Impact of Wilflful Default on Financial Performance of Public and Private Sector Banks in India

P. Nithyakirrthy[1], R. Shanthi[2], Puja Pawar[3,*] and Aishah Aldowish[4]

[1]Research Scholar, Department of Commerce, University of Madras.

[2]ProfessorDepartment of Commerce, University of Madras.

[3]Assistant Professor, Department of Economics, College of Business and Administration, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia.

[4]Lecturer Department of Economics, College of Business and Administration, Princess Nourah bint Abdulrahman University.

Abstract: The foundation of any nation's economy is its banking system. Because the funds placed in banks belong to the countries people, excessive losses to banks have an impact on every person living there. Bad loans and fraud are the main causes of NPAs that banks experience. The figures provided by the RBI also demonstrate that escalating bank frauds and the costs that result from them are one of the main obstacles to the development of banking in India. As a result, banks' loan books have become of worse quality, which has a negative impact on their financial performance. The amount of bad loans in many banks has reached dangerous proportions, even endangering their survival, and the Reserve Bank of India has placed them under Prompt Corrective Action. The current study spanning a period of ten years from FY 2012 to 2021 is intended to analyse the impact of the wilful default on selected financial parameters such as efficiency, liquidity, profitability and solvency of public and private sector banks. Nine different rations have been used under these broad parameters in the study. The data has been obtained from CIBIL Website and RBI. The study has used descriptive statistics, trend, correlation and regression analysis. The research reveals that there is a significant relationship between wilful default and financial performance of public sector banks. The study suggests that banks should exercise caution when making large loans.

Keywords: Wilful Default, Public Sector Banks and Private Sector Banks.

INTRODUCTION

The Indian economy's financial sector is crucial to the country's economic growth. One of the biggest economies in south Asia, India has a significant financial system, institutional structure, and array of channels and tools. An important source of funding for Indian banks' operations is the money that their depositors have entrusted to them as trustees. These resources are used to build banking assets, including loans, advances, and investments. An essential role of banks is lending and investing. Due to the absence of an effective risk management and control system, the financial services industry has suffered multiple substantial losses during the previous 20 years. The financial sector is continuously in danger from several risks, including credit risk, market risk, operational risk, and others. In the course of conducting banking operations, a number of issues emerge, and the credit risk is a significant one. Credit risk is an inherent component of banks' lending and investment activities. In India, bank credit dominates all sources of funding for

businesses. The fragility of the Indian banking sector, which is shown in the high NPA, is a direct result of these issues. One of the crucial indicators used to assess the performance of banks is their non-performing assets. NPAs have a noticeable effect on the profitability of banks. Non-performing assets harm banks' asset quality as well as their profitability, making it exceedingly difficult for them to survive. NPAs reveal how well banks are performing. A high percentage of non-performing assets increases the chances that many borrowers may default, which has an impact on bank profitability and net capital and lowers asset values. The banking industry must bear the burden of non-performing assets. The management of NPA is crucial to the success of banks.

An asset is considered to be non-performing by the RBI when it stops generating revenue for the bank. An asset was previously classified as a non-performing asset (NPA) based on the idea of "Past Due." A "non performing asset" (NPA) is a credit for which interest and/or a principal instalment have been "past due" for a predetermined amount of time. The following basic categories, which banks should classify their assets into, are:

- Standard Assets - A standard asset is one that does not reveal any issues and does not pose higher than

*Address correspondence to this author at the Assistant Professor, Department of Economics, College of Business and Administration, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia.
E-mail: drpujapawar@gmail.com

usual business risk. An NPA shouldn't exist for such an asset.

- Sub-standard Assets: If an asset remained NPA for a period of time that was less than or equal to 12 months, it would be classified as sub-standard. In these situations, the current net worth of the guarantors or the borrowers or the current market value of the security charged is insufficient to guarantee full repayment of the banks' debts.

- Doubtful Assets: If an asset has remained NPA for more than a year, it must be classed as doubtful. A loan that is considered doubtful has all the same intrinsic flaws as one that is considered substandard, with the additional feature that the flaws make full collection or liquidation highly improbable and uncertain based on the facts, conditions, and values that are now known.

- Loss Assets: Assets with a loss have been recognised by the bank, internal or external auditors, the department of cooperation, or an inspection by the Reserve Bank of India, but the loss has not yet been fully or partially written off.

The amount includes non-performing assets from all client categories, including people, partnerships, sole proprietorships, private and public limited businesses, and is further divided into wilful and general default. The Reserve Bank of India defines a wilful defaulter as a defaulting company that has:

- the ability to repay but has not made the required payments;

- diverted the funds for a use not permitted by the loan terms.

- Siphoned off the funds

- Without the knowledge of the bank or lender, disposed of or sold the movable or immovable fixed assets that were mortgaged against the term loan.

More than 86 percent of all non-performing assets belong to nationalised banks, which shows that they are the ones who are most negatively impacted by the NPA issue. The percentage of willful defaults has been sharply rising, which worries the government and the economy as a whole. Around 44% of the total NPA is made up of wilful defaults, which is a significant percentage. Poor lending decisions, unsuitable technology, poor SWOT analysis, a lack of credit appraisal structure, and managerial scarcity are the major drivers of the rise in NPAs and are controllable by the banking industry. by considering the importance of asset quality in the functioning of the banks, wilful default seems as first and foremost impact over on asset quality and financial position of banks. Therefore, the research study intended to analyse the impact of the wilful default on the financial performance of selected commercial banks in India. The study will encompass a comparative analysis between the public sector and private sector banks. The banks are selected on the basis of highest outstanding amounts of wilful defaults. And, the public sector banks include 12 banks including State Banak of India. The private sector banks include 13 banks operating in India.

REVIEW OF LITERATURE

NPA In India

Since a few years ago, the reasons of the NPA issue as well as possible solutions have been thoroughly investigated in India. One of the findings includes NPA is driven by several key groups of variables, including terms of lending, bank-specific indicators relating to asset size, credit orientation, financial innovations (non-interest income), regulatory capital requirements, and economic cycle shocks (Mishra & Dhal, 2003). Adverse economic and market issues such as resource shortages, regulatory changes, and recessionary conditions, as well as ineffective management and strained labour relations, are all driven upon with NPA (Vemula & Mahalingam, 2012). Price increases for inputs, unexpected shortages of supplies, volatility in currency exchange rates, and changes in governmental policies (Joseph & Prakash, 2014). The effect of NPA on bank profitability and soundness has been studied in India, and it has been discovered to be harmful to banks' performance in terms of sustainability, economic decline, financial viability, and the Domino effect on interrelated sectors.

Managers who lack the ability to properly analyse credit risk the bank's asset quality and may even engage in illegal activity to meet business objectives. All of these factors have a big impact on NPA. Government and political influences are another problem, along with the difficulty of seizing and selling mortgaged assets (Sanjeev, 2007). (Karunagar, et al. 2008). According to a study on NPA that uses a Sample Panel and focuses on PSU banks, inefficiency is the primary cause of NPA in these institutions. The finding supported the Varma committee's opinion that recapitalizing two PSU banks (Indian Bank and United Bank of India) would not be a good solution (Rajaraman & Vasishtha, 2002).

The issue of NPA in India will be brought to light that the RBI's Financial Stability Report for 2014 made it absolutely clear that the problem of wilful default must be separated and that the promoters must bear an equity share of the losses resulting in defaults. In order to determine the net economic worth of restructuring significant corporate debt, RBI expressed its worries about the need for increased transparency.

Wilful Default

The word "wilful default" is used differently around the world. There are two sorts of bankruptcy in the US: voluntary and involuntary. However, in India, fraud cases that result in bankruptcy are referred to as Wilful Default. The first time the term "Wilful Default" was used was in the Finance Minister's budget speech on February 28, 1994. (Gist of RBI Schemes of Defaulter Lists, 1994). The mechanism for wilful default disclosure was subsequently developed by the RBI in 1999 (RBI, Notification-DBOD. No.. DL(W).BC./110 /20.16.003(1)/2001-2002, 2002). (RBI, Collection And Dissemination Of Information on cases Of Wilful Default Of Rs.25 Lakhs And Above, 1999). The definition of wilful default underwent numerous revisions over time. In order to deal with wilful default, the RBI has issued recommendations, starting with identifying, recording, and

treating in terms of penalty and legal procedure (Master Circular on Wilful Defaulters, 2015).

India and other emerging economies have a number of particular difficulties with regard to financial regulation, stability, and growth. According to Mukherjee (2003), in order to succeed, a country like India should choose the decentralised creditor-led model and adopt measures to foster an atmosphere more favourable to it. However, wilful defaults became more common due to a weak regulatory framework. Satistha HK and Sowmya GS (2016), spoke about the rising number of wilful defaulters in the Indian banking system and the new rules and regulations the RBI is establishing to address this issue. The issue of wilful default and its effects on the profitability and final credit decision-making process of the banks were covered by Bardhan & Mukherjee (2013). One of the paper's most significant findings was that the bank will only extend loans up to its exogenously fixed limit if the limited liability condition holds and the wilful default condition is satisfied. Another significant finding of this study was the correlation between the incidence of wilful default and the bank's credit capacity. In the end, it examined the "loan capacity" as a tool for policymaking by the regulator. Karthik, Shrivastava, and Subramanyam (2017) critically analysed the exposure of lending institutions, regions, and industries at large to wilful defaulters. The study showed a significant positive link between gross advances, the credit institution's gross non-performing assets, and lawsuits filed by wilful defaulters.

Sharma and Sharma (2018) was analysed an indicator of the soundness of the financial sector is the NPA. A high percentage of NPAs indicates a high rate of loan defaults, which has an impact on banks' profitability and net worth as well as the asset's value. The authors point out that it is crucial to limit the rising level of non-performing assets (NPAs), which is having a negative impact on bank balance sheets and the overall profitability and efficiency of the Indian banking sector. In order to develop and support more economic growth, India requires banks that are considerably stronger, therefore any further decline in NPA levels in banks needs to be quickly addressed. In the present scenario, wilful defaults are one of the major causes of increase in NPAs in Indian banks.

As per the literature study, Research on Wilful Default in India has drawn attention of regulators, banks, academician, policy makers and lawyers. With the growing number and value of wilful default, it becomes imperative to understand the impact of wilful defaulters. Therefore, the aim of the work is to analyse the impact of wilful default on financial performance of public and private sector banks in India.

Objectives of the Study

- To analyse the impact of wilful default on financial performance (Efficiency, Profitability, Liquidity and Solvency) of public sector banks in India

- To analyse the impact of wilful default on financial performance (Efficiency, Profitability, Liquidity and Solvency) of private sector banks in India

Hypothesis

- H01: There is no positive correlation between wilful default and financial performance of public sector banks

- H02: There is no positive correlation between wilful default and financial performance of private sector banks

- H03: There is no significant relationship between wilful default and financial performance of public sector banks

- H04: There is no significant relationship between wilful default and financial performance of private sector banks

RESEARCH METHODOLOGY

- Data Source: This study attempts to analyse banks' performance based on the secondary data. The required data has been obtained from the statistical reports of the Reserve Bank of India and TransUnion CIBIL limited.

- Sampling Method: The method of sampling is Purposive since the sample is selected based on the pre-decided defined objective.

- Sample Size: The simple size is limited to 12 public sector banks including associates of SBI and 13 private sector banks. And the banks are selected on the basis of highest outstanding amount of wilful default.

- Study Period: The study covers a period of ten years from the FY 2012 to FY 2021. For the purpose of the study, banks have been grouped into two categories: Public Sector Banks and Private Sector Banks.

- Data Analysis: In this study, the data is analysed using percentage analysis of wilful default, trends of wilful default, descriptive statistics, correlation, and regression for both the public and private sector banks in India.

- Statistical Software: Statistical computations are on IBM SPSS and Microsoft Excel.

- Parameters of Variables: The types of variables considered for the study are

(A) - Wilful Default (WD), (B) - Capital Adequacy Ratio (CAR),

(C) - Credit Deposit Ratio (CDR), (D) - Net Interest Margin (NIM),

(E) - Net Interest Income (NII), (F) - Return on Asset (ROA),

(G) - Return on Equity (ROE), (H) - Cost of Funds (COF), and

(I) - Return on Advance (ROADV).

Table 1. Banks Covered in the Study.

Banks List (Total 25)			
Public Sector Banks (12)		**Private Sector Banks (13)**	
1.	Bank of Baroda	1.	Axis Bank Ltd
2.	Bank of India	2.	Dhana Laxmi Bank
3.	Bank of Maharashtra	3.	HDFC Banak Ltd
4.	Canara Bank	4.	ICICI Bank Ltd
5.	Central Bank of India	5.	IndusInd Bank Ltd
6.	Indian Bank	6.	Lakshmi Vilas Bank
7.	Indian Overseas Bank	7.	Karnataka Bank Ltd
8.	Punjab & Sind Bank	8.	Karur Vysya Bank
9.	Punjab National Bank	9.	Kotak Mahindra Bank Ltd
10.	UCO Bank	10.	Tamil Nad Mercantile Bank Ltd
11.	Union Bank of India	11.	The Federal bank of India
12.	SBI & its Associates	12.	The South Indian Bank Ltd
-	-	13.	Yes Bank

Capital Adequacy Ratio - An assessment of a bank's available capital expressed as a percentage of its risk-weighted credit exposures is called the capital adequacy ratio (CAR). The capital adequacy ratio, also referred to as the capital-to-risk weighted assets ratio (CRAR), is used to safeguard depositors and support the global financial systems' stability and effectiveness.

Credit Deposit Ratio - It measures how much a bank lends in relation to the deposits it has raised. It reveals how much of a bank's primary resources are going toward lending, which is the primary banking activity. A larger ratio denotes a greater reliance on deposits for lending, and vice-versa.

Net Interest Margin - The difference between the income a bank receives on loans and the interest it pays on deposits is known as the net interest margin (NIM). One indicator of a bank's profitability and expansion is NIM.

Net Interest Income - The difference between the interest revenue a bank receives from its lending activities and the interest it pays to depositors is known as net interest income (NII).

Return on Assets - The return on assets (ROA), sometimes known as the return on total assets, is a term for measuring how much money a company makes off of its capital. This profitability ratio describes the rate of growth in profits produced by an organization's assets.

Return on Equity - ROE is considered like an indicator of a company's profitability and how well it produces profits. The management of a firm is more effective at generating income and growth from its equity financing the higher the ROE.

Costs of Funds - The cost of funds is the amount that banks and other financial organisations pay to buy the money they really ought to lend to their clients. When banks utilize lower cost of funds to make both short- and long-term loans to borrowers, they often see better returns. When costs are high, that is passed on to borrowers, which means they must pay higher interest rates to access credit.

Return on Advance - To assess the strength of the lending and borrowing books at banks, various ratios are used in different ways. Thus, one such ratio that is determined for banks and NBFCs is yield on advances. The ratio displays the portfolio's average lending rate. A high yield on advances is a sign that the business is financing riskier assets and may be experiencing problems with asset quality. It also shows whether the loan's cost is consistent with the inherent risk.

DATA ANALYSIS

The study comprises of two objectives focusing on wilful default; to analyse the impact of wilful default on financial performance of public and private sector banks in India.

The above tables shows that the total number of banks for the study are selected on the basis of highest outstanding amount of wilful default (Table 2) for the period of ten years from FY 2012 to FY 2021.

The above table **2** and chart **1** shows that the percentage analysis of 12 public and 13 private sector banks outstanding amount of wilful default for the year 2011 to 2021. 2011 data is taken for finding percentage for the year 2012. In 2012, there was a peak of wilful default in public sector banks and in 2014, there was a peak of wilful default in private sector banks.

Table 2. Percentage Analysis of Public and Private Sector Bank Outstanding Amount of Wilful Default.

	Public Sector Banks		Private Sector Banks	
Year	**Outstanding Amount (in Lacs)**	**Percentage (%) of Outstanding Amount**	**Outstanding Amount (in Lacs)**	**Percentage (%) of Outstanding Amount**
2021	2,29,66,797.53	53	24,91,249.57	23
2020	1,49,72,386.28	21	20,33,372.63	17
2019	1,24,22,518.83	37	17,45,037.76	17
2018	90,76,546.99	49	14,93,212.01	18
2017	60,84,474.99	29	12,69,061.34	18
2016	47,16,552.58	33	10,79,422.35	37.
2015	35,48,080.63	51	7,87,268.19	17.
2014	23,52,839.29	59	6,70,124.78	38
2013	14,80,577.77	10	4,86,688.74	23
2012	13,46,877.36	98	3,95,157.65	-11
2011	6,81,545.59	-	4,41,658.18	-

(Source: CIBIL Website).

	31.3.2012	31.3.2013	31.3.2014	31.3.2015	31.3.2016	31.3.2017	31.3.2018	31.3.2019	31.3.2020	31.3.2021
Private	-11	23	38	17	37	18	18	17	17	23
Public	98	10	59	51	33	29	49	37	21	53
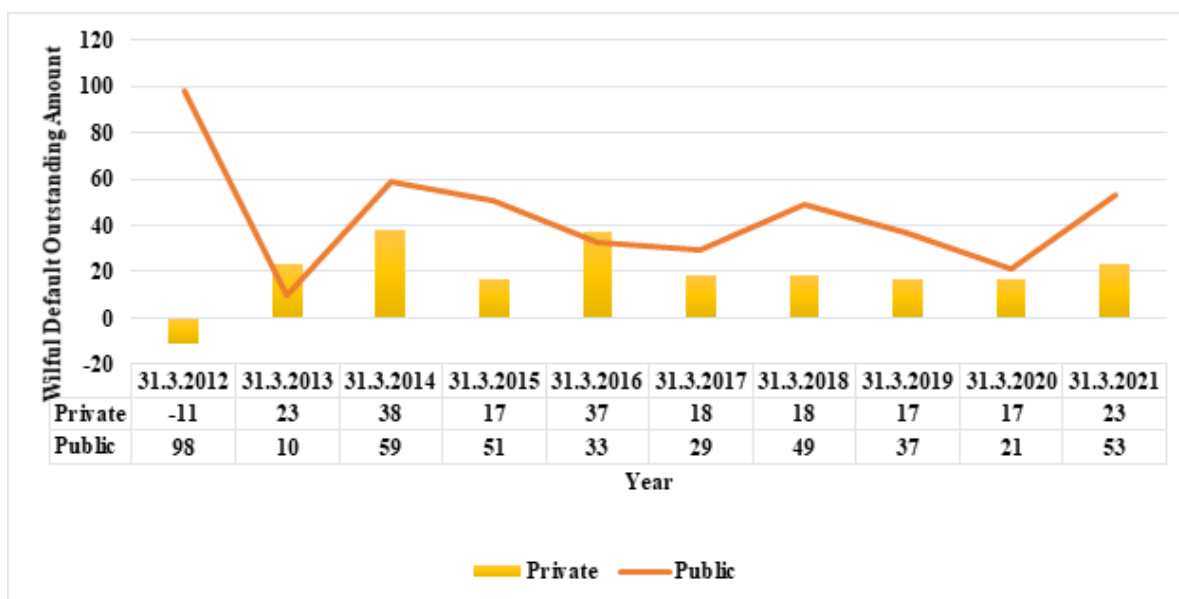
Chart 1. Percentage Analysis of Public and Private Sector Bank Outstanding Amount of Wilful Default.

Table 3. Descriptive Statistics of Public and Private Sector Banks.

Variables	**Mean**		**Standard Deviation**		**Variance**	
	1	2	1	2	1	2
Wilful Default	43.91	19.60	24.42	13.30	596.57	176.90
Capital Adequacy Ratio	12.17	14.57	1.10	0.73	1.22	0.54
Credit Deposit Ratio	69.45	80.38	5.61	3.60	31.52	12.97
Net Interest Margin	2.28	3.04	0.18	0.55	0.03	0.003
Net Interest Income	0.91	1.43	0.16	0.12	0.02	0.01
Return on Assets	-0.05	0.90	0.62	0.37	0.39	0.14

Return on Equity	-1.60	8.86	11.24	5.34	126.53	28.59
Cost of Funds	5.86	6.45	0.86	1.05	0.74	1.10
Return on Advance	9.04	10.73	1.01	1.27	1.02	1.63

(Note: 1 = Public Sector Bank and 2 = Private sector Bank).

(Source: CIBIL website and RBI).

Table 4. Correlation Analysis of Public Sector Banks.

H_{01}: There is no positive correlation between wilful default and financial performance of public sector banks.

H_{a1}: There is a positive correlation between wilful default and financial performance of public sector banks.

Variables	A	B	C	D	E	F	G	H	I
A	1								
B	0.210 (0.561)	1							
C	0.282 (0.430)	-0.361 (0.305)	1						
D	0.429 (0.216)	0.513 (0.130)	0.548 (0.101)	1					
E	-0.152 (0.676)	0.570 (0.085)	-0.931** (0.000)	-0.351 (0.321)	1				
F	0.352 (0.318)	0.249 (0.487)	0.757* (0.011)	0.786** (0.007)	-0.535 (0.111)	1			
G	0.360 (0.307)	0.291 (0.415)	0.726* (0.017)	0.805** (0.005)	-0.490 (0.151)	0.996** (0.000)	1		
H	0.130 (0.720)	-0.469 (0.172)	0.962** (0.000)	0.375 (0.285)	-0.909** (0.000)	0.714* (0.020)	0.673* (0.033)	1	
I	0.247 (0.492)	-0.216 (0.549)	0.969** (0.000)	0.620 (0.056)	-0.855** (0.002)	0.857** (0.002)	0.828** (0.003)	0.958** (0.000)	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
(A)Wilful Default (WD), (B)Capital Adequacy Ratio (CAR),
(C)Credit Deposit Ratio (CDR), (D)Net Interest Margin(NIM),
(E)Net Interest Income (NII), (F)Return on Asset(ROA),
(G)Return on Equity (ROE), (H)Cost of Funds (COF), and
(I)Return on Advance (ROADV).

The table **3** shows that the descriptive statistics of public and private sector banks for the period of ten years from 2012 to 2021. The mean wilful default demonstrates that public sector banks have an edge over the private sector banks, which is likely a result of the fact that most public sector banks manage big corporate accounts that help companies satisfy their needs for working capital and project funding. Additionally, the public sector banks handle the majority of government transactions, which contributes to a higher volume of business. The private sector banks have shown a better performance in respect of Capital Adequacy Ratio, Credit Deposit Ratio, Net Interest Margin, Non-Interest Income, Return on Assets, Return on Equity, Return on Advance. The private sector banks seem to be more focused on these earnings as compared to the public sector banks.

The table **4** and chart **2** inferred that $p<0.05$ and $p<0.01$, hence there is no positive correlation between wilful default and financial performance of public sector banks in India. In which capital adequacy ratio has no positive correlation with other financial performance of banks. And, other financial parameters have a positive correlation with variables. Thus, reject the alternative hypothesis and concluded that there is no positive correlation with wilful default and financial performance of public sector banks.
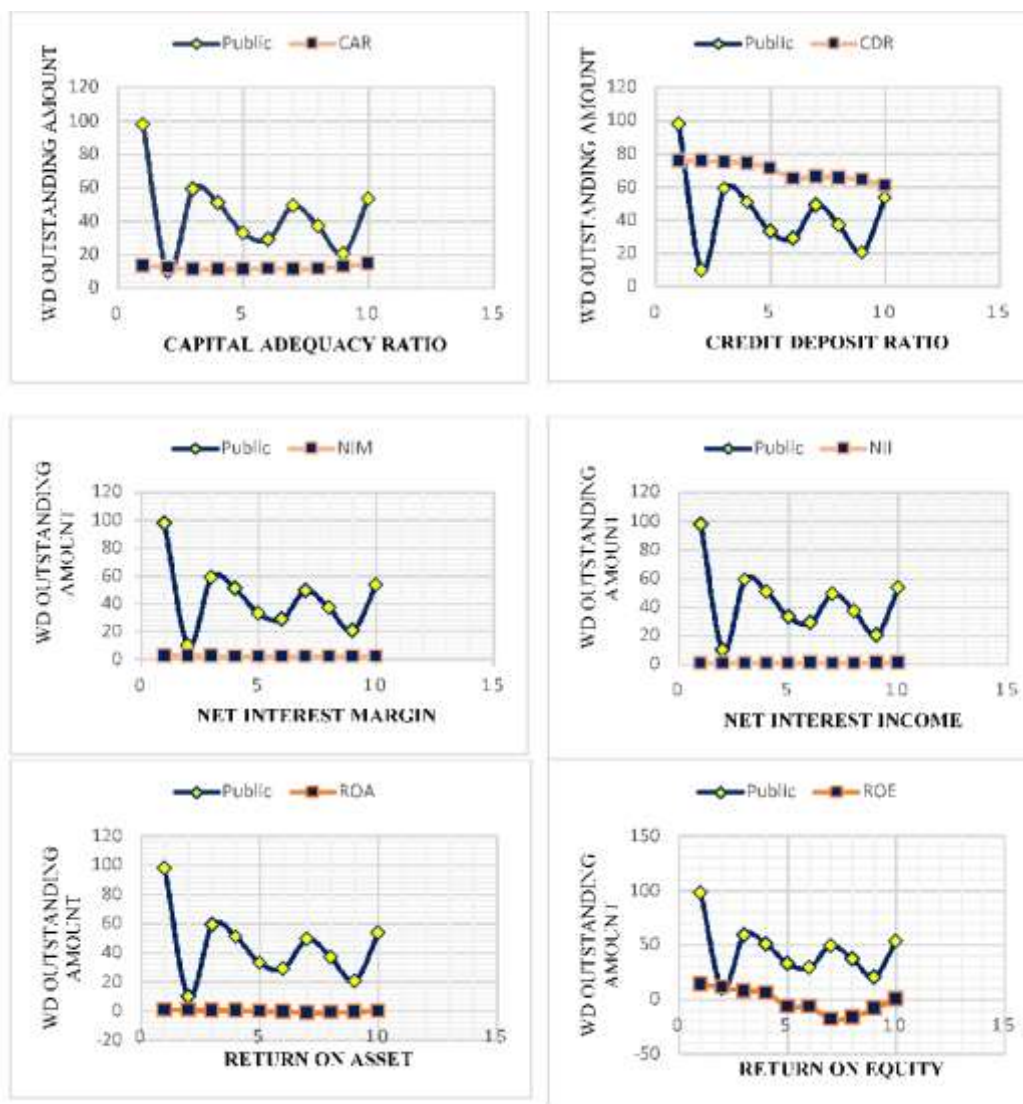
Chart 2. Correlation Analysis of Public Sector Banks.

Table 5. Correlation Analysis of Private Sector Banks.

H_{02}: There is no positive correlation between wilful default and financial performance of private sector banks

H_{a2}: There is a positive correlation between wilful default and financial performance of private sector banks

Variables	A	B	C	D	E	F	G	H	I
A	1								
B	-0.250 (0.486)	1							
C	-0.098 (0.787)	-0.594 (0.70)	1						
D	0.490 (0.150)	-0.641* (0.046)	0.244 (0.497)	1					
E	-0.022 (0.951)	-0.507 (0.135)	0.439 (0.204)	0.505 (-0.022)	1				

F	-0.041 (0.910)	-0.067 (0.855)	-0.477 (0.164)	0.134 (0.712)	-0.364 (0.302)	1			
G	-0.082 (0.821)	0.026 (0.944)	-0.522 (0.122)	0.069 (0.851)	-0.403 (0.249)	0.992** (0.000)	1		
H	-0.024 (0.947)	-0.460 (0.181)	0.110 (0.763)	0.124 (0.733)	-0.162 (0.655)	0.748* (0.013)	0.718* (0.019)	1	
I	-0.038 (0.918)	-0.400 (0.253)	0.058 (0.873)	0.091 (0.802)	-0.173 (0.633)	0.762* (0.010)	0.741* (0.014)	0.996** (0.000)	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
(A)Wilful Default (WD), (B)Capital Adequacy Ratio (CAR),
(C)Credit Deposit Ratio (CDR), (D)Net Interest Margin(NIM),
(E)Net Interest Income (NII), (F)Return on Asset(ROA),
(G)Return on Equity (ROE), (H)Cost of Funds (COF), and
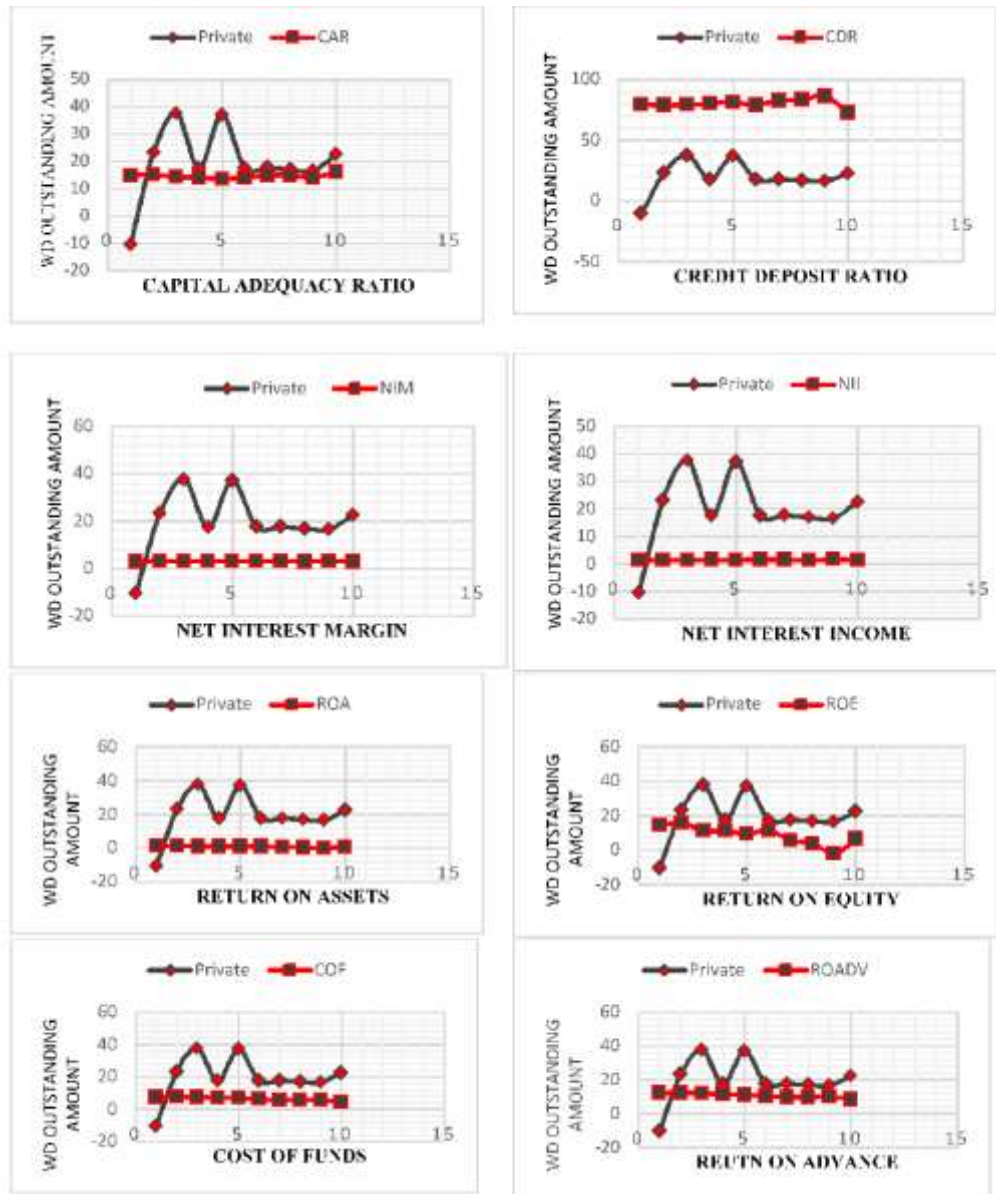(I)Return on Advance (ROADV).

Chart 3. Correlation Analysis of Private Sector Banks.

Table 6 Multiple Regression Analysis of Public Sector Banks

H03: There is no significant relationship between wilful default and financial performance of public sector banks

Ha3: There is a significant relationship between wilful default and financial performance of public sector banks

Dependent Variables: Y = Wilful Default

Independent Variables:

X1 = Capital Adequacy Ratio (CAR),

X2 = Credit Deposit Ratio (CDR),

X3 = Net Interest Margin (NIM),

X4 = Net Interest Income (NII),

X5 = Return on Asset (ROA),

X6 = Return on Equity (ROE),

X7 = Cost of Funds (COF), and

X8 = Return on Advance (ROADV).

Multiple R value   : 0.999

R Square value   : 0.988

F value   : 91.200

P value   : <0.005*

Variables	Unstandardized Co-efficient (B)	SE of Beta	Standardized Co-efficient (B)	t value	P value
Constant	177.761	97.593	-	1.821	0.320
X1	-101.799	6.641	-4.616	-15.329	0.041*
X2	28.784	1.429	6.616	20.138	0.032*
X3	-512.433	39.200	-3.918	-13.072	0.049*
X4	421.820	33.508	2.786	12.589	0.050*
X5	647.155	43.878	16.538	14.749	0.043*
X6	-29.537	2.123	-13.603	-13.912	0.046*
X7	-685.627	32.865	-24.175	-20.862	0.030*
X8	431.059	25.023	17.898	17.226	0.037*

(* Significant level at 5 %).

The table **5** and chart **3** inferred that p<0.05 and p<0.01, hence there is no positive correlation between wilful default and financial performance of private sector banks in India. In which net interest margin has a significant correlation with capital adequacy ratio. And other financial parameters have a significant correlation with variables. Thus, reject the alternative hypothesis and concluded that there is no positive correlation with wilful default and financial performance of private sector banks.

The Multiple Regression Equation is

Y = 177.761 + (-101.799X1) + 28.784X2 + (-512.433X3) + 421.820X4 + 647.155X5 + (-29.537X6) + (-685.627X7) + 431.059X8

The table **6** refer that the multiple correlation coefficient is 0.999 measures the degree of significant relationship between wilful default and financial performance of public sector banks in India. Here, the coefficient of X1 is -101.799 represent the effect of capital adequacy ratio, X2 is 28.784 represent the effect of credit deposit ratio, X3 is -512.433 represent the effect of net interest margin, X4 is 421.820 represent the effect of net interest income, X5 is 647.155 represent the effect of return on assets, X6 is -29.537 represents the effect of return on equity, X7 is -685.627 represent the effect of cost of funds, X8 is 431.059 represent the effect of return on advance on Wilful Default. And, the coefficient value is significant at 5% level. Thus, reject the null hypothesis and conclude that there is a significant relationship between wilful default and financial performance of public sector banks in India.

The Multiple Regression Equation is

Y = -745.564 + 34.124X1 + (-10.077X2) + 444.362X3 + 20.274X4 + (-175.150X5) + 2.016X6 + 254.583X7 + (-168.087X8)

Table 7. Multiple Regression Analysis of Private Sector Banks.

H_{04}: There is no significant relationship between wilful default and financial performance of private sector banks

H_{a4}: There is a significant relationship between wilful default and financial performance of private sector banks

Dependent Variables: Y = Wilful Default

Independent Variables:

X1 = Capital Adequacy Ratio (CAR),

X2 = Credit Deposit Ratio (CDR),

X3 = Net Interest Margin (NIM),

X4 = Net Interest Income (NII),

X5 = Return on Asset (ROA),

X6 = Return on Equity (ROE),

X7 = Cost of Funds (COF), and

X8 = Return on Advance (ROADV).

Multiple R value　　: 0.980

R Square value　　: 0.960

F value　　　　: 2.968

P value　　　　: <0.005*

Variables	Unstandardized Co-efficient (B)	SE of Beta	Standardized Co-efficient (B)	t value	P value
Constant	-745.564	405.615	-	-1.838	0.317
X1	34.124	20.465	1.885	1.667	0.344
X2	-10.077	3.408	-2.729	-2.957	0.208
X3	444.362	125.071	1.856	3.553	0.175
X4	20.274	58.465	.190	.347	0.787
X5	-175.150	143.226	-4.963	-1.223	0.436
X6	2.016	8.280	.811	.243	0.848
X7	254.583	143.197	20.139	1.778	0.326
X8	-168.087	103.143	-16.136	-1.630	0.350

(* Significant level at 5 %).

The table **7** refer that the multiple correlation coefficient is 0.980 measures the degree of significant relationship between wilful default and financial performance of private sector banks in India. Here, the coefficient of X1 is 34.124 represent the effect of capital adequacy ratio, X2 is -10.077 represent the effect of credit deposit ratio, X3 is 444.362 represent the effect of net interest margin, X4 is 20.274represent the effect of net interest income, X5 is -175.150 represent the effect of return on assets, X6 is 2.016 represents the effect of return on equity, X7 is 254.583 represent the effect of cost of funds, X8 is -168.087 represent the effect of return on advance on Wilful Default. And, the coefficient value is significant at 5% level. Thus, reject the alternative hypothesis and conclude that there is no significant relationship between wilful default and financial performance of private sector banks in India.

FINDINGS OF THE STUDY

- In Correlation analysis – Accept the null hypothesis for both public and private sector banks in India that there is no positive correlation between wilful default and financial performance of public and private sector banks

- In Regression analysis – for public sector banks – reject the null hypothesis and accept the alternative hypothesis that there is a significant relationship between wilful default and financial performance of public sector banks (Significant at 5% level)

- For Private sector banks – accept the null hypothesis and reject the alternative hypothesis that there is no significant relationship between wilful default

and financial performance of private sector banks (Significant at 5% level).

SUGGESTIONS

- Bad loans eventually cause higher NPAs. Therefore, banks must be careful and diligent while disbursing funds.

- Controlling and regulating chartered accountants is a crucial first step in lowering banks' non-performing assets (NPA).

- Banks should exercise caution while making loans to Indian businesses that have taken out large loans abroad.

- The banks' internal and external audit mechanisms need to be strengthened urgently.

- Before approving loans, public sector banks should establish an internal rating agency to conduct a thorough assessment of major projects.

- To track early warning signs regarding business projects, an efficient Management Information System (MIS) must be put in place.

- Using artificial intelligence can significantly reduce financial fraud (AI)

CONCLUSION

India's banking industry is unique since it includes both public and private banks that support the nation's economic growth. Banks operating in both sectors encourage healthy competition, which ultimately benefits all parties involved, particularly the clients who receive high-quality service from these banks. Effective management of nonperforming assets, which requires specific attention, is currently a key difficulty faced by banks in both the public and private sectors.

The study reveals that the private sector banks have performed better than the public sector banks. because, wilful default has an adverse impact and influence on the financial performance of public sector banks. whereas, private sector banks have no significant relationship with wilful default and it does not make any impact on financial performance of private sector banks. And, the study has strongly suggested that the public sector banks should be more cautious while lending the huge loans to reduce the NPA.

The scope of the study may include determining the degree of wilful default in each sector, including priority and nonpriority, small-scale industries, agriculture, infrastructure, etc., as well as the degree of wilful default at cooperative and foreign banks.

APPENDIX I

Public Sector Banks

YEAR	WD*	CAR	CDR	NIM	NII	ROA	ROE	COF	ROADV
2021	53.39437	14.57083	60.88417	2.358333	1.205	-0.01667	0.129167	4.370833	7.698333
2020	20.52617	12.88417	64.26417	2.266667	1.084167	-0.45667	-7.92667	5.09	8.254167
2019	36.86393	11.68833	65.58417	2.2325	0.916667	-0.89917	-16.4733	5.108333	8.159167
2018	49.17552	11.3	66.32583	2.071667	1.005833	-0.96417	-18.0175	5.254167	7.990833
2017	29.00259	11.75333	65.21333	2.027083	1.062361	-0.31694	-6.52778	5.764861	8.645694
2016	32.93251	11.23333	71.155	2.147778	0.774722	-0.18653	-6.49139	6.342083	9.281806
2015	50.79996	11.42333	74.43417	2.249167	0.773194	0.371667	6.350694	6.6025	9.728333
2014	58.91359	11.1975	75.09667	2.388611	0.764028	0.44125	7.714167	6.702361	9.971528
2013	9.926695	12.41917	75.72833	2.506389	0.7775	0.678333	11.41417	6.828889	10.33347
2012	97.62102	13.24833	75.90917	2.622083	0.814306	0.812361	13.81153	6.56125	10.35681

(*Calculated Percentage analysis of wilful default in CIBIL Website for selected banks).

(Source: RBI).

APPENDIX II

Private Sector Banks

YEAR	WD*	CAR	CDR	NIM	NII	ROA	ROE	COF	ROADV
2021	22.5181	16.12615	72.71154	2.973846	1.343846	0.693077	6.611538	4.486154	8.513846
2020	16.52313	14.12538	86.37308	3.026154	1.666154	0.143846	-1.92154	5.796154	9.956923
2019	16.8647	14.73154	83.52846	2.996154	1.286154	0.546154	3.951538	5.718462	9.674615

2018	17.66271	14.91077	82.70692	3.098462	1.487692	0.713077	5.813077	5.578462	9.676154
2017	17.56856	13.94077	79.13615	3.120769	1.619231	1.093846	11.45923	6.236154	10.44769
2016	37.10986	13.59077	81.28	3.123846	1.428462	1.015385	9.576923	6.923077	11.17308
2015	17.48084	14.08308	80.41	3.025385	1.456923	1.168462	11.29231	7.217692	11.52692
2014	37.69063	14.26231	79.17769	3.050769	1.361538	1.093846	11.32	7.437692	12.00462
2013	23.16318	15.14692	78.80692	3.032308	1.354615	1.356154	16.02308	7.636154	12.30154
2012	-10.5286	14.85077	79.69615	2.976923	1.352308	1.268462	14.52846	7.519231	12.12077

(*Calculated Percentage analysis of wilful default in CIBIL Website for selected banks).

(Source: RBI).

REFERENCES

Bardhan, S., & Mukherjee, V. (2013). Wilful Default in Developing Country Banking System: A Theoretical Exercise. Journal of Economic Development.

Joseph, A. L., & Prakash, M. (2014). A study on analyzing the trend of NPA level in private sector banks and public sector banks. *International Journal of Scientific and Research Publications*, *4*(7), 1-9.

Karthik, L., Shrivastava, A., & Subramanyam, M. (2017). Critical Analysis of Suit-Filed Wilful Defaulters Data in India. Journal of Management and Ethics

Karunakar, M., Vasuki, K., & Saravanan, S. (2008). Are non-performing assets gloomy or greedy from Indian perspective. *Research Journal of Social Sciences*, *3*(1), 4-12.

Misra, B. M., & Dhal, S. (2010). Pro-cyclical management of banks' non-performing loans by the Indian public sector banks. *BIS Asian Research Papers*, *16*, 1-23.

Mukherjee, P. (2003). Dealing with NPAs: lessons from international experiences. *Money and Finance*, *12*(12), 64-90.

Paul, R. V., & Prakash, N. (2019). Impact of Asset Quality on Financial Performance of Banks in India: A Comparative study of Public and Private Sector Banks. *International Research Journal of Commerce Arts and Science*, 10(7), 39-50.

Rajaraman, I., & Vasishtha, G. (2002). Non-performing loans of PSU banks: Some panel results. *Economic and Political weekly*, 429-435.

Sanjeev, G. M. (2007). Bankers' Perceptions on Causes of Bad Loans in Banks. *Journal of Management Research (09725814)*, 7(1).

Sharma, S, P., & Sharma, S. (2018). Restraining Wilful Defaults: Need of the hour for Indian Banking System. PHD Chamber of Commerce and Industry.

Vemula, V. V., & Mahalingam, M. (2012). Non-performing Assets-An Indian Perspective. *Thought paper, Infosys Finacle*.

WEBSITE

https://rbi.org.in/Scripts/PublicationsView.aspx?id=7320

https://rbidocs.rbi.org.in/rdocs/notification/PDFs/29647.pdf

https://rbidocs.rbi.org.in/rdocs/notification/PDFs/100MNF4F1E72176524C698EE963510D79FBAE.PDF