



The Anatomy of Banking Frauds: A Critical Insight into India's Public Sector Banks Since Liberalisation

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Abstract: This research paper undertakes an exhaustive disquisition of the multifarious issue of banking fraud in India's public sector banks since the Economic Reforms of the early 1990s to the present era. It elucidates high-profile cases such as the Vijay Mallya, Nirav Modi, Yes Bank Scandal, and DHFL Fraud, illuminating systemic deficiencies including regulatory lacunae, inadequate corporate governance, technological vulnerabilities, and the complicity of bank employees with malefactors. The study meticulously investigates the economic repercussions, notably substantial pecuniary losses, a diminution of public trust, augmented regulatory vigilance, and escalated compliance expenditures. Additionally, it examines the socio-economic ramifications on stakeholders, encompassing depositors, employees, and policymakers. The analysis propounds a series of well-founded recommendations for the establishment of rigorous regulatory architectures, heightened accountability, cutting edge fraud detection technologies, and comprehensive training regimens for banking personnel. The paper endeavours to discern the various types and frequencies of banking fraud, evaluate their impact on the banking sector and broader economy, unearth root causes, and propose effective stratagems to ameliorate fraud risks and fortify the resilience of public sector banks. Utilizing data from the RBI, the study accentuates the indispensability of enhanced regulatory oversight, superior internal controls, and pioneering technological solutions to safeguard the Indian banking ecosystem. The findings underscore the necessity for continuous surveillance, proactive risk management, and the assimilation of best practices across the banking sector to foster a secure and trustworthy financial environment.

Keywords: Banking Frauds, Financial Malfeasance, Public Trust Erosion, Reserve Bank of India

I. INTRODUCTION

Banking is essential for any economy as it provides services for payment, credit generation, and financial intermediation [1]. Banks are financial institutions that support the economy by supplying liquidity, ensuring safety for savers, and fostering the development of the agriculture sector through credit facilities [2]. However, the banking industry faces various risks and uncertainties that can affect its performance and stability.

Banking in India has a rich history, evolving from a traditional system to a robust financial sector [3]. Public sector banks (PSBs) are central to this landscape, commanding a significant share of the banking industry. These banks drive financial inclusion, support economic development, and implement government policies. Despite their critical roles, PSBs have been plagued by numerous fraud cases, significantly impacting the economy.

Banking frauds severely threaten the stability and credibility of the financial sector [4]. In India, public sector banks have witnessed various frauds, from small-scale forgeries to large-scale scams involving high-ranking officials and business conglomerates. These frauds result in significant financial losses, eroded public confidence, enhanced regulatory scrutiny, and increased compliance costs [5]. The RBI [6] defines fraud as “a deliberate act of omission or commission by any person, carried out in the course of a banking transaction or in the books of accounts maintained manually or under a computer system in banks, resulting in a wrongful gain to any person for a temporary period or otherwise, with or without any monetary loss to the bank”. These fraudulent activities undermine public trust and can lead to substantial financial losses. This research critically analyses the prevalence and nature of banking fraud within India's public sector banks.

II. LITERATURE SURVEY

Khanna and Arora (2009) examined the issue of fraud in the banking sector, identifying key causes and prevention strategies. Their study, based on primary data from 253 employees across 36 Indian banks, revealed varying adherence



to central bank guidelines by bank staff. The research emphasized the importance of employee training programs in preventing fraud, highlighting factors such as inadequate training, work pressure, market competition, and low compliance with Reserve Bank of India (RBI) regulations. The authors suggested strict measures to ensure compliance and strengthen anti-fraud mechanisms in banks [7].

The Ernst & Young Report (2012) provided a comprehensive analysis of the financial impact of fraud on the Indian economy, emphasizing the banking sector as a significant victim. The report indicated that various types of fraud resulted in a substantial loss of ₹6,600 crore to the Indian economy during the fiscal year 2011-12, with insider-enabled frauds comprising 61% of the cases. This underscores the urgent need for robust internal controls and vigilant oversight within financial institutions to mitigate insider fraud risk and protect the banking sector's integrity [8].

Tunji (2013) evaluated the influence of fraud on the performance of 24 Nigerian banks from 2001 to 2011 using Pearson correlation and multiple regression analysis. Their research indicated that Nigerian banks must improve their internal control systems, and regulatory agencies should strengthen their supervisory functions to reduce fraud [9].

Sharma and Sharma (2018) examined various fraud types in the Indian banking sector, highlighting common frauds in banks, including savings accounts, cheques, DD, deposits, bills, loans, hypothecation etc.,. The research further explored the reasons for these frauds across different banking sectors. Factors such as forged documentation, wrongful credit sanctioning, and identity theft were identified as primary causes in retail banking. In corporate banking, the main reasons included the overvaluation of securities, fund siphoning, and high-pressure job targets. The study also proposed preventive techniques for these frauds based on secondary data from sources such as the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) [10].

Kundu and Rao (2014) indicated that many banking frauds remain undisclosed due to concerns over reputation loss among banks. They identified several contributory factors, including employee ignorance, situational pressures, a predisposition toward fraudulent behavior, and delays in detecting and reporting fraud [11].

Murthy (2022) analysed trends in banking fraud within the Indian banking sector, revealing that many banks often compromised on Know Your Customer (KYC) norms due to staff inefficiency and inexperience. They also highlighted that innovations in the banking sector have introduced new challenges [12].

Bhasin (2016) presented data from a survey conducted in 2012-13, indicating that banks have yet to implement a zero-tolerance policy for fraud. The survey showed that several banks failed to comply with national banking regulations regarding operating passbook accounts, cheques, interbank and intra-bank accounts monitoring systems, and deposit accounts management. Additionally, the survey found that junior bankers were less knowledgeable about fraud and central bank directives than their middle and senior management counterparts [13].

Vousinas (2016) investigated the pivotal protagonist of internal audits in managing bank fraud. By integrating existing theoretical and empirical studies, he proposed a conceptual framework encompassing four dimensions: Fraud, Risk, Internal Audit, and Loss. The study tinted various internal audit techniques and their implementation at every stage within the banking sector, along with anti-fraud methods and data mining processes related to banking fraud. Vousinas concluded that internal audits are crucial for reducing the number of frauds in the banking sector and serve as an effective tool for enhanced management in any industry [14].

Singh et al. (2016) analyzed the escalating debts and associated frauds in the Indian banking sector, revealing a concerning scenario. Their detailed examination highlighted significant financial misconduct by key players and a substantial rise in NPAs within Indian commercial banks over recent decades. The study identified quantitative and qualitative disparities between NPAs in public and private sector banks, noting that public sector banks are more involved in fraud cases than private sector banks. Credit-related frauds constituted the majority of fraudulent activities in the banking industry, attributed primarily to managerial negligence and employee involvement, often in collusion with third parties or independently. This led to weak internal controls, particularly in public-sector banks [15].

Bello *et al.*, (2024) investigated the role of behavior analysis in fraud prevention, emphasizing the importance of developing dynamic models that can adapt to changing user behaviors to improve fraud detection systems' effectiveness.

III. BANKING FRAUDS VS. FINANCIAL FRAUDS

Banking frauds involve illicit activities targeting banking institutions or their customers to unlawfully acquire monetary resources or assets. Examples include fraudulent loans, wire fraud, document forgery, identity theft, demand draft fraud,



and phishing, which manipulate banking systems or processes [17]. In contrast, financial frauds cover a broader spectrum of deceptive activities across various sectors, such as banking, insurance, investment, and personal finance. Financial fraud includes Ponzi schemes, pyramid schemes, embezzlement, tax fraud, credit card fraud, insurance fraud, and phishing) [18]. Thus, while banking frauds fall within the category of financial frauds, they uniquely focus on the banking sector, whereas financial frauds span diverse financial domains.

IV. UNMASKING BANK FRAUDS: KEY ELEMENTS AND PREVENTION STRATEGIES

Bank frauds represent a significant threat to the Indian financial sector, impacting both individual customers and large institutions through increasingly sophisticated methods. These fraudulent activities not only lead to financial losses but also undermine trust in the financial system. Bank fraud encompasses a wide range of illegal activities aimed at obtaining money, assets, or personal information through deception or other means that violate trust. Essentially, it involves manipulating banking practices or systems to gain unauthorized access to funds or other assets. There are several types of bank frauds prevalent in India.

One of the common types is identity theft, where criminals steal personal information like Aadhaar numbers, PAN details, or bank account information to impersonate victims and access their finances. This is often the first step in a series of fraud activities. Phishing is another prevalent method, involving deceptive communications that appear to be from reputable sources like banks, tricking individuals into revealing sensitive information such as passwords, security codes, or PINs. In card skimming fraud, devices are installed on ATMs or POS systems to capture card information during legitimate transactions, which is then used to create counterfeit cards. Check fraud involves altering or forging checks to unlawfully withdraw funds, such as counterfeiting checks, altering the payee or amount, and depositing checks with insufficient funds. Loan fraud occurs when individuals or entities obtain loans through false information or fraudulent means, such as using fake documents, impersonating others, or falsely reconstructing financial histories. Cyberattacks on online banking systems have also become more prevalent, with hackers exploiting vulnerabilities to gain unauthorized access through methods like malware, ransomware, and Distributed Denial of Service (DDoS) attacks.

The causes of bank frauds are multifaceted. The rapid adoption of digital banking technologies has provided fraudsters with new avenues to exploit vulnerabilities. As banks continue to digitize their operations, the potential attack surface for cybercriminals expands [19]. Some banks may have insufficient or outdated security measures in place, making them prime targets for fraud, including lack of robust encryption, weak authentication processes, and inadequate monitoring systems. Human error is a significant cause of fraud, as employees may accidentally divulge sensitive information, customers fall for phishing scams, or improper handling of financial data occurs [20]. Social engineering tactics, where fraudsters manipulate individuals into divulging confidential information by impersonating bank employees or authoritative figures, also contribute to the prevalence of bank frauds. Gaps in regulatory frameworks can create opportunities for fraudsters, as inconsistent implementation of regulations or lack of stringent oversight can be exploited. The complexity of modern banking systems makes it difficult to monitor and secure every aspect effectively, creating loopholes and gaps that fraudsters can manipulate. Additionally, economic factors play a role, as economic downturns often see a spike in fraudulent activities as individuals and organizations resort to fraudulent practices to secure financial stability [21].

Bank frauds in the Indian banking industry encompass various methods designed to deceive and defraud both individuals and institutions. Understanding the types and causes of these frauds is crucial for developing effective measures to mitigate risks. By promoting awareness, strengthening security measures, and ensuring stringent regulatory oversight, the financial community in India can work towards creating a safer banking environment for all.

V. A CRITICAL ANALYSIS OF SIGNIFICANT BANKING FRAUDS IN INDIA SINCE THE ECONOMIC REFORMS OF 1991

Banking fraud entails employing illicit methods to acquire funds, assets, or other properties from a financial institution. A criminal act termed "bank fraud" occurs when an individual acquires funds or assets from a bank or financial institution through deceitful methods [21]. Bank fraud differs from bank robbery in that the offender conceals the crime in the hopes that no one will discover it until after he has fled [22]. The phrase "bank fraud" refers to efforts by an individual to mislead bank depositors by impersonating a bank or other financial institution [23].

Since the liberalization of the economy in 1991, transformations have transpired in the Indian banking sector. Bank fraud is a deliberate and dishonest act by clients and other stakeholders within a financial institution to obtain an improper or criminal advantage [24]. This results in significant losses, a drop in the integrity of the economy, harm to one's reputation,



a reduction in the trust that those consumers have in one another, and damage to one's reputation [25]. The banking system should be set up such that no possibility of fraud might be taken advantage of, even if someone's motives are not entirely wrong [22].

The banking industry has issues regarding moral behavior, financial hardship, and corporate governance despite generally being well-regulated and overseen [23]. This has been exacerbated by a sharp increase in fraud, especially in the past 20 years, jeopardizing financial institutions' stability [24]. Banking fraud has proven to be an honest and immediate concern in today's environment of constant change, affecting specific institutions and the overall economy. The rising interconnection of global financial institutions and the pervasiveness of current technologies in banking operations have made fraudulent exploits easier to pull off [26]. These frauds are significant not only for the immediate financial loss they cause but also for the loss of confidence in financial institutions and public trust and potentially even the impact on national economies [27]. Bank fraud is a global problem that is neither unique nor localized—a national issue with more significant consequences [24].

Policymakers, researchers, and the public are concerned about banks' increasing non-performing loans (NPLs) and nonperforming assets (NPAs) [28]. This tendency threatens deposit safety, bank profitability, and national financial stability. Similarly, liquidity risk and loan recovery issues can weaken banks and make them more susceptible to bank runs [28].

The Indian banking industry has also witnessed numerous cases of banking fraud, which have damaged the reputation of many banks and made serious inroads into the confidence of the depositors who see banks and other financial institutions as a savior of their hard-earned income [22]. Banking frauds damage bank profits. When a substantial number of depositors remove their funds out of fear their bank may fail, banking crises occur, which have huge economic and fiscal resolution costs [29].

A. Harshad Mehta Scam (1992)

Harshad Mehta, a stockbroker, orchestrated one of the most notorious financial scandals in India during 1992. He exploited loopholes in the stock market and national banking systems, causing a massive securities scam involving fraudulent transactions and diverting bank funds to inflate stock prices artificially. As noted by Dalal and Thakur, "Mehta's manipulation of the Bombay Stock Exchange (BSE) and his involvement with numerous banks led to a severe market collapse, raising questions about the regulatory framework's effectiveness" [30]. This scam exposed the vulnerability of the Indian stock market to manipulation and led to significant reforms in stock market regulations and trading practices [31].

B. Bank of Baroda (BoB) Black Money Scam (2015)

In 2015, the Bank of Baroda became embroiled in a significant foreign exchange scandal involving the illegal transfer of over ₹6,000 crores (\$810 million) to Hong Kong. This scam involved remittances camouflaged as payments for non-existent imports such as cashew, pulses, and rice. As highlighted by Singh, the funds were "remitted from Bank of Baroda to Hong Kong, camouflaged as payments for non-existent imports" [32]. This case raised serious concerns about regulatory oversight and the mechanisms in place to detect such large-scale fraudulent activities. The scam led to investigations by the CBI and the Enforcement Directorate (ED), highlighting the need for stronger anti-money laundering measures and enhanced scrutiny of foreign exchange transactions [33].

C. PNB Fraud (Nirav Modi and Mehul Choksi) (2018)

In 2018, diamond merchants Nirav Modi and Mehul Choksi orchestrated a massive fraud involving Punjab National Bank (PNB), amounting to nearly \$2 billion. By exploiting the banking system's weaknesses, they secured unauthorized Letters of Undertaking (LoUs) from PNB, which enabled them to obtain vast amounts of money from overseas banks. This elaborate scheme, concealed for years, came to light when the bank failed to receive repayments. As detailed in a comprehensive report, "Nirav Modi and Mehul Choksi, along with some PNB officials, manipulated the SWIFT interbank messaging system to carry out these fraudulent transactions" [34]. This scam exposed critical vulnerabilities in India's banking oversight, leading to demands for stringent regulatory reforms. The PNB fraud triggered a comprehensive review of banking procedures, particularly concerning LoUs and SWIFT operations, and emphasized the need for enhanced due diligence and internal controls within banks [35].

D. Vijay Mallya Fraud Case (2016)

Vijay Mallya, a prominent Indian businessman, is fighting extradition from the UK. Accused of fraud and money laundering in India, he owes an estimated ₹9,000 crore to 17 Indian banks. "Formerly referred to as the 'King of Good Times,' Vijay Mallya was chairman of Kingfisher Airlines, which shut down in 2012 due to financial issues" [36]. Mallya



is charged with defrauding Kingfisher Airlines from its loans, using the money for personal expenses, and failing to repay the loans. He is also charged with money laundering for allegedly moving about ₹9 billion (US\$110 million) overseas that was loaned to his airline. The Indian government has revoked Mallya's passport and initiated extradition from the UK. The case highlights the challenges of pursuing individuals accused of financial crimes across international borders [36]. The Mallya case also brought attention to the issue of willful defaulters and the need for stronger legal frameworks to recover dues from individuals who deliberately avoid loan repayments [37].

E. Kanishk Gold Bank Fraud

The Kanishk Gold Bank fraud was detected in 2018, involving Chennai jewelry manufacturer Kanishk Gold Pvt Ltd. State Bank of India (SBI) led a group of 14 banks accused of stealing around ₹824 crore. According to Chitra and Desikan [38], "SBI was the first to declare the account fraudulent to the RBI on November 11, 2017. By January, all other members had declared the account fraudulent to the regulator." This case highlighted the risks associated with lending to the gems and jewelry sector and the need for enhanced due diligence and monitoring of high-value loans [39].

F. Rotomac Pens Fraud (2018)

The Rotomac pen scandal is a significant case of financial fraud in India, underscoring the need for stricter corporate governance. Directors of Rotomac Global Pvt Ltd were accused of embezzling over ₹4,500 crore from a consortium of banks led by Bank of India. They obtained loans for export businesses but diverted the funds to offshore accounts without executing any export orders. The company allegedly used fake documents to secure loans and then defaulted, turning them into nonperforming assets. A.S. Sharma (2022) notes, "Allegations of financial crimes, criminal conspiracy, and cheating were brought against Rotomac Global and its directors by the Central Bureau of Investigation (CBI)." Legal proceedings are ongoing, involving several banks and highlighting the urgent need for robust financial [40]. The Rotomac case emphasized the importance of verifying export documentation and implementing stricter controls on foreign exchange transactions to prevent the diversion of funds [41].

G. PMC Bank Scandal (2019)

The PMC Bank scam, uncovered in 2019, revealed a massive fraud orchestrated by the bank's top management in collusion with Housing Development and Infrastructure Limited (HDIL). Under the leadership of Managing Director Joy Thomas, the bank extended 70% of its credit facilities to HDIL, using fictitious accounts and manipulated software to conceal nonperforming assets [42]. The fraud came to light during a routine audit, leading to thorough investigations by RBI and CBI, which uncovered years of deceit involving 21,049 bogus accounts [43]. In December 2024, Joy Thomas received a ten-year prison sentence for his role in the scam. The scam highlighted severe deficiencies in PMC Bank's internal controls, prompting regulatory authorities to tighten oversight and enhance financial industry governance standards [44]. The PMC Bank scam led to significant regulatory changes, including stricter norms for corporate governance in cooperative banks and enhanced monitoring of related-party transactions [45].

H. ABG Shipyard Scam (2019)

The ABG Shipyard fraud, one of India's largest financial scandals, involved ₹22,892 crores (\$3.1 billion) and highlighted vulnerabilities within the banking sector. From 2012 to 2017, ABG Shipyard misappropriated funds, diverting loans from a consortium of 28 banks, led by SBI, to overseas subsidiaries and unrelated business interests. The fraud was uncovered in a forensic audit by Ernst and Young in 2019, leading to CBI and ED investigations, arrests, and the company's eventual liquidation by the National Company Law Tribunal (NCLT). This case underscores the need for enhanced regulatory oversight, transparent corporate governance, and robust internal controls to prevent such frauds in the future [46]. The ABG Shipyard scam emphasized the importance of early detection of financial distress in large borrowers and the need for timely intervention by lenders to mitigate losses [47].

I. DHFL Fraud (2019)

The 2019 DHFL fraud, one of India's most significant financial scandals, involved fraudulent activities by Dewan Housing Finance Corporation Limited (DHFL) and its key promoters. Between 2016 and 2019, DHFL extended over ₹34,000 crores (\$4.3 billion) in loans to shell companies and fake borrowers. As highlighted in one report, the Wadhawan brothers created "a web of 87 shell companies" to divert funds for personal and business use. This astonishing case exposed severe deficiencies in regulatory oversight and risk management within the Indian financial system [48]. The DHFL scam prompted a review of lending practices in the housing finance sector and led to stricter norms for loan disbursements and monitoring of end-use of funds [49].

J. HDIL-GRECO Corporation Scam (2019)

The 2019 HDIL-GRECO Corporation scam, linked to the infamous PMC Bank fraud, involved a series of fraudulent activities orchestrated by Housing Development and Infrastructure Limited (HDIL) and GRECO Corporation. As part of this scam, HDIL was reported to have diverted significant funds into fake and shell accounts to cover up non-performing



assets (NPAs) and misuse bank funds for personal gains. According to an investigation by the Enforcement Directorate (ED), "PMC Bank had created over 21,000 fictitious accounts to hide bad loans given to HDIL group companies" [50]. This massive fraud exposed critical vulnerabilities in India's regulatory and banking systems, prompting a call for enhanced oversight and proactive measures to prevent such malpractices in the future. The HDIL-GRECO scam further highlighted the need for stringent KYC (Know Your Customer) norms and enhanced scrutiny of related-party transactions to prevent the misuse of bank funds [51].

K. Yes Bank Scandal (2020)

The Yes Bank scandal in 2020 exposed major issues within one of India's largest private sector banks. Under the leadership of co-founder Rana Kapoor, the bank's financial position deteriorated due to excessive lending to high-risk borrowers and inadequate risk management. According to a report, Yes Bank's "financial position has undergone a steady decline over the last few years" due to its inability to raise capital and address potential loan losses [52]. This led to a massive ₹5,000 crore fraud involving suspicious transactions, ultimately resulting in the Reserve Bank of India (RBI) taking control of the bank's board. The case highlighted the urgent need for robust regulatory oversight and stringent risk management practices within the banking sector. The Yes Bank crisis prompted the RBI to introduce a new framework for prompt corrective action (PCA) for banks, aiming to address financial weaknesses in a timely manner and prevent systemic risks [53].

L. NSEL Scam (2020)

The NSEL scam in 2020, also known as the National Spot Exchange Limited scam, resulted in a substantial financial fraud involving ₹5,600 crores. This scheme orchestrated by NSEL's former Managing Director Anjani Sinha and others involved issuing fictitious trading contracts and creating fraudulent stocks. Key banking institutions affected included Indian Bank and State Bank of India, which provided significant loans to the exchange. According to an investigation, "a web of brokers" was utilized to mis-sell NSEL products, resulting in considerable investor losses [44]. This scandal highlighted critical lapses in regulatory oversight and called for stronger financial regulations and monitoring to prevent similar incidents in the future. The NSEL scam led to stricter regulations for commodity exchanges and emphasized the need for investor protection mechanisms in such markets [55].

M. SREI Equipment Finance Scam (2022)

The SREI Equipment Finance scam in 2022 involved fraudulent transactions totalling ₹13,110 crores. Key banks affected included Bank of Baroda, State Bank of India, and Punjab National Bank, among others. As reported, these banks extended substantial loans that were misappropriated under the company's erstwhile management, leading to significant financial losses [56]. This scam highlighted the risks associated with lending to the infrastructure sector and the need for enhanced due diligence and monitoring of large corporate borrowers.

VI. THE MENACE OF BANKING FRAUDS IN INDIA

The menace of banking frauds and their significant impact on the Indian banking industry has become increasingly apparent with the rise of digital transactions. In fiscal year 2020-21, the country reported an average of 229 banking frauds per day, totalling 83,638 incidences and involving a staggering ₹1.38 lakh crores. However, "only ₹1,031.31 crores" were recovered, reflecting a marginal increase from the previous fiscal year, when 84,540 scams amounting to ₹1.86 lakh crores were reported, and ₹16,197 crores were recovered. The Reserve Bank of India (RBI) noted that between June 1, 2014, and March 31, 2023, Indian banks lost ₹4.69 lakh crores due to frauds from around 65,017 reported incidences. In FY 2024, the RBI reported bank frauds amounting to over ₹13,930 crores, a significant decrease from more than ₹30,200 crores in 2023. This decreasing trend indicates a heightened vigilance from regulatory bodies and financial institutions, though the country continues to grapple with the severe challenges posed by banking frauds. The staggering magnitude of banking frauds has severely undermined the financial stability of Indian banks, resulting in significant monetary losses and eroding depositor and investor confidence. Regulatory bodies and financial institutions are now compelled to implement stringent oversight and enhanced risk management practices to curb these fraudulent activities.

VII. OVERVIEW OF THE BANKING FRAUD REGULATORY ENVIRONMENT IN INDIA

India's regulatory landscape for addressing banking fraud is primarily shaped by various circulars and guidelines issued by the Reserve Bank of India (RBI). The RBI has implemented extensive measures to monitor and mitigate fraud, including mandatory reporting requirements, stipulations for internal control systems, and regular audits. However, despite these efforts, significant gaps persist within this regulatory framework.



One challenge is the inconsistent implementation of these guidelines across different banks, leading to varied responses to fraud incidents. This inconsistency can create vulnerabilities within the system and hinder effective fraud prevention. Additionally, current regulatory mechanisms may not adequately address the evolving nature of banking fraud, especially with the rise of sophisticated technologies and cyber threats. The rapid advancements in financial technologies often outpace the development of regulatory measures, leaving the system exposed to new and emerging fraud tactics.

To strengthen the regulatory framework, there is a need for more robust inter-agency cooperation and data-sharing mechanisms. Enhanced collaboration among regulatory bodies and financial institutions would improve the effectiveness of fraud detection and prevention. By bridging these regulatory gaps and promoting greater consistency and adaptability, the banking sector can bolster its resilience against fraud and safeguard the integrity of the financial system.

VIII. CHALLENGES IN BANKING OPERATIONAL RISK MANAGEMENT

Effectively managing operational risk, particularly in relation to fraud, is crucial for maintaining the stability and security of the banking sector. However, several challenges hinder the implementation of robust risk management practices:

A. Insufficient Risk Assessment Structures:

Many banks lack comprehensive frameworks for identifying and evaluating potential fraud risks. Existing procedures often fail to adapt to emerging fraud tactics, leaving institutions vulnerable to new threats [57].

B. Fragile Internal Controls:

Weak internal controls within banks can increase susceptibility to fraudulent activities. Inadequate segregation of duties and insufficient supervision create opportunities for fraud to occur undetected [58].

C. Underutilization of Advanced Technology:

Despite the availability of advanced technologies such as artificial intelligence and machine learning, many banks do not fully leverage these tools for fraud detection. Traditional systems often struggle to identify complex fraud patterns or abnormalities, hindering effective prevention efforts [59].

D. Inadequate Employee Training:

Employees often lack adequate training to identify and report potential fraud incidents. This deficiency can lead to poor detection rates and delayed responses to fraudulent activities [60].

E. Deficient Communication Channels:

The absence of effective channels for reporting suspicious activities can impede fraud detection and mitigation. Clear and accessible reporting mechanisms are essential for timely intervention [61].

F. Inconsistent Fraud Prevention Measures:

Variations in fraud prevention practices across different branches or departments within a bank can create inconsistencies in protection and increase overall fraud risk. A standardized approach is crucial for comprehensive risk management [62].

G. Regulatory Compliance Gaps:

Banks often face challenges in keeping pace with constantly evolving regulatory norms and guidelines. Failure to comply with these regulations can heighten operational risks and expose institutions to vulnerabilities [63].

H. Inefficient Fraud Monitoring Systems:

Many fraud monitoring systems lack the capability to monitor operations in *real time*. This limitation can result in delayed detection and response to fraud activities, potentially amplifying losses [64].

I. Inadequate Incident Response Planning:

Weak or outdated incident response plans can hinder the effective handling of fraud incidents. Comprehensive planning is crucial for minimizing the impact of fraud and ensuring a swift and coordinated response [65].

Addressing these challenges is vital for strengthening the resilience of the banking sector against fraud. By implementing robust risk assessment frameworks, enhancing internal controls, investing in advanced technologies, providing comprehensive employee training, establishing clear communication channels, standardizing fraud prevention measures, ensuring regulatory compliance, improving fraud monitoring systems, and developing effective incident response plans, banks can significantly enhance their ability to prevent, detect, and mitigate fraud.

**IX. CONCLUSION AND SUGGESTIONS**

This study has delved into the intricate landscape of banking fraud in India, focusing specifically on public sector banks. By examining a range of high-profile cases and analysing the underlying causes and contributing factors, this research has highlighted the urgent need for comprehensive reforms to mitigate the risks and safeguard the integrity of the Indian banking sector.

The findings underscore that the regulatory deficiencies, coupled with poor corporate governance and technological vulnerabilities, have created an environment conducive to fraudulent activities. To address these challenges, a multi-faceted approach is required, encompassing regulatory, technological, and organizational reforms.

Firstly, the implementation of robust regulatory frameworks is crucial. This includes strengthening existing regulations, ensuring consistent enforcement across all banking institutions, and proactively adapting to the evolving nature of banking fraud, particularly in the realm of digital technologies and cyber threats. Enhanced collaboration and data-sharing mechanisms between regulatory bodies and financial institutions are essential to improve the effectiveness of fraud detection and prevention [66].

Secondly, enhancing internal controls within banks is paramount. This involves strengthening risk assessment structures, ensuring adequate segregation of duties, and implementing rigorous supervision mechanisms. Investing in advanced technologies, such as artificial intelligence and machine learning, can significantly enhance fraud detection capabilities and enable a more proactive approach to risk management [67].

Thirdly, fostering a culture of accountability and transparency within banks is vital. This can be achieved by promoting ethical conduct, establishing clear communication channels for reporting suspicious activities, and implementing comprehensive employee training programs to raise awareness and equip staff with the knowledge and skills to identify and prevent fraud [68].

Furthermore, strengthening collaboration between regulatory bodies and financial institutions is crucial. This includes promoting information sharing, coordinating efforts to combat fraud, and ensuring consistent implementation of regulatory guidelines across all banks. By working together, these stakeholders can create a more resilient banking environment that can effectively address the challenges posed by fraudulent activities [69].

In addition to these measures, continuous monitoring and evaluation of the effectiveness of fraud prevention and detection mechanisms are essential. This involves regularly reviewing and updating internal controls, investing in research and development of new technologies, and adapting to the ever-evolving tactics employed by fraudsters [70].

By addressing these key areas, the Indian banking sector can take significant strides towards mitigating the risks of fraud, safeguarding its integrity, and restoring public confidence. A proactive and comprehensive approach to combating fraud will not only protect the financial system but also contribute to the overall stability and growth of the Indian economy.

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