dominate insurance fraud, while organised schemes occur less frequently but cause disproportionate financial losses (Deloitte, 2025; NAIC, 2024; CLM Alliance, 2023). In Nigeria, this pattern suggests that behavioural rationalisations (i.e., inflating claims to 'recover' premium costs) mirror international dynamics. Subgroup results revealed role-based differences: regulators and consultants rated hard fraud more severely than underwriters or brokers. These distinctions likely reflect vantage points; oversight bodies are more exposed to systemic or organised schemes, whereas operational staff encounter opportunistic exaggerations in daily claims processing. This supports Slovic's (2000) contention that institutional location shapes how risks are perceived and prioritised.

5.3 Fraud Impacts on Solvency (H3)

The findings also confirmed H3. Experts rated the financial consequences of fraud as severe ($M = 4.18$), reinforcing perceptions of fraud as not only an operational disruption but also a systemic threat to insurer solvency. This perception is consistent with research in Ghana (Akomea-Frimpong et al., 2016) and India (Gour & Gupta, 2012), which show that fraud erodes profitability and solvency margins. Subgroup results added nuance: older and more experienced respondents were significantly more likely to stress solvency consequences, while regulators again rated fraud's financial impact higher than market-facing staff. These findings

suggest that institutional vantage points and cumulative professional experience heighten awareness of long-term solvency risks, even when perceptions of fraud prevalence are more muted.

5.4 Implications

Three implications emerge. First, fraud in Nigeria should be viewed not only as a technical detection challenge but also as a governance issue shaped by institutional weaknesses, enforcement gaps, and cultural rationalisations (Yusof & Razak, 2018; North, 1990). Second, the finding that soft fraud dominates highlights the need for behavioural interventions alongside technological solutions. Public education, claims-handling transparency, and incentive alignment may be as critical as machine-learning detection tools. Third, the heightened sensitivity of regulators and experienced professionals to solvency risks underscores the urgency of institutionalising data-sharing mechanisms, strengthening enforcement, and closing the perception–action gap that currently constrains fraud governance.

It is important to emphasise that the findings reflect expert perceptions of fraud rather than direct measures of fraud incidence. In data-constrained environments such as Nigeria, such perceptions should not be interpreted as precise estimates of fraudulent activity. However, they remain highly relevant to understanding solvency risk, as expert judgements shape underwriting practices, claims-handling decisions, reserving behaviour, and regulatory responses. When fraud is perceived to be widespread or financially severe, insurers may respond by tightening underwriting criteria, increasing premiums, or adopting more conservative reserving strategies, all of which have direct implications for market stability and solvency. The study, therefore, does not claim to measure the prevalence of actual fraud but rather to examine how expert perceptions influence risk management and solvency-related decision-making in practice.

From a regulatory perspective, the findings point to the need for a more coordinated fraud-governance roadmap led by the National Insurance Commission (NAICOM), in collaboration with the Nigerian Insurers Association (NIA). This could include risk-based supervision focusing on high-fraud lines such as motor insurance, alongside industry-wide data sharing through a centralised fraud intelligence platform. At the firm level, insurers could strengthen claims investigation through tiered screening that distinguishes frequent soft fraud from less common but high-impact hard fraud, while enhanced underwriting verification and closer coordination between underwriting, claims, and risk management functions may improve early detection and reduce loss leakage.

6. CONCLUSION

6.1 Contributions

This study makes three contributions to the literature on insurance fraud and risk research. First, it expands the empirical evidence base beyond advanced economies by documenting expert perceptions in Nigeria, a market where reliable fraud statistics are scarce, but exposure is high due to compulsory motor insurance. Second, it integrates behavioural and institutional perspectives with risk-perception theory, showing that fraud is understood not only as an outcome of individual pressures and opportunities but also as a systemic governance challenge shaped by institutional capacity and cultural norms. Third, it provides policy-relevant insights for regulators and insurers by clarifying how different professional vantage points (i.e.,

underwriters, brokers, consultants, and regulators) frame fraud risks. These insights can guide the design of fraud governance systems that combine technical detection, institutional coordination, and behavioural interventions. Collectively, these contributions situate Nigeria within comparative debates on insurance fraud and highlight the importance of integrating expert perception into risk-management research in contexts of weak data infrastructure.

Overall, this study set out to investigate expert perceptions of fraud in the Nigerian motor-insurance sector, with particular focus on its prevalence, typologies, and consequences for insurer's solvency. Anchored in Fraud Triangle Theory, Routine Activities theory, rational Choice Theory, and Institutional Theory, and informed by debates on risk perception, the analysis provides a rare empirical window into how industry professionals understand and frame the problem of fraud in an environment marked by scarce data and weak regulatory capacity. Three findings stand out.

First, there is a clear consensus that fraud is not only present but deeply entrenched in Nigeria's motor-insurance market. Experts described fraudulent claims as widespread, a perception that mirrors the global recognition of fraud as one of the most pressing challenges confronting the insurance industry. In the Nigerian case, the absence of reliable claims statistics has not dampened awareness; if anything, it has sharpened reliance on professional judgment and informal intelligence networks.

Second, soft fraud was judged to be more prevalent than hard fraud. This is consistent with evidence from advanced markets, where opportunistic exaggerations such as inflating repair costs or double claiming are far more frequent than organised schemes. Nigerian experts reinforced this pattern, though role-based differences revealed how vantage points matter: regulators and consultants were more likely to highlight the risks of staged or collusive claims than underwriters or brokers, who tend to encounter exaggerations at the claims desk. This suggests that perceptions of fraud are not monolithic but are filtered through institutional experience, echoing broader arguments in the risk perception literature.

Third, fraud was perceived to have a significant impact on solvency. Across the sample, respondents expressed concern that fraudulent claims undermine profitability and weaken insurers' ability to meet long-term obligations. This finding aligns with studies in other emerging markets, such as Ghana and India, which have documented measurable erosion of solvency margins due to fraudulent activities. Subgroup analyses further indicated that more experienced and regulatory-facing professionals were particularly attuned to these systemic risks, underscoring the role of accumulated knowledge and oversight responsibilities in shaping how fraud's consequences are understood.

Together, these findings advance theoretical and practical debates in three ways. Theoretically, they demonstrate the value of integrating behavioural frameworks with institutional analysis. Fraud cannot be explained solely as a matter of individual incentives; it is embedded in broader governance structures, enforcement capacities, and cultural norms. Equally, perceptions of fraud are themselves a form of risk construction, shaped by institutional location and professional experience. For risk research, this underlines the importance of examining not only how risks are measured but how they are socially recognised and prioritised.

Practically, the study highlights the urgent need for investment in fraud governance in Nigeria. Three priorities stand out. First, data infrastructure must be strengthened. Shared fraud registries, cross-firm reporting, and systematic claims databases would enable insurers and regulators to move from perception to evidence-based monitoring. Second, regulatory coordination requires reinforcement. While NAICOM and the NIA provide important

oversight, the perception–action gap remains wide, and consistent enforcement is necessary to translate recognition of fraud into credible deterrence. Third, behavioural interventions should complement technical tools. Public education, transparent claims handling, and incentive alignment are essential to reduce the normalisation of "small" frauds that erode trust and cumulatively damage industry viability.

These recommendations extend beyond Nigeria. Many emerging markets face similar challenges: limited data, weak enforcement, and cultural rationalisations that blur the boundary between legitimate and fraudulent claims. By situating Nigeria within a comparative frame, this study underscores that fraud governance must address both behavioural and institutional dimensions. In doing so, it contributes not only to the literature on insurance fraud but also to broader debates on risk, governance, and institutional resilience in high-uncertainty environments.

Finally, fraud in Nigeria's motor-insurance sector is recognised by experts as widespread, dominated by opportunistic exaggerations, and materially damaging to solvency. These insights provide a foundation for policy reform, industry investment, and future research. As digital infrastructures expand and regulatory frameworks evolve, further work will be needed to trace how perceptions and practices shift over time. For now, the evidence is clear: addressing fraud is not optional but central to safeguarding both insurers' stability and the credibility of the Nigerian insurance market.

6.2 Limitations and Future Research

Several limitations should be noted. First, reliance on expert elicitation was necessary given the absence of reliable claims data, but such methods are inherently shaped by subjective interpretation. While professional-knowledge screening bolstered data quality, the results reflect perceptions rather than verified claims outcomes. Future research could triangulate expert judgements with emerging datasets as centralised fraud registries or industry databases become available.

Second, the sampling strategy combined purposive and snowball recruitment, which, although appropriate for specialist populations (Martinez-Mesa et al., 2016), may introduce selection bias. Subgroup analyses suggested broadly shared perceptions across demographics, but representativeness cannot be assured. Future work could benefit from stratified designs drawing on regulatory lists or professional registers.

Third, measurement of fraud impacts relied on a two-item scale, which, while conceptually central, produced lower internal consistency. Developing validated multi-item instruments would allow for richer assessment of financial, reputational, and trust-related consequences.

Finally, the study was cross-sectional, capturing perceptions at a single moment. Fraud is dynamic, evolving alongside macroeconomic pressures, regulatory reforms, and technological innovations such as telematics and AI-based claims analysis. Longitudinal research could track how perceptions shift over time, while comparative studies across emerging markets would illuminate how institutional capacity, cultural norms, and digital infrastructures mediate fraud risks.

In all, these limitations point to a clear agenda for future research: integrating expert perceptions with empirical datasets, refining measurement tools, and extending analysis across time and jurisdictions. Such work would advance theoretical debates on the interaction of fraud, governance, and risk perception in diverse institutional contexts.

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Conflict of interest
The authors declare no conflict of interest.

Data Availability
The data supporting the findings of this study are available from the corresponding author upon request.

Tables and Figures
All tables and figures are original and were prepared by the authors. No copyrighted material was reproduced.

Participants' Consent
Participation was entirely voluntary. All participants received information about the aims of the study and the nature of their involvement and provided informed consent before completing the survey.

AI Usage Statement

Generative AI tools were not used to generate or interpret research content. A language-editing tool (*ChatGPT, OpenAI Version 5*) was used only to assist with grammar, style, and formatting to align the manuscript with journal requirements. All substantive content, analysis, and interpretation were developed by the authors, who take full responsibility for the final manuscript.

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