The Role of Forensic Accounting in Detecting and Preventing Bank Frauds in India: Case Studies of YES Bank &PMC Bank

Dr.Shilpi Bhalla
Assistant Professor, Kaveri College of Arts, Science and Commerce-Pune

***Abstract*- The Indian banking sector has witnessed a series of financial frauds over the last decade. Due to failure of traditional statutory audits to detect early warning signals, the growing importance of forensic accounting as a specialized tool for fraud detection and investigation highlighted.**

This paper examines the role of forensic accounting in uncovering banking and financial frauds in India, with a specific focus on case studies of the YES Bank crisis, the Punjab and Maharashtra Cooperative (PMC) Bank scam.

Using secondary data from regulatory reports, forensic audit findings, and investigative documents, the study analyses fraud techniques such as fund diversion, fictitious accounts, and asset overvaluation. The findings reveal that forensic audits were instrumental in identifying hidden patterns of manipulation that got unnoticed in conventional audits.

The paper concludes by recommending the integration of forensic accounting into mainstream banking practices through mandatory forensic audits, adoption of AI-driven fraud detection tools, and enhanced training for auditors and bank officials. The study contributes to the growing literature on forensic accounting in emerging economies and underscores its necessity for strengthening corporate governance and financial stability in India.

***Index Terms*-Banking fraud in India, Corporate Governance, Forensic Audit, Fraud Detection Techniques**

I.INTRODUCTION

The banking sector forms the backbone of India's financial system and plays a pivotal role in driving economic growth and stability. It acts as an intermediary between savers and borrowers, mobilizing household savings into productive investments. Banks facilitate capital formation, support trade and industry through credit, and contribute to financial inclusion by extending services to rural and under banked areas. In India, where agriculture, small businesses, and the services sector employ a large portion of the population, banking provides essential credit and risk management tools. Public sector banks, private banks, and cooperative banks together ensure liquidity flow, promote entrepreneurship, and help implement government policies such as Jan Dhan Yojana, Mudra loans, and priority sector lending. Furthermore, the banking sector safeguards financial stability by regulating monetary supply under the Reserve Bank of India (RBI) and supporting payment systems, digital transactions, and technological innovations like UPI. Its performance has a direct impact on GDP growth, employment generation, and investor confidence, making it a key pillar of India's economy.

In recent years, India's banking and financial sector has faced severe stress due to the escalating problem of Non-Performing Assets (NPAs), large-scale loan defaults, and corporate frauds. According to RBI and various industry reports, gross NPAs of scheduled commercial banks peaked at over 11% in 2018, one of the highest among major economies. High-profile corporate borrowers defaulted on large loans, often due to wilful mismanagement, diversion of funds, or collusion with bank officials. The growing list of banking frauds—ranging from irregular loan sanctions, manipulation of financial statements, and related-party transactions to outright fund siphoning—has weakened public confidence in financial institutions. These incidents highlight systemic weaknesses in credit appraisal, monitoring, and governance. Traditional auditing and internal control mechanisms have often proven inadequate in detecting sophisticated financial frauds.

Forensic accounting goes beyond conventional accounting by applying investigative, analytical, and legal expertise to uncover hidden financial

irregularities. It helps trace fund flows, identify shell companies, detect falsified documents, and expose manipulation in financial reporting. Digital forensic tools allow auditors to analyse large datasets, track suspicious transactions, and uncover fraud patterns. Forensic accountants assist regulators, enforcement agencies, and banks in collecting evidence that stands scrutiny in courts of law. Importantly, forensic accounting strengthens deterrence, as the presence of specialized investigation mechanisms discourages potential fraudsters. In the context of India's rising NPAs and loan scams, forensic accounting has become indispensable not only for post-fraud investigations but also for proactive fraud risk management.

II.OVERVIEW OF KEY INDIAN BANKING FRAUDS

YES Bank Crisis (2020)

YES Bank, once celebrated as a high-growth private sector bank, collapsed due to excessive exposure to risky borrowers, poor governance, and fraudulent loan practices. Forensic audits revealed evergreening of loans, related-party transactions, and misreporting of asset quality, leading to a ₹10,000+ crore bailout supported by RBI and SBI.

Punjab & Maharashtra Cooperative (PMC) Bank Fraud (2019)

PMC Bank collapsed after it was found to have concealed its exposure of over ₹6,000 crore to the HDIL group. Investigations revealed that bank officials created thousands of fictitious accounts to hide bad loans and manipulated financial reporting. A forensic audit later confirmed fund diversion and collusion between management and borrowers.

III.RESEARCH PROBLEM

Despite the presence of multiple regulatory frameworks and oversight mechanisms in India, incidents of banking and financial sector frauds have continued to rise over the past decade. The Reserve Bank of India (RBI) has introduced prudential norms, the Prompt Corrective Action (PCA) framework, and periodic supervisory reviews to monitor banks' financial health. Similarly, the Securities and Exchange Board of India (SEBI) has implemented corporate governance norms and disclosure requirements to enhance transparency. Yet, high-profile frauds such as the YES Bank crisis, PMC Bank collapse, and large corporate loan defaults (e.g., Kingfisher Airlines, Nirav Modi-PNB scam) highlight persistent vulnerabilities.

One of the critical gaps lies in the limitations of statutory audits and traditional internal control systems. These mechanisms primarily focus on compliance, accuracy of financial statements, and adherence to accounting standards. However, sophisticated fraud schemes often involve management override, collusion, fictitious documentation, and concealment of transactions, which routine audits are ill-equipped to detect. For instance, in the case of PMC Bank, auditors failed to identify the large, concealed exposure to HDIL because it was deliberately hidden through fictitious accounts.

This raises a fundamental research question: Why do frauds continue to thrive despite the existence of strict regulations and audit mechanisms? The answer lies in the absence of specialized investigative approaches within the traditional audit framework. Statutory audits are retrospective and compliance-driven, whereas fraud detection requires proactive, investigative, and forensic-oriented techniques.

Here emerges the role of forensic accounting as a potential solution to bridge this gap. Forensic accounting employs investigative skills, data analytics, transaction trail mapping, and legal expertise to uncover fraud patterns, identify fund diversion, and provide evidence admissible in courts of law. By going beyond surface-level compliance checks, forensic accounting can detect early warning signs, expose irregularities, and strengthen fraud risk management. Addressing this gap is critical not only for restoring public trust in banks but also for safeguarding financial stability in India's economy.

IV.OBJECTIVES OF THE STUDY

The present study aims to explore the growing significance of forensic accounting in India's banking and financial sector, particularly in the context of rising frauds and loan defaults. Given the persistent limitations of statutory audits and regulatory frameworks in detecting sophisticated frauds, this research intends to highlight how forensic accounting can serve as a robust tool for early fraud detection, investigation, and risk management. The specific objectives are outlined below:

1. To examine the role of forensic accounting in uncovering banking and financial frauds in India.

2. To analyse case studies of YES Bank, PMC Bank, and large loan default scams.
3. To identify red flags and forensic techniques useful in fraud detection.
4. To recommend strategies for strengthening fraud risk management through forensic accounting.

V.LITERATURE REVIEW

Forensic accounting has evolved as a specialized discipline at the intersection of accounting, law, and investigative techniques. Globally, the concept gained prominence after high-profile corporate scandals such as Enron (2001), WorldCom (2002), and the global financial crisis of 2008, where traditional auditing practices failed to detect manipulations in financial reporting. In response, countries like the U.S. enacted the Sarbanes–Oxley Act (2002) and strengthened the role of forensic audits in fraud detection.
In India, forensic accounting started gaining recognition after the Satyam Computers scandal (2009), which exposed significant gaps in statutory auditing. The Institute of Chartered Accountants of India (ICAI) has since introduced training modules and certifications in forensic accounting, reflecting its growing importance. Moreover, agencies like the Serious Fraud Investigation Office (SFIO), Enforcement Directorate (ED), and Central Bureau of Investigation (CBI) increasingly rely on forensic audit reports for legal proceedings. However, literature suggests that despite growing recognition, forensic accounting in India remains underutilized compared to global practices.

Banking Fraud Statistics in India (RBI Reports, 2020–2025)
Recent RBI reports and financial stability reviews reveal a worrying trend of rising frauds in the Indian banking sector, particularly in public sector banks.

According to RBI data:

- In FY 2019–20, frauds worth over ₹1.85 lakh crore were reported, with the majority in loan and credit operations.
- The RBI Annual Report (2021) highlighted that large-value frauds (above ₹100 crore) constituted nearly 90% of the total fraud value.
- Despite regulatory measures, FY 2022–23 still reported over 9,000 fraud cases, with loan-related frauds dominating.
- Although the gross NPAs of banks have declined marginally post-2022 due to recovery efforts, the problem of willful defaults and fund diversion continues to threaten banking stability.

These statistics demonstrate that fraud is not an isolated phenomenon but a systemic issue, necessitating advanced investigative tools like forensic accounting.

Prior Case Studies on Indian Bank Scams
Several high-profile Indian financial scandals provide useful insights into the role of forensic accounting:

- Satyam Computers (2009): Considered "India's Enron," this case revealed massive financial misreporting and highlighted the need for forensic audits beyond statutory reviews.
- Nirav Modi–PNB Scam (2018): Fraudulent issuance of Letters of Undertaking (LoUs) worth over ₹11,000 crore went undetected for years. Forensic auditors traced fund diversions and shell entities across international jurisdictions.
- YES Bank Crisis (2020): Misreporting of asset quality, round-tripping of loans, and weak credit risk practices were exposed by forensic investigations.
- PMC Bank Fraud (2019): Concealment of exposure to HDIL through fictitious accounts highlighted collusion between management and borrowers, only revealed by forensic analysis.

These case studies establish a recurring theme: statutory audits failed to identify fraud signals, but forensic investigations successfully unearthed fraudulent practices.

VI.RESEARCH METHODOLOGY

This study adopts a qualitative research approach through case study analysis. The paper focuses on two representative cases—YES Bank crisis, PMC Bank fraud. These cases were selected because they represent different types of banking fraud: private sector mismanagement, cooperative bank collusion.

Data Sources
The analysis relies on secondary data, including regulatory reports – RBI annual reports, inspection findings, and SEBI orders. Investigative documents – charge sheets and reports by CBI, Enforcement Directorate (ED), and Serious Fraud Investigation

Office (SFIO). Forensic audit reports (where publicly available). Academic literature, books, newspapers, and financial journals for contextual understanding.

Analytical Framework

The study applies: Fraud Triangle Theory (Cressey, 1953): Pressure, Opportunity, and Rationalization as drivers of fraud.

Forensic Accounting Tools: Ratio analysis, Benford's Law (to identify statistical anomalies in numbers), data mining, digital forensic techniques, and transaction trail mapping.

This combined framework helps evaluate why fraud occurred, how it was concealed, and how forensic accounting exposed it.

Case Study: YES Bank Crisis (2020)

YES Bank, once considered one of India's fastest-growing private sector banks, came under severe stress due to its aggressive lending strategy, especially to high-risk corporates in sectors such as real estate, infrastructure, and NBFCs. Between 2015–2019, the bank reported strong growth in its loan book, but this was largely due to exposure to already stressed borrowers. By early 2020, YES Bank faced a liquidity crunch and a rapid deterioration of asset quality, leading RBI to intervene and impose a moratorium.

RBI's Forensic Audit

RBI commissioned a forensic audit to probe the bank's loan books and governance practices. The audit revealed:

Overexposure to Stressed Assets – YES Bank had sanctioned large loans to corporates that were already financially distressed (e.g., DHFL, IL&FS, Reliance Group entities, Essel Group).

Evergreening of Loans – The bank frequently rolled over loans or extended fresh credit to defaulting companies to avoid classifying them as NPAs.

Fund Diversion – Borrowers were found to have diverted loans to shell companies or for purposes other than those stated.

Weak Risk Management – Internal monitoring systems failed to flag early warning signals.

Questionable Related-Party Transactions – Evidence of favoritism and connected lending.

These findings pointed to systemic weaknesses in credit appraisal and governance.

SEBI Investigation

The Securities and Exchange Board of India (SEBI) conducted a parallel investigation to examine corporate governance lapses and insider activities. Its findings included:

Insider Collusion-Top executives were alleged to have colluded with corporate borrowers, approving loans despite poor financial health and inadequate security.

Manipulation of Financial Statements-The bank allegedly under-reported NPAs and misclassified accounts to present a healthier balance sheet.

Governance Failures-Weak oversight by the board of directors, insufficient independence of risk and audit committees.

Misrepresentation to Investors-The bank raised capital through debt instruments and equity issuance without fully disclosing its true financial risks.

Actions& Impact

Actions: In March 2020, RBI imposed a 30-day moratorium, capped withdrawals at ₹50,000 per depositor, and superseded the board. Rescue Plan: SBI, along with other Indian banks, infused capital under an RBI-led reconstruction scheme. Enforcement: Investigations by the Enforcement Directorate (ED) later revealed quid pro quo arrangements, including kickbacks to YES Bank's then-CEO, Rana Kapoor, for extending loans to troubled borrowers.

Impact: Severe erosion of investor wealth, panic among depositors, and loss of confidence in private sector banking governance.

VII.FORENSIC ACCOUNTING SIGNIFICANCE

The YES Bank crisis highlights how traditional audits failed to detect the evergreening of loans and diversion of funds, while forensic audits exposed hidden layers of fraud. It demonstrates importance of transaction trail mapping to uncover round-tripping and fund diversion. Use of forensic analytics to detect abnormal loan growth in stressed sectors. The role of regulatory forensic audits in holding bank executives accountable.

Case Study: Punjab and Maharashtra Cooperative (PMC) Bank Scam (2019)

The Punjab and Maharashtra Cooperative (PMC) Bank fraud, one of India's largest urban cooperative bank scams, came to light in September 2019. The bank had been operating smoothly for years, reporting sound financial health. However, an

internal whistle blower and subsequent RBI inspection uncovered a massive fraud amounting to ₹6,500 crore, largely linked to the bankrupt real estate company Housing Development and Infrastructure Ltd. (HDIL).For over a decade, PMC Bank had concealed its true financial position by manipulating records and falsifying data in the core banking system to hide its huge exposure to HDIL.

RBI's Forensic Audit

After the fraud surfaced, the Reserve Bank of India ordered a forensic audit to assess the full extent and modus operandi of the scam. The forensic audit revealed:

Concealment of NPAs (Non-Performing Assets)-Over 70% of the bank's loan book was linked to HDIL and its group entities, yet these loans were shown as performing assets.

Manipulation of Core Banking Software (CBS) -The bank's IT systems were tampered with to exclude HDIL-linked accounts from RBI's monitoring reports. Fake customer accounts were created to distribute and hide exposure.

Creation of Dummy Accounts-Around 21,000 fictitious accounts were generated to camouflage bad loans and disguise HDIL exposure as small, diversified loans.

Internal Collusion-Senior officials, including the Managing Director and top executives, were found to have colluded with HDIL promoters.

Lack of Oversight-The Board of Directors and auditors failed to exercise due diligence or detect irregularities for years.

Modus Operandi of the Fraud

Selective Reporting: The bank submitted falsified data to RBI and statutory auditors by excluding HDIL accounts from the core banking system during inspections.

Continuous Rollovers: Loans to HDIL were renewed repeatedly, and fresh funds were extended despite the company being declared insolvent by other lenders.

Diversion of Depositor Funds: Deposits collected from customers were siphoned off to service HDIL's debt and keep the illusion of profitability alive.

Actions & Impact

Actions: RBI imposed restrictions under Section 35A of the Banking Regulation Act. Capped withdrawal limits to ₹1,000 per depositor (later increased in phases). Appointed an Administrator to take over management. BI revised its supervisory framework for cooperative banks, introducing tighter audit scrutiny and mandatory IT system reviews.

Impact: Thousands of depositors lost access to their life savings for months. Some cases of reported deaths due to distress were documented. The incident severely damaged faith in cooperative banking institutions.

Forensic Accounting Significance

The PMC Bank case underscores the indispensable role of forensic accounting in uncovering deeply embedded frauds that bypass regular audits. Detection through Digital Forensics by aanalysis of the CBS logs revealed unauthorized software edits and user manipulation. Transaction Mapping traced fund flows from deposit accounts to HDIL-related entities. Pattern Analysis identified abnormal loan concentration and repetitive rollovers. Forensic audit reports became a key legal document in prosecution under the Prevention of Money Laundering Act (PMLA).

VIII.FINDINGS OF THE STUDY

The study of the YES Bank and PMC Bank frauds reveals deep-rooted governance, audit, and ethical failures within India's banking framework. Despite being from different segments, a private sector bank and a cooperative bank, both cases share structural weaknesses that facilitated long-term fraud.

Findings

Systemic Governance Failures: Both banks suffered from weak oversight by their Boards of Directors. In YES Bank, aggressive risk-taking and lack of independent monitoring allowed overexposure to risky corporates. In PMC Bank, the board and senior management colluded to hide the true financial position, showing a complete breakdown of fiduciary responsibility.

Ineffectiveness of Traditional Audits: Routine statutory and concurrent audits failed to detect early warning signs. Auditors relied on management-provided data without independent verification. In YES Bank, red flags such as loan evergreening and fund diversion went unnoticed. In PMC Bank, manipulation of core banking software concealed massive NPAs from auditors and regulators.

Evidence of Insider Collusion and Ethical Breach: Senior executives were directly involved in fraudulent activities. YES Bank's top management was accused of receiving kickbacks for extending

loans to troubled borrowers. Bank's executives maintained fraudulent accounts for HDIL, showing deliberate concealment and collusion.

Technological Exploitation and Data Manipulation: The PMC Bank case demonstrates how fraudsters exploited digital systems by altering back-end codes and creating fake accounts. YES Bank's digital loan monitoring systems lacked forensic verification tools to trace fund diversion.

Fund Diversion and Loan Evergreening: Both banks engaged in practices such as round-tripping of funds, related-party lending, and restructuring of defaulting loans to conceal true NPA levels.

Delayed Regulatory Action: Despite existing frameworks by RBI and SEBI, frauds were detected only after severe liquidity crises. The reactive approach of regulators underscores the absence of a real-time forensic monitoring mechanism.

Forensic Audits as Turning Points: Forensic investigations, ordered post-crisis, exposed the hidden layers of deception. These audits used tools like Benford's Law, ratio analysis, data mining, and transaction trail mapping to reveal fund diversion, shell company networks, and digital manipulation. Forensic audit reports became critical evidence in RBI, ED, and SEBI investigations, validating their indispensable role in fraud detection.

Erosion of Public Confidence: Both cases triggered panic among depositors and investors, eroding trust in the financial system. The impact was especially severe in PMC Bank, where thousands of depositors lost access to their life savings for months.

IX.RECOMMENDATIONS

Based on these findings, the study presents key policy-level and institutional recommendations to strengthen fraud risk management in India's banking system through forensic accounting integration.

Policy-Level Recommendations

Mandatory Forensic Audits for High-Value Exposures.RBI should mandate forensic audits for all large corporate loans (above ₹500 crore) and all NPA accounts. These audits must be conducted periodically, not only after defaults occur.

Integration of Forensic Analytics and Artificial Intelligence

Banks should deploy AI-driven anomaly detection, predictive modelling, and network analytics to flag suspicious transactions and borrower linkages. Continuous monitoring systems should automatically detect patterns like fund diversion, loan rollovers, or circular lending.

Creation of a National Forensic Data Repository

Establish a centralized forensic database under RBI to store fraud patterns, red-flag indicators, and past forensic audit findings. This can serve as a reference for auditors and investigators across institutions

Strengthening Whistleblower and Early Warning Mechanisms

Implement protected digital channels for employees and customers to report suspicious activity. Introduce incentive schemes to encourage early disclosure of fraudulent practices.

Reinforcement of Regulatory Coordination

Strengthen cooperation between RBI, SEBI, CBI, ED, and SFIO for timely data sharing and coordinated forensic investigations. Introduce a Joint Fraud Detection Taskforce for large-scale banking frauds.

Institutional and Operational Recommendations

Capacity Building in Forensic Accounting

Regular training programs for bank auditors, risk officers, and compliance staff in forensic accounting tools such as data mining, ratio analytics, Benford's Law, and digital forensics.

Enhanced IT and Data Security Audits

Especially for cooperative banks, periodic forensic IT audits should be mandatory to detect unauthorized data manipulation in core banking systems.

Board-Level Accountability and Ethical Oversight

Strengthen the role of independent directors with expertise in forensic or investigative finance. Audit committees must independently verify high-risk exposures and borrower relationships.

Red Flag and Early Alert System (EAS)

Introduce a real-time fraud alert system within banks that integrates loan disbursal data, repayment behaviour, and transaction monitoring.

Transparency and Public Disclosure

Banks must publicly disclose significant forensic audit findings in their annual governance reports to enhance accountability.

Strengthening Cooperative Banking Supervision
RBI should directly supervise the top 100 cooperative banks, integrating forensic auditing, digital oversight, and system-level validation.

Strategic Implications
For Regulators: Adoption of forensic accounting strengthens regulatory surveillance and enables proactive fraud prevention rather than reactive intervention.

For Banks: Embedding forensic tools within internal audit systems enhances detection capability, risk governance, and stakeholder confidence.

For Policymakers and Researchers: Encourages further academic study and evidence-based policy making to integrate forensic accounting into India's financial regulatory framework.

X.CONCLUSION

The analysis of YES Bank and PMC Bank illustrates that banking frauds in India are not merely accounting irregularities but systemic governance failures. While traditional audits verify compliance, forensic accounting investigates intent, concealment, and manipulation — thereby acting as the most potent instrument for fraud prevention. Integrating forensic accounting across the financial ecosystem will significantly improve transparency, accountability, and long-term financial stability of India's banking sector.

REFERENCES

Books & Academic Sources
[1] Bologna, J. G., & Lindquist, R. J. (1995). *Fraud Auditing and Forensic Accounting*. John Wiley & Sons.
[2] Crumbley, D. L., Heitger, L. E., & Smith, G. S. (2017). *Forensic and Investigative Accounting* (8th ed.). CCH Group,
[3] Golden, T., Skalak, S., & Clayton, M. (2011). *A Guide to Forensic Accounting Investigation* (2nd ed.). John Wiley & Sons.
[4] Rezaee, Z., & Riley, R. (2009). *Financial Statement Fraud: Prevention and Detection*. John Wiley & Sons.

Research Papers
[1] Joshi, S. (2020). Forensic Accounting in the Indian Banking Sector: Emerging Trends and Challenges. *International Journal of Accounting Research*, 8(2), 1–9.
[2] Gupta, P., & Mehta, A. (2021). Role of Forensic Accounting in Early Fraud Detection in Indian Banks. *Journal of Financial Crime Studies*, 14(1), 33–48.
[3] Sharma, R., & Kulkarni, P. (2022). Revisiting Banking Governance Failures: Evidence from YES Bank Crisis. *Indian Journal of Corporate Governance*, 25(3), 44–58.

Reports (RBI, SEBI, Agencies)
[1] Reserve Bank of India. (2021). *Report on Trend and Progress of Banking in India*. RBI Publications. (Retrieved from https://www.rbi.org.in)
[2] Reserve Bank of India. (2023). *Handbook of Statistics on Indian Banking*. RBI Publications.
[3] Securities and Exchange Board of India (SEBI). (2020). *Investigation Report on YES Bank Ltd*. SEBI.
[4] Economic Offences Wing (EOW), Mumbai Police. (2019). *Charge Sheet: PMC Bank–HDIL Fraud Case*. Government of Maharashtra.
[5] Enforcement Directorate (ED). (2020). *Prosecution Complaint: YES Bank–DHFL Money Laundering Case*. Directorate of Enforcement, Ministry of Finance, Government of India.

News / Business Sources
[1] The Economic Times. (2020). "Rana Kapoor Arrested in YES Bank Fraud Case." Retrieved from https://economictimes.indiatimes.com
[2] Business Standard. (2019). "PMC Bank Crisis Explained: How HDIL Loans Were Hidden." Retrieved from https://www.business-standard.com
[3] The Hindu BusinessLine. (2021). "Forensic Audits Rise in Banking Frauds; RBI Tightens Monitoring." Retrieved from https://www.thehindubusinessline.com