

Determinants, Detection, and Impacts of Fraud in Conventional Commercial Banks: A Systematic Literature Review of Scopus Q1–Q2 Articles (2019–2024)

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ABSTRAK

Penipuan tetap menjadi salah satu risiko paling gigih dan sistemik yang dihadapi bank komersial konvensional di seluruh dunia. Terlepas dari reformasi peraturan yang signifikan, kemajuan dalam kerangka kerja tata kelola, dan adopsi sistem kontrol digital yang canggih, aktivitas penipuan terus merusak kinerja bank, stabilitas keuangan, dan kepercayaan publik. Studi ini melakukan Tinjauan Literatur Sistematis (SLR) terhadap lebih dari 100 artikel yang ditinjau sejawat yang diterbitkan dalam jurnal Q1–Q2 yang terindeks Scopus antara tahun 2019 dan 2024, yang berfokus secara eksklusif pada bank komersial konvensional. Dipandu oleh kerangka kerja PRISMA, tinjauan ini mensintesis bukti yang ada tentang penentu penipuan bank, mekanisme deteksi penipuan, dan dampak penipuan terhadap kinerja dan stabilitas bank. Temuan menunjukkan bahwa penipuan di bank konvensional terutama didorong oleh kelemahan tata kelola, kegagalan perilaku dan etika, kesenjangan peraturan dan kelembagaan, dan risiko digital yang muncul. Meskipun pengendalian internal, audit, akuntansi forensik, dan analitik canggih secara signifikan meningkatkan deteksi penipuan, efektivitasnya bervariasi di berbagai konteks kelembagaan. Kecurangan terbukti memberikan dampak buruk yang substansial terhadap profitabilitas, solvabilitas, dan modal reputasi, dengan implikasi yang meluas melampaui bank individual hingga sistem keuangan yang lebih luas. Tinjauan ini berkontribusi pada literatur dengan mengintegrasikan temuan-temuan yang terfragmentasi ke dalam kerangka analitis yang koheren dan dengan mengidentifikasi kesenjangan penelitian kritis dan implikasi kebijakan bagi regulator dan manajemen bank.

Kata kunci: Kecurangan perbankan; Tata kelola perusahaan; Deteksi kecurangan; Pengendalian internal; Stabilitas perbankan.

ABSTRACT

Fraud remains one of the most persistent and systemic risks confronting conventional commercial banks worldwide. Despite significant regulatory reforms, advancements in governance frameworks, and the adoption of sophisticated digital control systems, fraudulent activities continue to undermine bank performance, financial stability, and public trust. This study conducts a Systematic Literature Review (SLR) of more than 100 peer-reviewed articles published in Scopus-indexed Q1–Q2 journals between 2019 and 2024, focusing exclusively on conventional commercial banks. Guided by the PRISMA framework, the review synthesizes existing evidence on the determinants of bank fraud, fraud detection mechanisms, and the impacts of fraud on bank performance and stability. The findings reveal that fraud in conventional banks is primarily driven by governance weaknesses, behavioral and ethical failures, regulatory and institutional gaps, and emerging digital risks. While internal controls, auditing, forensic accounting, and advanced analytics significantly enhance fraud detection, their effectiveness varies across institutional contexts. Fraud is shown to exert substantial adverse effects on profitability, solvency, and reputational capital, with implications that extend beyond individual banks to the broader financial system. This review contributes to the literature by integrating fragmented findings into a coherent analytical framework and by identifying critical research gaps and policy implications for regulators and bank management.

Keywords: Bank fraud; Corporate governance; Fraud detection; Internal control; Banking stability.

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INTRODUCTION

Fraud has long been recognized as an inherent and systemic risk in conventional commercial banking. Unlike episodic operational failures, fraud in banks is deeply embedded in organizational structures, governance arrangements, incentive systems, and regulatory environments (Beasley et al., 2021; Ozili, 2021). Conventional commercial banks, as core financial intermediaries, manage large volumes of funds under conditions of high information asymmetry, making them particularly vulnerable to fraudulent behavior consistent with agency theory (Jensen & Meckling, 1976; Nguyen et al., 2022).

In the post-global financial crisis era, regulatory authorities have intensified efforts to strengthen prudential oversight, corporate governance, and risk management frameworks. Nevertheless, empirical evidence suggests that fraud-related losses remain substantial and persistent across both developed and emerging banking systems (Cumming et al., 2020; ACFE, 2022). High-profile cases of internal fraud, earnings manipulation, cyber-enabled fraud, and governance failures continue to surface, raising concerns about the effectiveness of existing control mechanisms.

The rapid digitalization of banking services has further transformed the fraud risk landscape. While digital platforms, fintech integration, and data-driven decision-making enhance operational efficiency, they also introduce new vulnerabilities related to cyber fraud, identity theft, insider misuse of information systems, and algorithmic manipulation (Khan et al., 2021; Chen et al., 2023). As a result, fraud is increasingly viewed not merely as a compliance or operational issue but as a multidimensional risk with direct implications for bank stability, depositor confidence, and systemic resilience.

Although the academic literature on bank fraud has expanded significantly, existing studies remain fragmented across disciplines and methodologies. Prior reviews often focus on specific fraud types or detection techniques and rarely integrate determinants, detection mechanisms, and impacts within a unified framework. Moreover, few studies systematically restrict their scope to high-quality Scopus Q1–Q2 journals while applying a transparent PRISMA-based methodology. This study addresses these gaps by providing a comprehensive SLR of recent high-impact literature on fraud in conventional commercial banks.

METHODOLOGY

This study follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines as revised by Page et al. (2021). The review protocol was designed to ensure transparency, replicability, and methodological rigor.

The literature search was conducted exclusively using the Scopus database, chosen for its comprehensive coverage of peer-reviewed journals and its journal ranking system. The search covered

the period from January 2019 to December 2024 and was limited to articles published in Scopus-indexed Q1 and Q2 journals.

A structured Boolean keyword strategy was employed, combining fraud-related terms with banking and governance constructs, including “bank fraud,” “financial fraud,” “commercial banks,” “corporate governance,” “internal control,” “audit,” “fraud detection,” “forensic accounting,” “data analytics,” and “machine learning.” Only English-language journal articles were considered.

Inclusion criteria required that studies focus explicitly on fraud in conventional commercial banks, either as a primary variable or a core analytical outcome. Studies focusing exclusively on Islamic banks, fintech firms, or non-bank financial institutions were excluded unless used strictly for comparative purposes. Conference papers, book chapters, and non-peer-reviewed outputs were also excluded.

The initial search yielded a large pool of articles. After removing duplicates, titles and abstracts were screened for relevance, followed by full-text assessment. The final sample comprised more than 100 articles, which were coded and synthesized thematically. Articles were classified into three overarching dimensions: determinants of fraud, fraud detection mechanisms, and impacts of fraud.

RESULTS AND DISCUSSION

1. Determinants of Fraud in Conventional Commercial Banks

The literature consistently identifies organizational and governance weaknesses as central determinants of fraud in banks. Empirical studies demonstrate that ineffective boards, low board independence, weak audit committees, and excessive managerial power significantly increase fraud risk (Beasley et al., 2021; García-Sánchez et al., 2020). CEO duality and concentrated ownership structures further exacerbate opportunities for fraudulent behavior, particularly in environments with limited external monitoring (Umar et al., 2020; Nguyen et al., 2022).

Internal control deficiencies constitute another critical determinant. Weak segregation of duties, inadequate monitoring systems, and ineffective compliance functions reduce the likelihood of timely fraud detection and increase the persistence of fraudulent activities (Drogalas et al., 2020; DeFond & Zhang, 2014).

Behavioral and ethical factors are also prominent in the literature. Studies grounded in behavioral economics and organizational ethics highlight the role of managerial opportunism, moral hazard, and unethical organizational cultures in fostering fraud (Kaptein, 2019; Near & Miceli, 2020). Performance-based compensation schemes emphasizing short-term profitability have been empirically linked to earnings manipulation and misconduct in banks (Bergstresser & Philippon, 2006; Ozili, 2021).

Regulatory and institutional environments further shape fraud risk. Banks operating in jurisdictions with weak legal enforcement, fragmented supervision, and regulatory capture exhibit significantly higher fraud exposure (Houston et al., 2019; Cumming et al., 2020). Delayed supervisory intervention and inconsistent enforcement undermine deterrence effects.

Technological transformation introduces an additional layer of risk. While digital banking enhances efficiency, insufficient cybersecurity governance and weak IT controls significantly increase vulnerability to cyber fraud and insider abuse (Khan et al., 2021; Alshater et al., 2022).

2. Fraud Detection Mechanisms

The literature emphasizes that robust internal control systems constitute the first line of defense against fraud. Banks with integrated enterprise risk management frameworks and continuous monitoring mechanisms experience lower fraud incidence and severity (Gordon et al., 2009; Drogalas et al., 2020).

Internal and external audits play complementary roles in fraud detection. Effective internal audit functions enhance early detection of irregularities, while high-quality external audits strengthen transparency and deterrence (Beasley et al., 2021; DeFond et al., 2020). However, audit effectiveness varies across institutional contexts, particularly in emerging markets.

Forensic accounting has gained prominence as a specialized tool for investigating complex fraud cases. Evidence from *Journal of Financial Crime* suggests that forensic techniques improve post-fraud investigation outcomes, although adoption remains uneven due to cost and expertise constraints (Rezaee et al., 2020; Okoye & Gbegi, 2013).

More recently, data analytics, artificial intelligence, and machine learning have emerged as powerful fraud detection tools. Studies published in *Decision Support Systems* and *International Review of Financial Analysis* demonstrate that machine learning models outperform traditional rule-based systems in detecting anomalous transactions (Kou et al., 2021; Chen et al., 2023). Nevertheless, challenges related to data quality, model interpretability, and ethical use persist.

3. Impacts of Fraud

Fraud has significant adverse effects on bank performance and stability. Empirical evidence indicates that fraud increases non-performing loans, reduces profitability, and weakens capital adequacy (Ozili, 2021; Nguyen et al., 2022). Beyond direct financial losses, fraud inflicts long-lasting reputational damage, eroding depositor trust and investor confidence (Gatzert & Schmit, 2016; Cumming et al., 2020).

At the systemic level, widespread fraud undermines financial stability by amplifying risk contagion and increasing the likelihood of banking crises. These effects underscore the broader macroeconomic relevance of bank fraud.

Discussion

This systematic literature review reveals that fraud in conventional commercial banks is not an isolated operational anomaly, but a **structural, behavioral, and institutional phenomenon** embedded within governance arrangements, incentive systems, and regulatory architectures. Across regions and methodologies, the reviewed studies converge on the finding that **weak governance structures and ethical failures** represent the most persistent antecedents of bank fraud. In particular, board ineffectiveness, limited independence of audit committees, excessive managerial discretion, and misaligned compensation schemes consistently emerge as key enablers of fraudulent behavior (Beasley et al., 2021; García-Sánchez et al., 2020; Nguyen et al., 2022).

However, important **cross-regional differences** are evident. In developed banking systems, fraud is more frequently associated with sophisticated earnings manipulation, regulatory arbitrage, and cyber-enabled misconduct, often occurring despite formal compliance with governance codes. In contrast, in emerging and developing economies, fraud is more strongly linked to weak legal enforcement, political interference, regulatory capture, and deficiencies in supervisory capacity (Houston et al., 2019; Cumming et al., 2020). These findings suggest that the **effectiveness of governance mechanisms is highly contingent on institutional quality**, supporting institutional theory as a complementary lens to agency theory.

The literature also highlights **mixed evidence regarding the effectiveness of technological solutions** for fraud detection. While studies employing machine learning and advanced analytics report superior detection accuracy compared to traditional rule-based systems (Kou et al., 2021; Chen et al., 2023), other studies caution that technological tools alone cannot compensate for weak ethical cultures, poor data governance, or managerial opportunism. This inconsistency underscores the need to view fraud detection technologies as **embedded components of broader governance and risk management systems**, rather than standalone solutions.

Another unresolved debate concerns the role of auditing. While high-quality internal and external audits are associated with reduced fraud risk in many contexts (DeFond et al., 2020; Drogalas et al., 2020), their deterrent effect appears weaker in environments characterized by concentrated ownership, weak investor protection, or limited auditor independence. These findings challenge the assumption of audit universality and point to the importance of contextualizing audit effectiveness within national regulatory and institutional settings.

Overall, the reviewed literature suggests that fraud risk in conventional commercial banks should be conceptualized as an **enterprise-wide risk** that interacts with credit risk, operational risk, reputational risk, and systemic risk. Treating fraud solely as a compliance issue underestimates its potential to destabilize banks and undermine financial system resilience.

5. Research Gaps and Future Research Directions

Despite the growing volume of high-quality research on bank fraud, this review identifies several **critical gaps** that warrant further scholarly attention, particularly at the doctoral level.

First, the literature is dominated by **cross-sectional empirical designs**, which limit insights into the dynamic evolution of fraud risk over time. Longitudinal studies examining how governance reforms, regulatory changes, or digital transformation alter fraud patterns remain scarce. Future research should employ panel data techniques, event studies, or quasi-natural experiments to capture the temporal dynamics of fraud in banking institutions.

Second, **cross-country comparative research** remains underdeveloped. While many studies focus on single-country contexts, few adopt harmonized fraud measures that enable robust international comparison. This gap is particularly salient given the globalized nature of banking and the increasing interconnectedness of financial systems. Comparative studies across legal traditions, supervisory regimes, and governance models would significantly enrich the literature.

Third, the role of **board-level competencies**, particularly digital literacy and risk expertise, remains largely unexplored. As fraud increasingly exploits digital infrastructures, future studies should examine whether boards with stronger technological competence are more effective in overseeing fraud risk and cybersecurity governance.

Fourth, although machine learning and artificial intelligence are widely promoted as transformative fraud detection tools, **causal evidence on their effectiveness** is limited. Most studies focus on predictive accuracy rather than organizational outcomes. Future research should investigate whether the adoption of advanced analytics actually reduces fraud losses, improves supervisory outcomes, or alters managerial behavior.

Finally, the interaction between **ethical leadership, organizational culture, and technological controls** remains insufficiently theorized. Integrative frameworks that combine behavioral ethics, governance theory, and information systems research offer promising avenues for advancing theoretical and empirical understanding.

CONCLUSION

This study provides a comprehensive Systematic Literature Review of more than 100 Scopus Q1–Q2 journal articles published between 2019 and 2024 on fraud in conventional commercial banks. By integrating evidence on the **determinants, detection mechanisms, and impacts of fraud**, the review advances scholarly understanding of fraud as a systemic risk with profound implications for bank performance, stability, and public trust.

The findings demonstrate that fraud in conventional banks is driven by a complex interaction of governance weaknesses, behavioral failures, regulatory gaps, and technological vulnerabilities. While internal controls, auditing, forensic accounting, and advanced analytics enhance fraud detection, their effectiveness is highly context-dependent. Importantly, fraud imposes significant financial, reputational, and systemic costs that extend beyond individual institutions.

By synthesizing fragmented literature into a coherent analytical framework, this review contributes to academic research, informs regulatory policy, and offers practical insights for bank governance. Future research that adopts longitudinal designs, comparative perspectives, and integrative theoretical frameworks will be essential for deepening understanding and strengthening fraud resilience in the global banking system.

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