Journal of Research Administration
Society of Research Administrators International

A STUDY TO INVESTIGATE THE REASONS FOR BANK FRAUDS IN INDIAN BANKING INDUSTRY

Akhtar Hasan Jamal Khan
DCBM, Integral University, Lucknow, U.P., India
E-mail: ahjk@student.iul.ac.in

Syed Afzal Ahmad
DCBM, Integral University, Lucknow, U.P., India
E-mail: safzal@iul.ac.in

Asma Farooque
DCBM, Integral University, Lucknow, U.P., India
E-mail: asmag080@gmail.com

Abstract: Multiple loan fraud is a problem faced by a signifi-cantly large number of banks and financial institutions in not only the real estate sector, but other sectors too. Every year, it results in a high number of bad debts and financial losses to the lenders. At every level, there were numerous instances where borrowers successfully obtained loans from multiple financial institutions against the same surety. In majority of the cases, it was the real estate builders with turnover in hundreds of crores, with political and financial clout, and a deep understanding of how the system works, more importantly, the inherent weaknesses that could be exploited. In many instances, it was not possible without the explicit involvement of the staff from the lending institutions, which went at length to oblige these borrowers, in return for under-the-table payoffs

1 Introduction

The banking system of any country comprises of the small savings of the people. When a large number of people deposit the money it becomes the huge amount in the hands of the banks. Commercial Banks lends this money to individuals, traders and institutions and earns profits in the form of interest. But when the lenders do not returns this amount to the banks it becomes the threat to the banks. Data from a report by the Reserve Bank of India (RBI) shows that up until March 2021, banks had declared loan fraud total around five trillion, which is about 4.5% of the total bank credit. In all, 45,613 cases were reported by 90 banks and financial institutions. State Bank of India (SBI), which also happens to be the biggest lending body in India, reported the maximum fraud amount at over INR 78,000 crore (Saha et al., 2016). Such amounts are staggering, causing a huge dent in the economy of a developing country like India.

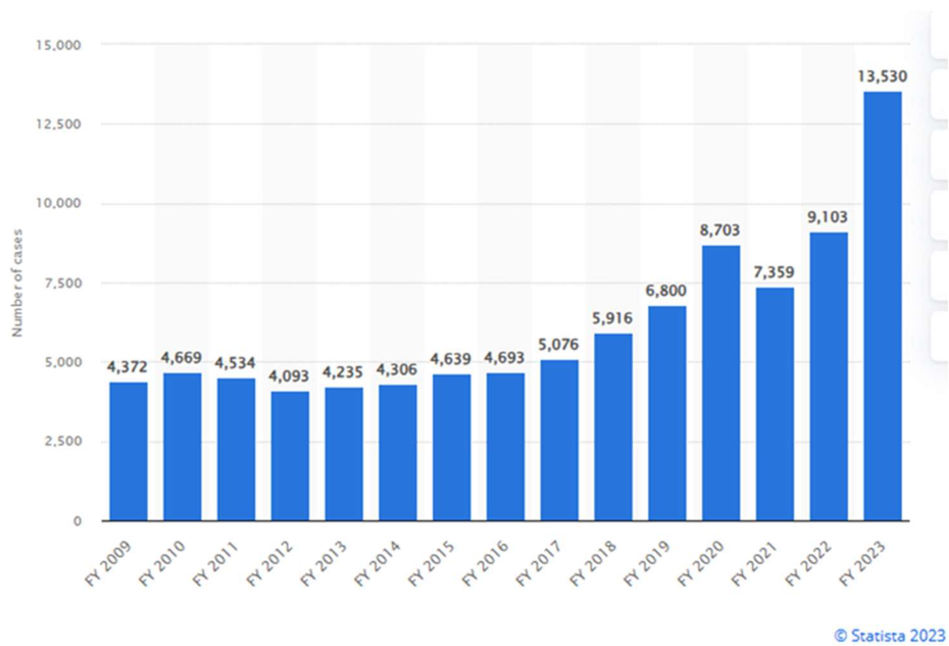
The entire paper is divided into Six section , The First section Introduces the Indian banking System and showing the current status of loan scam in Indian, Second section shows the literature review from various research papers, Third section illustrate the finding of Literature Review and

showing the evidences from various source of data and classify accordingly, Fourth section defines the Types of Fraud that has been observed previously
, Fifth section showing the critical observations that how Indian bank economy are be effecting. The first author's contribution is to evaluate several research papers, news pieces, and case studies, summarize the findings, and classify various types of frauds. The second author's contribution is a definition of existing loan scams in India. The third author's role is to discuss the impact of loan frauds on the Indian economy.

2 Present Status of Loan Scams in India

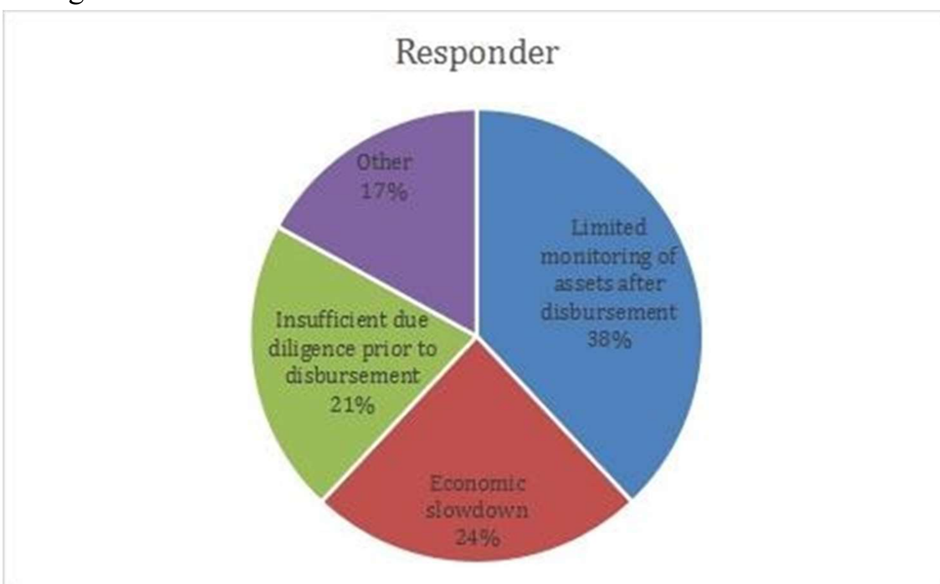
In Survey Report of "Statista,2023" Showing Number of bank fraud cases across India between from financial year 2009 to 2023.

[Figure 1 about here.]



[Figure 2 about here.]

Chart1: Number of bank fraud cases across India between from financial year 2009 to 2023 (Source: India-number-of-bank-fraud-cases,January 2022 (https://www.stati sta.com/))
Chart2:Bank Fraud Survey 2023 (Source: Indian Banking Survey, January 17, 2023 (www.deloitte.com/in))
According to Article Presented in Deloitte India "India Banking Fraud Survey, Edition IV"(2023), 78 % of respondents believe that frauds in the banking sector will increase over the next two year, 24% will be loan fraud, 14 % Mobile/Internet Banking fraud,13 % will be Identity/data theft fraud. As it is mentioned in "Section I : Understanding the current fraud environment in the banking sector" presented in "India Banking Fraud Survey, Edition IV" at Deloitte. Due to the COVID-19 crisis came at a time when banks were struggling to deal with an increasing number of fraud incidents. Financial crime across the globe is expected to rise in response to the uncertainty in the business landscape. For banks, the economic slowdown has only heightened the risk of fraud and money laundering.



[Figure 3 about here.]
Chart4: Factors affecting higher Stressed Assets(Source: Indian Banking Survey, January 17, 2022 (www.deloitte.com/in))

3 Literature Review

I have compiled Literature Review from several Research article, Case Studies, books news papers, published thesis, websites, online survey etc.The papers were selected by the use of keywords like "Bank Scams," "Financial Frauds," "Loan Scams" "Bank Frauds," "Multiple loan Scams" in K-Hub, Proquest, Ebsco, IEEE, Springer, Elsevier, IIM Bangalore, Google Scholar, Journal of Public Affairs ,Shodhganga press and also in the library containing finance and banking journals. Scams Data collected from a report published by the Reserve Bank of India (RBI) as well as various news paper who published the Loan Fraud like TOI, The Tribune, Indian Express , Mid Day, The New Indian Express, Hindustan Times, Hindu News etc and International Online Survey websites like .deloitte.com & Statista.com etc . In order to keep the research latest, mostly papers were selected between the years 2007–2021. I have go through approximately 150 papers based on bank scam out of which I have cite approximately 70publications , 11 Thesis, 10 Case Studies and online Survey based on loan scams.

Multiple borrowing or multiple loan is a common and significant feature of a growing economy where borrowers, when their credit needs cannot be met by a single lender, turn to more than one supplier (Krishnaswamy, 2007) . It is a phenomenon where the procurer of loan obtains overlapping loans through a number of buyers (Kessy and Urio, 2006) . While multiple borrowing is a natural form of financial need satisfaction, multiple loaning from various institutions against a single collateral, is an act of defrauding the lenders (Amanze and Onukwugha, 2018). Such loan frauds are a major source of losses to the banks and financial institutions, every year (Ajah and Inyiama, 2018) .

While there exists a rich scholarship on the issue of loan frauds in India and internationally (Ajah and Inyiama, 2018; Oyedokun and Patil, 2004) , there are very few studies that have tried to explore the issue of multiple loan fraud (e.g. Mundra, 2014) . The concept of multiple borrowing has been addressed by many researchers (Krishnaswamy, 2007; Amanze and Onukwugha, 2018; Ajah and Inyiama, 2018) . On the impact of multiple borrowing, there are contradictory findings among the researchers. For instance, Chaudhury and Imran (2009) reported that the cases of multiple borrowing were increasing, but the rate of repayment and subsequent defaulting were on the rise too. Similar instances have been reported from across the world where banks have seen a substantial rise in their Non-Performing Assets (NPAs) due to instances of non-payment of the borrowed sum (Wisniwski, 2010).

On the other hand, Krishnaswamy (2007) has found an equal, and in some cases, even better repayment history for multiple borrowers compared with single borrowers. Multiple loan fraud is a huge concern area for lenders, but the vast nature of the problem poses a challenge before the researchers. Then there is the issue of detecting the attempts towards these frauds, or after these have actually been committed. Data mining techniques have been found to be particularly useful in this area (Al-Shabi, 2019; Taha & Malebary, 2020; Bagga, Goyal, Gupta, & Goyal, 2019)

This research aims to thoroughly investigate the issue of multiple loan fraud in the Indian context, using data mining and expert opinion, and suggest some preventive mechanism.

Auther Charan Singh RBI Chair Professor(2018) analysis using secondary data (literature review and case approach) as well as an interview-based approach found that Bank employees even Senior management and board of directors had be the part of fraud to cover-up some cases to meet their short term targets and goals. According to Khanna, Ashu (2009)Main Causes That Lead to the Perpetration of Frauds is lack of properly trained and experienced person The findings reveal that 68.77% of respondents have not undergone any formal training in prevention of bank frauds.

According to Cascarino, R. E. (2012)he mention in his book that Most of the corporate fraud that takeplace because of poorly trained and inattentive staff(11) and Madan Lal Bhasin (2015)Found in her research after a questionnaire-based survey 2012-13 among 345 Bank employees . This study reveals that the menace of frauds in the indian banking industry are poor employment practices and lack of effective employee training; usually over-burdened staff, weak internal control systems, and low compliance levels on the part of Bank Managers, Offices and Clerks.

Auther Charan Singh RBI Chair Professor(2016) in his study finally proposes some recommendations to reduce future occurrence of frauds in Indian banking sector. The credibility of third parties such as auditing firms and credit rating agencies is also questioned in the study and is believed to be a significant contributor amongst other causes, such as oversight by banks and inadequate diligence

Sushil Panday(2019) in his case study he stated the the main cause of Nirav modi fraud was happened due to bank employee gave Letter of undertaking without any colleteral.The overseas bank gave money to the Nostro account of PNB. The loan was provided on the guarantee provided by PNB through the swift channel. The overseas bank was not interested in what Nirav Modi will do with the They had the trust that PNB would pay back even if Nirav become a bankrupt.

A indulge in fraudulent activities on customers. Detection of such frauds takes a long time, and is only discovered when there are customer complaints of fraudulent cases. The customers who are victim of fraudulent activities by the bank, due to identity theft etc., could have avoided so, by following appropriate preventive measures and customer awareness guidelines.

Neha Sharma (2018) stated in her paper that the volume of fraud amounts showed that the SBI is on first rank with Rs. 2,236.81 Crore followed by Punjab National Bank with Rs. 2,250.34 Crore and Axis Bank with Rs. 1,998.49 Crore. The data provided by RBI to finance ministry revealed that in most fraud cases the involvement of bank staff was very evident. In SBI total 64 employees were involved in fraud cases, 49 bank employees were involved in HDFC fraud cases and 35 bank employees were found to be involved in Axis Bank fraud cases. The total figures showed that total 450 bank employees were involved from both Public and Private sector banks in total 3,870 fraud cases amounting Rs. 17,750.27 Crore Charan Singh RBI Chair Professor(2016) find in his study that there have been instances of frauds involving collusion of staff with third party agents like auditors to Times: Mar, 2017).

Ms. Bhavana Shrma(2020)published a review article she categorized the various types of fraud in the Indian banking system and also elaborated the reasons why it happened

. According to her frauds may be done by the management, employees, customers and outsiders.she collected the data through questionnaire filled from bank staff, managers and officers, of State Bank of India (SBI), Bank of India (BOI) and Bank of Baroda (BOB) in the area of Delhi and NCR .Almost 90 banks of data were analyzed by descriptive statistics. Hypotheses of result validated by ANOVA Technique. She concluded that the main reason for bank fraud is lack of inadequate training of staff members.

Partha Saha(2013)Analysed that the main cause of fraud is asymmetry Information among different agents.he proposed logical framework based on third party independent authentication of multiple agents.Mental states used in table where Perfect Action plan(PAC), Deliberate Violation Plan (DVP), Derelict Action Plan (DAP), Mistaken Action Plan(MAP), Incapacity Plan(IP).

According to Kartati , (2019) In the wake of big corporates houses failing to evade corporate frauds, a study was needed to identify primary factors leading to fraud. The main purpose of this paper is to identify the major factors and motivations for fraud in the corporate sector.

4 Findings of literature review

After reviewing several papers I found that these can be the main Cause of Bank fraud that are listed here:

A. Cause of Bank scams Causes of Loan Fraud Poor Supervision

Inadequate compensation to employees Poor internal control system Unauthorized extension of credit facilities

Collusion between employees and external parties

Untrained employees who are not well trained to prevent bank scam.

The awareness level of bank employees regarding bank scams are very poor. Decentralised system

Lack in proper and regular audit

Negligence to inspect the security documents Non- verification of end use of funds

multiple financing to same party against same security Lack of Effective and regular Training to staff Unauthorized sanctions

Unauthorized borrowings

Manipulation of vouchers Fake documents Forged customer's signature

Forged cheques Money laundering

Manipulation of accounts Opening fictitious accounts

Asymmetry Information amongst different agents Chart5: Causes of Loan Fraud

5 Classification of Loan Fraud

After go through several papers and case studies I observed that there can be five types of Loan fraudulent that are classified on the basis of the people connivance of scam.

Type 1. Scams committed by customer in connivance with bank employee.

Type 2. Scams committed by customer in connivance with third party.

Type 3. Scams committed by customer with the help of fake/Manipulated/Duplicate documents.

Type 4. Scams committed by customer in connivance with vendor.

Type 5. Scams committed by Outsider in connivance with bank employee

6 Evidences from the Past

In Below Table I have briefly discuss few cases that were reported in various news papers:

4. Types of Loan Scam in India

A. Secured Loan Scams

Fraud for profit: Those who commit this type of mortgage fraud are often industry insiders using their specialized knowledge or authority to commit or facilitate the fraud. Current investigations and widespread reporting indicate a high percentage of mortgage fraud involves collusion by industry insiders, such as bank officers, appraisers, mortgage brokers, attorneys, loan originators, and other professionals engaged in the industry. Fraud for profit aims not to secure housing, but rather to misuse the mortgage lending process to steal cash and equity from lenders or homeowners. The FBI prioritizes fraud for profit cases.

Fraud for housing: This type of fraud is typically represented by illegal actions taken by a borrower motivated to acquire or maintain ownership of a house. The borrower may, for example, misrepresent income and asset information on a loan application or entice an appraiser to manipulate a property's appraised value.

6.1 Unsecured Loan Scam

Application FraudPerhaps the most common type of loan fraud is application fraud. It occurs when a potential borrower provides misleading information on a payday loan. Borrowers attempt to dupe lenders in a number of ways by presenting stolen or false information on their loan applications. Here are some of the most common examples of application fraud targeting unsecured personal lending institutions:

Identity Theft – Here, the applicant steals someone identity and uses it to secure a loan. Unless a sound KYC is in place which involves PAN verification & Voter ID verification & Aadhar number verification and verification of other parameters, the fraudster can easily make his way out with money.

Fake Bank Account – In this loan fraud, the only real victim is the lending institution as it involves a completely made-up identity and not a copy of any real person. The borrower uses the black market to acquire a fake name, birth certificate, and other personal documents to give the impression of a legitimate individual and set up a fake bank account.

Fake Information – This involves misrepresenting one income or personal assets. Other fraudsters may include illegitimate personal references or employers. These types of fraud generally involve a co-conspirator who acts as the reference or employer on behalf of the fraudster.

C. Information FraudHere, breached or compromised information is used to gain access to bank accounts, loan applications, and other tools to defraud lending institutions. Here are the types:

Web Scraping – Here, fraudsters scrape the internet, mostly social media platforms or websites where people register themselves, to gather individual information.

Account Hacking – Hacking – A serious offense, fraudsters hack into an existing genuine bank account and apply for a loan through that account.

Table 1

Case Recurrence	Year	Bank	Amount	Connivance	Fraud Type
Hindustan Times Delhi	24 March 2021	DHFL	2 lakh fake home loan accounts	Bank Employee and owner	Type1(only bank)
Neha Sharma, journal of Technology management for Growing Economics Vol-9, PP-71-88	April 2018	Allahabad Bank	52 lakhs	Customer, Forged documents	Type 3
Neha Sharma, journal of Technology management for Growing Economics Vol-9, PP-71-88	April 2018	State Bank of Patiyala	5 crore	Customer, Bank employee,Forged documents	Type1 &Type 3
Neha Sharma, journal of Technology management for Growing Economics Vol-9, PP-71-88	April 2018	Syndicate Bank	209 Crore	Customer, Bank employee, forged documents, Third party	Type1& Type2 & Type3 & Type 4
Neha Sharma, journal of Technology management for Growing Economics Vol-9, PP-71-88	April 2018	Punjab & Sind Bank	86 Lakhs	Customer, forged documents	Type3
Nirav Modi Case study Pramana Research Journal Volume-9, Issue-6	2019	Punjab National Bank	12,700 Crore	Customer, Bank Employee	Type1
Times of India Ghaziabad	16 March 2021	Punjab National bank	47.22 Lakhs	Customer, Bank Employee, Forged document	Type 1 , 3 & 4
www.moneycontrol.com/news	22 July 2021	Karuvannur Co-op Bank scam-Kerala	100 Crore	Bank Employee, Outsider	Type 5
The new Indian Express -Telangana	8 Jan 2022	Union Bank of india	2 Crore	Bank Employees, Outsider(Broker	Type 5

Loan Phishing – Here, fraudsters send an email to unsuspecting individuals purporting to be their bank or other financial institution. Such emails are often detectable through a little vigilance.

Dark Web – Fraudsters have become adept at searching the Dark Web, or DarkNet, to find the information they can use in identity theft, account hacking, application fraud, and other types of unsecured personal lending fraud.

2.3 Asset Fraud Asset fraud happens when an individual steals cash or kind in the process of borrowing cash or kind. Some of the common ways this is done are listed below: Fake Bankruptcy – This fraud involves hiding assets or income and filing for bankruptcy seeking a loan to pay off debtors. This is done in order to protect certain assets

under the bankruptcy law.

P2P money transfer – This fraud may occur while transferring money online using banking or third-party apps. Unless the app is trustworthy and secure, there is always a risk of compromising critical information to hackers.

7 Effect of Loan Scams on Indian Economy

According to RBI , the rising trend in loan related frauds in the financial sector is a matter of serious concern. Bank scams cause a dis-balance in the economy often leading to weakening of the market. Due to such scams, stock markets face huge crashes thereby affecting the economy in a big way. This causes a slowdown in economic growth often leading to weakening of the economy and often disappearance foreign investment.According to (Ashutosh Kolte,2019)Loan scam impacted the economy in adverse way. Now, there is rise in the need of taking new decisions, new reforms, autonomy to the banks but at the same time whether the banks are using that autonomy honestly or not, this watch needs to be kept by RBI.

8 Conclusion

The researcher has gone for thorough literature review for identification of loaning status in Indian Banking Industry. During the literature review it was found that although some studies have been conducted in foreign countries but only handful of research has been done in Indian context, that too mainly fail to elaborate the cause and effect of loaning scam in Indian Banking Industry. Hence there was need to keenly observe the factors which result in scams in Indian Banking Industry with special reference to Uttar Pradesh.

Acknowledgement

We would like to extend our sincere appreciation to Integral University for their invaluable support in facilitating our research endeavors. The Manuscript Control Number Manuscript Communication Number: IU/R&D/2023-MCN0002268 issued by Integral University serves as a testament to their commitment to advancing academic research. This recognition underscores the significance of our work, and we are grateful for the university's dedication to fostering scholarly contributions in our field.

References

[1] Ajah, I. and Inyiama, C. (2018). ‘Loan fraud detection audit-based combat strategies’. The Journal of Internet Banking and Commerce, Vol 16, No 2, pp. 1–13.

[2] Amanze, B. and Onukwugha, C. (2018). ‘An enhanced model for bank fraud detection in nigerian’. INTERNATIONAL EDUCATIONAL JOURNAL OF SCIENCE ANDENGINEERING, No 5, pp. 1–1.

[3] G. (2006). ‘Contribution of Microfinance Institutions (MFIs) in poverty

[4] reduction in Tanzania’. Workshop on Micro and Small Entreprises woprkshop.

[5] Krishnaswamy, K. (2007).

[6] Oyedokun, G. and Patil, R. (2004). ‘Forensic accounting investigation techniques: Any rationalization? Available at SSRN2910318’. Corporate debt market: New beginnings. Economic and Political Weekly, pages 1237–1246.

[7] Saha, P., Bose, I., and Mahanti, A. (2016). ‘A knowledgebased scheme for risk assessment in loan processing bybanks’. Decision Support Systems, Vol 84, pp. 78–88.

[8] Ahluwalia, S., Mahto, R. V., and Guerrero, M. (2020). Blockchain technology and startup financing: A transaction cost economics perspective. Technological Forecasting and Social Change, 151:119854.

[9] Ajah, I. and Inyiama, C. (1970). Loan fraud detection and it-based combat strategies. The Journal of Internet Banking and Commerce, 16(2):1–13.

[10] Al-Shabi, M. (2019). Credit card fraud detection using autoencoder model in unbalanced datasets. Journal of Advances in Mathematics and Computer Science, pages 1– 16.

[11] Amanze, B., Onukwugha, C., et al. (2018). An enhanced model for bank fraud detection in nigerian. INTERNA- TIONAL EDUCATIONAL JOURNAL OF SCIENCE AND ENGINEERING, 1(5).

[12] Bagga, S., Goyal, A., Gupta, N., and Goyal, A. (2020). Credit card fraud detection using pipeling and ensemble learning. Procedia Computer Science, 173:104–112.

[13] Barua, S. K. and Varma, J. R. (1993). Securities scam: Genesis, mechanics, and impact. Vikalpa, 18(1):3–14.

[14] Bhasin, M. (2013). Corporate accounting scandal at satyam: A case study of india’s enron. European Journal of Business and Social Sciences, 1(12):25–47.

[15] Bhasin, M. L. (2015). Menace of frauds in the indian banking industry: an empirical study. Australian Journal of Business and Management Research, 4(12).

[16] Bhasin, M. L. (2016a). The fight against bank frauds: Current scenario and future challenges. Ciencia e Tecnica Vitivinicola Journal, 31(2):56–85.

[17] Bhasin, M. L. (2016b). Unethical creative accounting culture at satyam computers limited: A case study of india’s enron. International Journal of Business and Social Research, 6(7):24–48.

[18] Cascarino, R. E. (2012). Corporate Fraud and Internal Control,+ Software Demo: A Framework for Prevention, volume 626. John Wiley & Sons.

[19] Chaudhury, I. A. and Matin, I. (2002). Dimensions and dynamics of microfinance membership overlap–a micro study from bangladesh. Small Enterprise Development, 13(2):46–55.

[20] Conlin, M. (1999). Peer group micro-lending programs in canada and the united states. Journal of Development Economics, 60(1):249–269.

[21] Dashottar, S. and Srivastava, V. (2021). Corporate bank- ing—risk management, regulatory and reporting framework in india: a blockchain application-based approach. Journal of Banking Regulation, 22(1):39–51.

[22] Gayathri, S. et al. (2018). A critical analysis of the punjab national bank scam and its implications. International Journal of Pure and Applied Mathematics, 119(12):14853–14866.

[23] Goldmann, P. (2010). Financial services anti-fraud risk and control workbook. John Wiley & Sons.

[24] Gordon, E. A., Henry, E., Louwers, T. J., and Reed, B. J. (2007). Auditing related party transactions: A literature overview and research synthesis. Accounting Horizons, 21(1):81–102.

[25] Gupta, P. and Gupta, S. (2015). Corporate frauds in india–perceptions and emerging issues. Journal of Finan- cial Crime.

[26] Hanumantu, K. D., Worlikar, V., and Narayanaswami,S. (2019). The punjab national bank scam: Ethics versus robust processes. Journal of Public Affairs, 19(4):e1952.

[27] Hsu, S., Li, J., and Bao, H. (2021). P2p lending in china: Role and prospects for the future. The Manchester School, 89(5):526–540.

[28] Kaur, A. (2020). Banking fraud: A conceptual framework of dredging up various banking scams, causes and preven- tive role of law enforcement agencies. PalArch's Journal of Archaeology of Egypt/Egyptology, 17(6):2003–2021.

[29] Khanna, A. and Arora, B. (2009). A study to investigate the reasons for bank frauds and the implementation of preventive security controls in indian banking industry. International Journal of Business Science & Applied Man- agement (IJBSAM), 4(3):1–21.

[30] Krishnaswamy, K. (2007). Competition and multiple borrowing in the indian microfinance sector. Center for Microfinance, IFMR, Chennai. Working Paper.

[31] Kshetri, N. (2017). Will blockchain emerge as a tool to break the poverty chain in the global south? Third World Quarterly, 38(8):1710–1732.

[32] Mahmood, R. and Islam, M. M. (2015). Practices of cor- porate governance in the banking sector of bangladesh. In- ternational Journal of Managing Value and Supply Chains, 6(3):17–29.

[33] Majumder, A., Routh, M., and Singha, D. (2019). A con- ceptual study on the emergence of cryptocurrency economy and its nexus with terrorism financing. In The Impact of Global Terrorism on Economic and Political Development. Emerald Publishing Limited.

[34] Malhotra, R. and Malhotra, D. K. (2003). Evaluating consumer loans using neural networks. Omega, 31(2):83– 96.

[35] Mia, M. A. (2017). What causes multiple borrowing in microfinance? a developing country experience. Strategic Change, 26(2):83–99.
[Mohanty] Mohanty, S. On the recent scams and frauds in indian banking system.

[30] Montezemolo, S. (2013). Payday lending abuses and predatory practices. The State of Lending in America & Its Impact on US Households, Center for Responsible Lending.

[31] Mungure, M. E. (2015). The causes and impacts of loan default to microfinance Institutions (mfis) activities: a case of pride Tanzania ltd Pamba branch-Mwanza. PhD thesis, Mzumbe University.

[32] Mutoko, W. R. and Kapunda, S. M. (2017). Factors influencing small, medium and micro-sized enterprises' borrowing from banks: The case of the botswana manu- facturing sector. Acta Commercii, 17(1):1–9.

[33] Oyedokun, G. (2016). Forensic accounting investiga- tion techniques: Any rationalization? Available at SSRN 2910318.

[34] Patil, R. (2004). Corporate debt market: New beginnings.
Economic and Political Weekly, pages 1237–1246.

[35] Perera, S., Nanayakkara, S., Rodrigo, M., Senaratne, S., and Weinand, R. (2020). Blockchain technology: Is it hype or real in the construction industry? Journal of Industrial Information Integration, 17:100125.

[36] Prasanth, S. and Sudhamathi, S. (2021). Role of increas- ing levels of non-performing assets in bank's deteriorating financial position after covid: A review of literature.

[37] Reurink, A. (2018). Financial fraud: a literature review. Journal of Economic Surveys, 32(5):1292–1325.Rhyne, E. (2001). Mainstreaming microfinance: How lending to the poor began, grew, and came of age in Bolivia. Number 332.1 R4. Kumarian Press Bloomfield, CT.

[38] Roberts, K. H. and Libuser, C. (1993). From bhopal to banking: Organizational design can mitigate risk. Organi- zational dynamics, 21(4):15–26.

[39] Saha, P., Bose, I., and Mahanti, A. (2016). A knowledge based scheme for risk assessment in loan processing by banks. Decision Support Systems, 84:78–88.

[40] Saha, P., Parameswaran, N., Chakraborty, B. B., and Mahanti, A. (2013). A formal analysis of fraud in banking sector. In 2013 46th Hawaii International Conference on System Sciences, pages 3468–3477. IEEE.

[41] SHARMA, M. B., SINGH, S., and DHAS, D. B. (2020). An investigation types and reasons of frauds in indian pub- lic sector banks. International Journal of Pharmaceutical Research, 12(2):1310–1316.

[42] Sharma, N. and Sharma, D. (2018). Rising toll of frauds in banking: A threat for the indian economy. Journal of Technology Management for Growing Economies, 9(1):71– 88.

[43] Singh, C., Mittal, A., Garg, R., Goenka, A., Goud, R., Ram, K., Suresh, R., Chandrakar, R., and Kumar, U. (2014). Financial inclusion in india: Select issues. IIM Bangalore research paper, (474).

[44] Singh, C., Pattanayak, D., Dixit, D., Antony, K., Agar- wala, M., Kant, R., Mukunda, S., Nayak, S., Makked, S., Singh, T., et al. (2016). Frauds in the indian banking industry. IIM Bangalore Research Paper, (505).

[45] Wisniwski, S. (2010). Overindebtedness: Evidence, causes and consequences. European Fund for Southeast Europe, Prague, Czech Republic.

[46] Wright, A. and De Filippi, P. (2015). Decentralized blockchain technology and the rise of lex cryptographia. Available at SSRN 2580664.

[47] Hazra, A., Ahmad, S. A., Rathi, R., & Farooque, A. (2023). Role of Effective Talent Management in Organizational Performance and Retention: An Empirical Study. Journal of Informatics Education and Research, 3(2).

[48] Farooque, A., Ahmad, S. A., & Akhtar, M. (2021). Management Issues Across the Spectrum of Society.

[49] Ahmad, S. A., Asthana, D. P. K., & Sinha, D. A. (2017). Role of Corporate Reporting in Emerging Economies as Investment Information. International Journal of Management, 8(2).