

Impact of Bank Frauds on Financial Performance of Select Banks

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Abstract

The Indian banking sector plays a vital role in the Indian economy, serving as a cornerstone for financial transactions, capital allocation, and economic development. However, with the increasing sophistication of financial crimes, banks face significant challenges in safeguarding their assets and maintaining the trust of their account holders and stakeholders. Among these challenges, bank frauds represent a critical threat to the financial stability and reputation of financial institutions worldwide.

This study focuses on investigating the impact of bank frauds on the financial performance of select Public and Private banks, Public Sector Banks including the State Bank of India (SBI), Bank of Baroda, Punjab National Bank (PNB), Indian Overseas Bank, Union Bank, Private Sector Banks including thus HDFC Bank, ICICI Bank, Kotak Mahindra Bank (KOTAK), Axis Bank, and IndusInd Bank. By examining the relationship between bank frauds and financial performance, this research aims to provide insights into the resilience, risk management practices, and regulatory compliance efforts of these banks.

Keywords: Banking Frauds, Financial Performance, Financial Crimes

1. Introduction

The Indian banking sector has witnessed a significant surge in fraudulent activities over the past seven years, which has had a profound impact on the financial performance of banks and, by extension, the broader Indian economy. The data reveals a troubling trend: both the number of frauds and the amounts involved have been steadily increasing, affecting both public and private sector banks. From 2017 to 2023, Top five public sector banks have reported a total of 34,155 fraud cases, involving an astonishing ₹238,345.25 crores. The year 2020 marked a particularly alarming peak, with 8,445 frauds involving ₹88,363.66 crores. This surge in fraudulent activities has placed immense pressure on the financial stability of these banks, eroding profits, increasing provisions for bad debts, and diminishing investor confidence. Top five Private sector banks, while typically perceived as more resilient, have also been deeply affected. Over the same period, these banks reported 95,849 fraud cases, with a total amount involved reaching ₹45,103.41 crores. The number of frauds in private banks more than quadrupled from 6,033 cases in 2017 to 26,354 cases in 2023, with the amount involved peaking at ₹19,023.32 crores in 2021. The sharp rise in banking frauds has significant implications for the Indian economy. As banks allocate more resources to cover losses from fraud, their ability to lend and support economic growth is compromised. This leads to tighter credit conditions, affecting businesses and consumers alike. Additionally, the erosion of trust in the banking system can deter investment, both domestic and foreign, further hampering economic progress. The cumulative impact of these frauds, totalling nearly ₹283,448.66 crores across both public and private top five banks, highlights the urgent need for stronger regulatory measures and enhanced internal controls to safeguard the financial system and support sustainable economic development.

2. Meaning and Definition

Fraud is a dishonest act, by which one person gains or intends to gain over another person. In other words, fraud is an act or omission which is intended to cause wrongful gain to one person and wrongful loss to the other, either by way of concealment of facts or otherwise. Fraud is defined as „the use of one's occupation for personal enrichment through deliberate misuses or misapplication of the employing organizations resources or assets.

RBI 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 computer system in banks, resulting into wrongful gain to any person for a temporary period or otherwise, with or without any monetary loss to the banks”.

3. Review of literature

The important Studies reviewed on the topics presented as follows:

The study reveals a steady increase in the number of fraud cases and the amounts involved from 2018 to 2022. Technology upgrades have led to a shift towards self-service banking, but this has also made customers more vulnerable to fraud (Dr. B. Srinivas 2023). It concluded that addressing fraud threats in the banking sector requires a holistic approach that incorporates technological advancements, a proactive organizational culture, and effective training programs (Dr. Rohan Joshi 2022). India's surge in digitization, particularly in banking and e-payments post-demonetization, has led to widespread adoption of bank accounts and e-payment methods, fostering financial inclusion (Diksha Mishra & others). The banking sector is grappling with numerous challenges in the 21st century, prompting a reassessment of legal strategies and processes to adapt to the dynamic environment (Richa Rajpal 2022). The research highlights a surge in fraud cases, particularly affecting public sector banks, impacting their loan and advance portfolios (G.V.K.R.Sharma 2022). It concludes that today, banking frauds are a critical issue facing the country. However, the pace of developing effective mechanisms to combat these frauds is negligible (Dr. C.P. Gupta 2021). It concluded that Government and RBI are actively addressing fraud detection with corrective measures, but staff awareness and coordinated investigations are crucial. Top bank management must proactively contribute to both bank and economic development (Dr. Sadyojathappa S 2021). In this paper he stated conclusion, financial systemic frauds, both pre and post-pandemic, have significantly impacted the financial market. While banking regulations are in place, there remains a lack of systemic methods to detect fraud, including insider involvement and money laundering (Ms. Nanda Pardhey 2021). It Concluded that the rampant occurrence of banking frauds presents a critical challenge to the nation, affecting both the quality of life and hindering national growth (Dr. C.P. Gupta & all 2021). The study highlighted a concerning trend of simultaneous increases in both the frequency and magnitude of frauds within the banking sector, indicating a critical challenge (Baxi Minouti Kaivalya& all 2021)⁽⁹⁾. In this research paper, the author concludes that there is a growing awareness among banks to enhance their fraud risk management in response to regulatory directives and increasing incidents of fraud (Mrs Sunindita Pan 2020). The study found that effective customer education and communication programs, which help customers recognize how to prevent fraud and understand their own responsibilities, should be implemented alongside refined digital safety efforts (P. Mary Jeyanthi1 2020).

4. Scope of the Study

The scope of this study encompasses a comprehensive examination of bank frauds in India, their management, and their impact on financial institutions, as well as employees perceptions regarding fraud prevention strategies. In this research explores the strategies that banks can employ to effectively manage fraud risks, providing a conceptual background for understanding practical fraud management practices. In this research focusing specifically on the Indian banking sector, this chapter analyzes the trends of bank frauds in India. This study investigates the impact of bank frauds on the financial performance of selected banks.

5. Research Gap

From the above review of literature the Points were observed:

While numerous studies have examined the issue of bank frauds, most have been limited in scope, focusing on only a few select banks or specific types of frauds. The previous studies have often overlooked the crucial aspect of analyzing the impact of bank frauds on the financial performance of banks, particularly in the context of comparing periods before and after major fraud incidents. This gap in the literature indicates a need for a more comprehensive study that not only covers

a wider range of banks and fraud types but also assesses the broader implications of these frauds on the financial health of banking institutions.

To address the limitations of previous studies, the present research aims to fill the gap by undertaking a comprehensive analysis of bank frauds in India, focusing on both public and private sector banks. Unlike earlier studies that selected only a few banks or concentrated on specific types of frauds, this study examines the top five public and private sector banks, providing a broader perspective on fraud risk management practices across the industry.

6. Research Objectives

To this, study has been conducted make very specific following objectives has been covered within the Study:

1. To measure the impact of select bank frauds on financial performance of select banks.

Hypotheses for Study

H₀₁: There is no significant impact of bank frauds on financial performance of select banks.

7. Research Methodology

To investigate this research secondary data was used. Secondary data will collected from the various journals, magazines, and websites of select banks and RBI. In this study secondary data were utilized to gain a comprehensive understanding of bank frauds in India. For this analysis of bank frauds in India, secondary data could include annual reports, records, and databases from reputable sources like the Reserve Bank of India (RBI), various Public and Private sector Banks. This data provides a broad overview of trends, historical records, and statistical analysis that support the study's findings.

Statistical Tools:

The study employed several statistical tools to analyse the data comprehensively Descriptive Statistics, ANOVA (Analysis of Variance), Regression Model.

Period of the Study

The study focuses on a seven-year period from 2016-17 to 2022-23. This period is particularly significant because it encompasses the aftermath of the demonetization policy in India, which led to a notable increase in bank frauds. The present research study is related to top five public and private sector banking companies selected don the basis of market capitalization as criteria.

Table-1.1: Public Sector Bank asFollows

Company Name	Market Cap (Rs. cr)	Rank
SBI	365,284.35	1
Bank of Baroda	39,804.82	2
PNB	37,802.66	3
IOB	35,725.56	4
Union Bank	32,651.26	5

Table-1.2: Private Sector Bank as Follows

Company Name	Market Cap	Rank
	(Rs. cr)	
HDFC Bank	842,818.39	1
ICICI Bank	473,043.49	2
Kotak Mahindra	340,566.16	3
Axis Bank	225,638.36	4
IndusInd Bank	76,355.17	5

Source: www.moneycontrol.com

8. Results Analysis:

Table 1 : Number of frauds reported and Amount involved in frauds (Crores) In Public Sector Banks

Year	State Bank Of India		Bank of Baroda		Punjab National Bank		Indian Overseas Bank		Union Bank	
	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)
2017	837	2424.74	NA	NA	185	2809.31	106	850.45	127	896.42
2018	1789	2532.24	NA	NA	213	15501.65	74	1372.9	121	1542.12
2019	2616	12387.13	191	4099.66	219	5903.19	161	4403.69	284	6516.88
2020	6964	44622.45	350	12971.14	509	14633.27	207	6939.82	415	9196.98
2021	5724	10085.92	248	9796.31	714	10947.51	458	3740.78	579	12791.43
2022	4192	7100.65	280	3990.12	431	9579	312	1462.33	638	3942.37
2023	2755	4878.18	784	1780.99	289	1809.1	1017	1332.14	366	5504.38
TOTAL	24877	84031.31	1853	32638.22	2560	61183.03	2335	20102.11	2530	40390.58
CAGR	18.553%	10.502%	22.352%	-11.229%	6.580%	-6.094%	38.130%	6.621%	16.324%	29.598%
MEAN	3553.86	12004.47	370.60	6527.64	365.71	8740.43	333.57	2871.73	361.43	5770.08

Note : NA = Bank of Baroda information not available for the years of 2017 & 2018

Table 1 stated that descriptive statistics of Number of frauds reported and Amount involved in frauds (Crores) In Public Sector Banks. State Bank of India (SBI) the number of frauds reported by SBI increased from 837 in 2017 to a peak of 6,964 in 2020 before slightly decreasing to 2,755 in 2023. The amount involved in these frauds escalated dramatically from ₹2,424.74 crores in 2017 to ₹44,622.45 crores in 2020, with an average amount involved of ₹12,004.47 crores per year. Bank of Baroda the Fraud cases grew from 191 in 2019 to 784 in 2023, with the amount involved peaking at ₹12,971.14 crores in 2020. The Compound Annual Growth Rate (CAGR) for the amount involved is -11.23%, indicating fluctuations rather than a consistent rise. Punjab National Bank (PNB) the number of frauds and the amount involved both surged, with fraud cases increasing from 185 in 2017 to 714 in 2021, and the amount involved reaching ₹15,501.65 crores in 2018. PNB's average amount involved in frauds stands at ₹8,740.43 crores. Indian Overseas Bank this bank reported a significant rise in the amount involved in frauds, reaching ₹6,939.82 crores in 2020. The CAGR of the number of frauds reported is 38.13%, showing a sharp increase over the years. The Union Bank The number of frauds reported grew from 127 in 2017 to 638 in 2022, with the amount involved peaking at ₹12,791.43 crores in 2021.

Table 2 : Number of frauds reported and Amount involved in frauds (Crores) In Private Sector Banks

Year	HDFC Bank		HDFC Bank		Kotak Mahindra Bank		AXIS Bank		Indusind Bank	
	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)	Number of frauds reported	Amount involved in frauds (Crores)
2017	2319	165.2	3359	421.07	126	111.54	205	72.92	24	2.9
2018	3612	146.55	2938	589.571	268	56.73	521	353.97	32	118.19
2019	5484	498.44	2131	2316.52	376	14.1	145	529.04	66	14.33
2020	7580	222.6	2817	9472.87	643	579.6	1554	2055.62	103	1158.61
2021	5232	1640.8	1549	11838.64	894	656.44	5959	1579.67	583	3307.77
2022	6543	505.86	5678	3100.05	899	169.55	6125	290.43	1730	227.78
2023	3726	525.72	6642	385.39	706	72.4	7865	172.54	7415	1730

TOTAL	34496	3705.17	25114	28124.111	3912	1660.36	22374	5054.19	9953	6559.58
CAGR	7.01%	17.98%	10.23%	-1.26%	27.91%	-5.99%	68.38%	13.09%	126.83%	149.18%
MEAN	4928.00	529.31	3587.71	4017.73	558.86	237.19	3196.29	722.03	1421.86	937.08

Table 2 stated that descriptive statistics of Number of frauds reported and Amount involved in frauds (Crores) In Public Sector Banks The number of frauds reported by HDFC Bank increased from 2,319 in 2017 to a peak of 7,580 in 2020, with the amount involved fluctuating but showing an overall growth trend. ICICI Bank reported 6,642 frauds in 2023, up from 3,359 in 2017. The amount involved reached its peak at ₹11,838.64 crores in 2021, with an average amount involved of ₹4,017.73 crores per year. Kotak Mahindra Bank the bank witnessed a sharp rise in the number of frauds, growing from 126 in 2017 to 706 in 2023. The amount involved peaked at ₹656.44 crores in 2021. AXIS Bank also saw a significant increase in the number of frauds, from 205 in 2017 to 7,865 in 2023, with the amount involved reaching ₹2,055.62 crores in 2020. IndusInd Bank the number of frauds reported by IndusInd Bank rose dramatically from 24 in 2017 to 7,415 in 2023, with the amount involved showing a significant growth trend, peaking at ₹3,307.77 crores in 2021.

Table 3 : Bank Frauds and various financial metrics across Public Sector Banks

Bank	SBI	Bank of Baroda	PNB	Indian Overseas Bank	Union Bank	F	Sig.
Number of frauds reported	3553.86	370.6	365.71	333.57	361.43	13.11	0.000
Amount involved in frauds (Crores)	12004.47	6527.64	8740.43	2871.73	5770.08	1.32	0.29
Net Profit After Tax (Crores)	17372.14	3320.31	-1801.57	-2487.13	862	4.8	0.000
% of fraud amount in net profit	258.72	608.85	753.21	56.61	24.91	1.04	0.40
Interest Earned (in crores)	271645.86	66309.84	64114.28	17969.94	50895.11	1.75	0.17
% of frauds amount in Interest Earned	4.44	8.94	14.81	16.35	11.71	1.75	0.17
Deposits (in crores)	3401137.86	881417.33	889788.12	233855.29	676823.96	71.86	0.000
% of frauds amount in Deposits	0.360	0.690	1.100	1.250	0.920	1.535	0.219
Advances (in crores)	2431534.86	643590.45	578985.2	139555.86	459418.75	82.533	0.000
% of frauds amount in Advances	0.5	0.94	1.67	2.2	1.34	1.983	0.125

Table 3 : The data provides insights into the relationship between the reported bank frauds and various financial metrics across major Indian public sector banks, including State Bank of India (SBI), Bank of Baroda, Punjab National Bank (PNB), Indian Overseas Bank, and Union Bank.

SBI reports the highest average number of frauds at 3,553.86, significantly higher than other banks. The ANOVA test ($F = 13.11$, $\text{Sig.} = 0.000$) indicates that the differences in the number of frauds across these banks are statistically significant, suggesting variability in fraud occurrences. The amount involved in frauds is also highest for SBI (₹12,004.47 crores), followed by PNB (₹8,740.43 crores) and Bank of Baroda (₹6,527.64 crores). However, the ANOVA result ($F = 1.32$, Sig.

= 0.29) indicates that the differences in fraud amounts across banks are not statistically significant, implying that the magnitude of frauds is relatively comparable among these banks. The net profit varies considerably, with SBI reporting a substantial profit (₹17,372.14 crores) while PNB and Indian Overseas Bank show losses (-₹1,801.57 crores and -₹2,487.13 crores, respectively). The significant F-value ($F = 4.8$, $\text{Sig.} = 0.000$) suggests that there are substantial differences in profitability among these banks. PNB exhibits the highest percentage of fraud amount relative to net profit (753.21%), indicating a severe impact of fraud on its profitability. In contrast, Union Bank shows the lowest impact (24.91%). The ANOVA results ($F = 1.04$, $\text{Sig.} = 0.40$) suggest that these differences are not statistically significant, though the variation is notable. SBI leads in interest earned (₹2,71,645.86 crores), significantly higher than other banks. However, the percentage of fraud amounts in interest earned is highest for Indian Overseas Bank (16.35%), followed by PNB (14.81%). Despite the differences, the ANOVA ($F = 1.75$, $\text{Sig.} = 0.17$) indicates that these variations are not statistically significant. SBI also has the largest deposit base (₹34,01,137.86 crores). The percentage of fraud amounts in deposits is highest for Indian Overseas Bank (1.25%) and lowest for SBI (0.36%). The F-value ($F = 71.86$, $\text{Sig.} = 0.000$) shows that there are significant differences in deposit levels across banks. SBI has the highest advances (₹24,31,534.86 crores), followed by Bank of Baroda (₹6,43,590.45 crores). Indian Overseas Bank shows the highest percentage of fraud amounts in advances (2.2%), suggesting a higher risk in its loan portfolio. The ANOVA ($F = 82.533$, $\text{Sig.} = 0.000$) confirms significant differences in the level of advances among the banks.

Table 4 : Bank Frauds and various financial metrics across Private Sector Banks

Bank	HDFC Bank	ICICI Bank	Kotak Mahindra Bank	AXIS Bank	IndusInd Bank	F	Sig.
Number of frauds reported	4928	3587.71	558.86	3196.29	1421.86	4.219	0.008
Amount involved in frauds (Crores)	529.4	4017.73	237.29	722.14	937.14	3.411	0.021
Net Profit After Tax (Crores)	27365.5	16136.35	9134.57	6771.53	4153.29	13.124	0.000
% of fraud amount in net profit	1.86	29.7	2.65	25.17	25.04	1.309	0.289
Interest Earned (in crores)	117307.44	83650.87	31367.61	61748.61	25560.08	27.491	0.000
% of frauds amount in Interest Earned	0.43	4.6956	0.7398	1.1662	3.0994	2.435	0.069
Deposits (in crores)	1182191.16	834660.39	254604.46	648272.27	223017.94	18.343	0.000
% of frauds amount in Deposits	0.043	0.465	0.0916	0.1126	0.3634	2.358	0.076
Advances (in crores)	1066654.8	747336.45	254602	592743.86	198968.78	19.985	0.000
% of frauds amount in Advances	0.0476	0.5361	0.0956	0.1234	0.4144	2.281	0.084

Table 4 The data compares the frauds and financial performance of major private sector banks in India, including HDFC Bank, ICICI Bank, Kotak Mahindra Bank, AXIS Bank, and IndusInd Bank. HDFC Bank has the highest average number of frauds reported (4,928), followed by ICICI Bank (3,587.71). The ANOVA test ($F = 4.219$, $\text{Sig.} = 0.008$) shows that the

differences in the number of frauds across these banks are statistically significant, indicating that fraud occurrences vary considerably between banks. ICICI Bank has the highest average amount involved in frauds (₹4,017.73 crores), significantly higher than other banks, with IndusInd Bank also showing a relatively high amount (₹937.14 crores). The ANOVA result ($F = 3.411$, $\text{Sig.} = 0.021$) indicates that there are statistically significant differences in the fraud amounts among these banks, suggesting varied exposure to fraud risks. HDFC Bank has the highest average net profit after tax (₹27,365.5 crores), followed by ICICI Bank (₹16,136.35 crores). The significant F-value ($F = 13.124$, $\text{Sig.} = 0.000$) suggests substantial differences in profitability across these banks, with HDFC Bank leading in profitability. ICICI Bank has the highest percentage of fraud amount relative to net profit (29.7%), indicating a significant impact of fraud on its profitability. Kotak Mahindra Bank shows a relatively low impact (2.65%). However, the ANOVA ($F = 1.309$, $\text{Sig.} = 0.289$) suggests that these differences are not statistically significant. HDFC Bank leads in interest earned (₹1,17,307.44 crores), with ICICI Bank also earning a substantial amount (₹83,650.87 crores). The percentage of fraud amount in interest earned is highest for ICICI Bank (4.70%), followed by IndusInd Bank (3.10%). The ANOVA result ($F = 27.491$, $\text{Sig.} = 0.000$) indicates significant differences in interest earned across the banks, with HDFC Bank being the most dominant. HDFC Bank also has the largest deposit base (₹11,82,191.16 crores). The percentage of fraud amount relative to deposits is highest for ICICI Bank (0.465%), indicating higher fraud exposure relative to deposits. The F-value ($F = 18.343$, $\text{Sig.} = 0.000$) shows significant differences in deposit levels among these banks. HDFC Bank leads in advances (₹10,66,654.78 crores), with ICICI Bank following (₹7,47,336.45 crores). The percentage of fraud amount relative to advances is highest for ICICI Bank (0.5361%), followed by IndusInd Bank (0.4144%). The ANOVA ($F = 19.985$, $\text{Sig.} = 0.000$) confirms significant differences in the level of advances across the banks.

Table 5 : Regression Model Summary of Amount involved in frauds in various banks with Predictors: Number of frauds reported

Bank	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
SBI	.779 ^a	.607	.528	10203.50	7.718	.039 ^b
Bank of Baroda	.412 ^a	.170	-.107	4909.40	0.612	.491 ^b
PNB	.416 ^a	.173	.008	5414.18	1.048	.353 ^b
Indian Overseas Bank	.190 ^a	.036	-.157	2418.32	0.188	.683 ^b
Union Bank	.646 ^a	.417	.301	3524.85	3.583	.117 ^b

Predictors: Number of frauds reported in Individual bank.

Table 5 provides analysis of Regression Model Summary and ANOVA of Amount involved in frauds in various banks with Predictors Number of frauds reported.

In SBI (State Bank of India) the correlation coefficient (R) of .779 indicates a strong positive relationship between the number of frauds reported and the amount involved in frauds at SBI. An R Square of .607 suggests that approximately 60.7% of the variability in the amount involved in frauds can be explained by the number of frauds reported. The F-value is 7.718 with a significance level of 0.039. This indicates that the model is statistically significant at the 0.05 level. Thus, the number of frauds reported is a significant predictor of the amount involved in frauds for SBI.

In Bank of Baroda the R value of .412 indicates a moderate positive relationship between the number of frauds reported and the amount involved in frauds at Bank of Baroda. The R Square of .170 suggests that only 17% of the variability in the amount involved in frauds is explained by the number of frauds reported. The negative Adjusted R Square (-.107) implies that the model may not be a good fit for the data, possibly due to overfitting or insufficient data. The F-value is 0.612 with a significance level of 0.491. This indicates that the model is not statistically significant, meaning the number of frauds reported does not significantly predict the amount involved in frauds for Bank of Baroda.

In PNB (Punjab National Bank) the R value of .416 indicates a moderate positive relationship. An R Square of .173 means that 17.3% of the variability in the amount involved in frauds is explained by the number of frauds reported. The F-value is 1.048 with a significance level of 0.353. This indicates that the model is not statistically significant, meaning the number of frauds reported does not significantly predict the amount involved in frauds for PNB.

In Indian Overseas Bank the R value of .190 shows a weak positive relationship. An R Square of .036 indicates that only 3.6% of the variability in the amount involved in frauds is explained by the number of frauds reported. The negative Adjusted R Square (-.157) suggests the model does not fit the data well. The F-value is 0.188 with a significance level of 0.683. This indicates that the model is not statistically significant, meaning the number of frauds reported does not significantly predict the amount involved in frauds for Indian Overseas Bank.

In Union Bank the R value of .646 indicates a strong positive relationship. An R Square of .417 shows that 41.7% of the variability in the amount involved in frauds is explained by the number of frauds reported. The Adjusted R Square of .301 is lower, reflecting the influence of additional predictors or sample size. The standard error of 3524.85 suggests moderate variability around the regression line. The F-value is 3.583 with a significance level of 0.117. This indicates that the model is not statistically significant at the 0.05 level, although it is approaching significance. The number of frauds reported is not a strong predictor of the amount involved in frauds for Union Bank.

Table 6 : Regression Model Summary of Amount involved in frauds in Private Sector Banks with Predictors: Number of frauds reported

Bank	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
HDFC	.163 ^a	.027	-.168	559.84	.137	.726 ^b
ICICI	.523 ^a	.274	.129	4387.69	1.885	.228 ^b
KOTAK	.553 ^a	.306	.167	242.26	2.205	.198 ^b
AXIS	.009 ^a	.000	-.200	848.06	.000	.985 ^b
INDUSIND BANK	.295 ^a	.087	-.096	1295.77	.477	.521 ^b

Predictors: Number of frauds reported in Individual bank.

Table 5 provides analysis of Regression Model Summary and ANOVA of Amount involved in frauds in various banks with Predictors Number of frauds reported.

HDFC Bank, The **R-value** of 0.163 indicates a weak positive correlation between the number of frauds reported and the financial metric analyzed. However, with an **R Square** of just 0.027, only 2.7% of the variability in the financial metric is explained by frauds, making the relationship negligible. The **p-value** of 0.726 further confirms that this model is not statistically significant, suggesting that the number of frauds has little to no impact on the financial performance of HDFC Bank.

ICICI Bank shows a **moderate positive correlation** with an **R-value** of 0.523, meaning that frauds have a somewhat stronger relationship with the financial metric. However, the **R Square** of 0.274 suggests that only 27.4% of the variance is explained by the number of frauds. Although this is higher than HDFC, the **p-value** of 0.228 indicates that the model is still not statistically significant, implying that frauds alone do not sufficiently explain the financial performance of ICICI Bank.

Kotak Mahindra Bank exhibits a moderate correlation with an **R-value** of 0.553, and an **R Square** of 0.306, showing that 30.6% of the variance in the financial metric is linked to the number of frauds. Despite this, the model's **p-value** of 0.198 indicates it is not statistically significant, suggesting that while there is some relationship, it is not strong enough to predict financial outcomes reliably.

Axis Bank has an **R-value** of 0.009, indicating almost no correlation between the number of frauds and the financial performance metric. With an **R Square** of 0.000, the model fails to explain any variance in the financial metric, and the **p-value** of 0.985 confirms no statistical significance, showing that frauds have no measurable impact on Axis Bank's financial performance.

IndusInd Bank shows a weak positive correlation with an **R-value** of 0.295. The **R Square** of 0.087 means only 8.7% of the variance in the financial metric can be attributed to the number of frauds, indicating a weak relationship. The **p-value** of 0.521 suggests the model is not statistically significant, implying that frauds do not significantly impact the financial performance of IndusInd Bank.

9. Conclusions

The analysis of frauds in Indian banking reveals distinct patterns and significant differences between public sector banks and private sector banks. Notably, while the number of fraud cases reported is higher in private sector banks, the amount involved in frauds is considerably larger in public sector banks. This disparity highlights the varying nature and impact of fraudulent activities across these sectors. The high number of fraud cases in private sector banks suggests that these institutions face frequent but potentially smaller-scale fraudulent activities. In contrast, public sector banks, though reporting fewer cases, encounter frauds involving significantly larger sums. This indicates a critical need for targeted fraud prevention measures in public sector banks to address high-value frauds effectively. Private sector banks exhibit higher net profits compared to their public sector counterparts. However, the percentage of fraud amount relative to net profit is much higher in public sector banks. This indicates that frauds in public sector banks have a more substantial impact on their financial performance. Similarly, the percentage of fraud amount relative to interest earned, deposits, and advances is also higher in public sector banks. These findings underscore the severe financial repercussions of frauds in public sector banks and the urgent need for stringent control measures. To mitigate fraud, public sector banks must enhance their due diligence processes, especially before granting loans and advances. Proper documentation and thorough verification of collateral security are crucial steps in this direction. Strengthening internal policies and regulatory frameworks is essential to prevent fraud effectively. Both public and private sector banks need to adopt more robust policies and regulatory measures. Establishing a special committee dedicated to overseeing large transactions and loans can provide an additional layer of scrutiny and reduce the risk of significant frauds. Enhanced oversight can also help in early detection and prevention of fraudulent activities. Management in both public and private sector banks should prioritize the reduction of fraud cases. By focusing on controlling the number of frauds, banks can automatically reduce the overall amount involved in these fraudulent activities. Implementing comprehensive fraud detection systems, regular audits, and employee training on fraud prevention are key strategies in achieving this goal.

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