# CREDIT RISK MANAGEMENT OF NON PERFORMING ASSETS IN SELECTED PUBLIC AND PRIVATE SECTOR BANKS

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**ABSTRACT** *The risk is an inalienable part of bank's business. Successful risk management is crucial to any bank for establishing financial position. In this perspective, adjusting risk management to bank's hierarchical structure and business procedure has turned out to be essential in the banking business. Credit risk is the bank's risk of misfortune, emerging from a borrower who does not make installments as assured. Such condition is called default. The risk is the central component that drives financial conduct. Financial institutions require to deal with the risk proficiently, to be answerable to risk-taking people. The future of banking no doubt depends on the dynamics of risk management. The banks that have the effective risk management framework will sustain in the market over the long run. Credit risk is the most established and greatest risk that a bank, by the excellence of its exceptional nature of the business, acquires. That is why; it has gained a greater significance in the recent past for various reasons. Monetary progression is the central tendency of banking sector all over the globe. India is a special case of this swing towards the market-driven economy. This paper evaluates the changes in the capital structure and solvency position of banks by using various risk indicators for highlighting risk profile of Indian Banking entities. The Paper evaluates in detail the risk profile of top five public sector banks and top five private sector banks.*

***Keywords:***

## INTRODUCTION

The banking has become an enterprise of modern economic development. As per the thesaurus, the term bank implies the side of the ocean, a little hill, ashore in the ocean or an archive for money. In economics, a bank implies a store for money of the entire economy **(Kapoor, 2004).**

The banking sector is the central constituent of the financial system. The banking sector is specifically connected to the country's economy; they both complement each other in a matter of development, growth, quality, and status. A strong and flexible banking system is the establishment of sustainable economic development. The reason for proficient banking is effortlessness in activities in light of successful risk management, transparency, and accountability. Trust and certainty are the core elements of banking.

The risk is the component of uncertainty or the possibility of loss that may occur any business transaction anywhere, in any mode and anytime. Credit risk is the probability that a borrower will neglect to meet concurred commitments. All around, over half of the aggregate risk components in Banks and Financial Institution (FI) s are credit risk alone. Thus managing credit risk for productive management of an FI has gradually turned into the most crucial task. Credit risk management encompasses identification, estimation, coordinating alleviations, observing and control of the credit risk exposures.

Credit risk management is the act of mitigating losses by understanding the abundance of a bank's capital and the probability of loan loss reserves at a given time – a procedure that has for some time been a test for financial institutions. Considering the more rigorous administrative necessities and assimilating the higher capital expenses for credit risk, numerous banks are redesigning their ways to deal with credit risk. However, the banks that find this as entirely a consistency practice are considered as impractical. Better credit risk management additionally shows a chance to incredibly enhance overall performance and secure a competitive advantage.

The objective of credit risk management is to maximize a bank's risk-balanced rate of return by maintaining credit risk presentation within worthy parameters. Banks need to deal with the credit risk indisputable in the whole portfolio and in addition the risk in individual credits or exchanges. Similarly, banks need to consider the connections between credit risk and other risks. The effective management of credit risk is a basic segment of a complete way to deal with risk management and indispensable to the long-term achievement of any banking association.

The worldwide financial crisis and the credit crisis are the part of credit risk management in the administrative spotlight. Therefore, controllers started to request for more transparency. They need to realize that a bank has comprehensive information of customers and their related credit risk. Also, new Basel III controls will make a much greater regulatory burden for banks.

**NPA**

Banks most of the time does not classify loans as nonperforming after 90 days of failure to pay interest or principal, which can happen amid the term of the loan or for inability to pay foremost due at maturity. A loan can likewise be classified as nonperforming if an organization makes all intrigue installments, however, can't reimburse the principal at maturity.

NPA is a ratio, in the same way as other different ratios, which enlightens the outsiders about a bank. By simply knowing the value of the ratio, an investor who doesn't have the advantage of insight in the everyday affairs of a company can rate the quality of a bank regarding its ability to do business.

**The Effects of NPAs**

Carrying nonperforming assets additionally alluded to as nonperforming loans, on the balance sheet places three clearly identifiable burdens on lenders. The delinquency of premium or principal reduces cash flow for the lender, which can disrupt budgets and decrease earnings. Loan disrupts arrangements, which are put aside to cover potential misfortunes, lessen the capital accessible to give ensuing loans. Once the genuine unpaid amount from defaulted loans is resolved, they are noted down against earnings.

## LITERATURE REVIEW

According to **Singh, 2013**, Effective credit risk management must be a critical component of a bank's overall risk management methodology and is basic to the long-term achievement of any banking association. It turns out to be increasingly critical with a specific end goal to guarantee supportable benefits in banks.

The study by **Mitrica, Moga, and Stanculescu (2010)** has displayed a risk analysis for the Romanian Banking system. The investigation was carried with the purpose of prudential guidelines and furthermore from the perspective of Romanian Banking system's introduction to remote assets. The investigation presumed that outside assets were an important source of risk for the banking system in Romania.

According to the investigation of **Basel, 1999** Credit risk management system support the banks to set up a rational procedure for establishing new credit and in addition to the extension to the existing credit. Moreover, these procedures are followed after checking with intensive care, and other proper advances are taken into consideration to control or relieve the risk of connected lending.

As indicated by **Atakelt &Veni, 2015,** Assessing the determinants of credit risk is the foundation for the feasibility of risk management system and practice. Optimal portfolio diversifications, building up an extensive credit restrict system and advance evaluating, along with credit risk management technique, strategy and procedures without a reasonable picture of credit risk drivers are considered simply like driving an auto without having a break and knowing the final destination. Therefore, the achievement and survival of business banks are incredibly relying upon powerful Credit risk management system and practice.

**Greuning and Bratanovic, 2009** Credit risk is a critical risk zone in the banking business. If not effectively supervised and administered, it causes non-performing assets, decreases a bank's net revenues, disintegrates capital and in extraordinary cases, may result in a prompt bank failure. Credit risk management accordingly must be an essential banking process to work on, including distinguishing proof, estimation, accumulation, and control and nonstop checking of credit risk.

The advantages of implementing better risk management prompted better banks performance. Better bank performance expands their reputation and impression to public or market perspective. The banks additionally get more chances to build the beneficial resources, prompting higher bank productivity, liquidity, and solvency for better functioning. **(Eduardus et al., 2007).**

According to the **Kolapo, Ayeni, and Oke, 2012**, Among different risks experienced by banks, credit risk plays an essential role on banks' financial performance since a substantial amount of banks' income is collected from advances through which interest margin is inferred.

**Bagchi (2003)** analyzed and studied the credit risk management in banks. He analyzed risk identification, risk estimation, risk checking, and risk control and risk review as essential aspects to be contemplated for credit risk management for better performance and functioning of banks.

**Muninarayanappa and Nirmala (2004)** designed the idea of credit risk management in banks. They featured the goals and elements that decide the system of bank's strategies on credit risk management. The difficulties identified with internal and external factors in credit risk management are also highlighted. They concluded that achievement of credit risk management requires the maintenance of proper credit risk environment, credit procedure, and strategies. In this way, a definitive point is required to secure and enhance the loan quality.

**Kumar and Koteshwar (2006),** in their investigation, to assess the credit risk management they reviewed the Broadway sector of banks means the private sector banks, in view of essential information, revealed some intriguing viewpoints about the credit risk management practices of business banks in India viz; More well-known credit assessment strategies like Altman' s Z score demonstrate, J.P. Morgan credit framework, Zeta examination didn't discover a role of credit evaluation toolbox of the commercial banks in India. Employees are not given sufficient training to upgrade their theoretical comprehension of credit risk and enhance their abilities in dealing with it. The usage given by data innovation to effective credit risk organization isn't efficiently bridled by business banks in India, especially in public sector banks. The accessibility of far-reaching information for credit assessment is a long way from refined in commercial banks in India.

## OBJECTIVE OF THE STUDY

- ☞ To analyze the risk factors of selected public and private sector banks.
- ☞ To analyze which type of credit risk management using by banks.
- ☞ To analyze that which bank have higher credit risk.

## DATA COLLECTION

This examination depends on secondary data. The required information for this investigation was collected from the different sources like month to month RBI bulletins published by RBI, Govt. of India, Reports published by National Institute of Bank Management, Annual reports of different banks, publications and notices of RBI, Reports distributed by Indian Bank Association(IBA) and various websites like money-control, ace-equity, ndtv-profit and so on.

### Current Risk Status of Banks in India

Indian banks, as a matter of fact, do not suffer from situation/position of the dangerous capital structure. The Basel III norms have stipulated minimum leverage ratio (percentage of a minimum of Tier I, capital to Total Assets ratio). Based on the Basel III norms following are indicators of the current leverage position of all public and private sector banks operating in India;

**Table 1:- As per Basel III**

| Bank | Bank name | Head | 2015 (consolidated) | 2016 (consolidated) |
|---|---|---|---|---|
| **Private sector banks:-** | ICICI Bank | Tier (CET1) | 8.0% | 12.93% |
| | | Tier 1 | 12.09% | 13.13% |
| | | Total CAR | 16.17% | 16.60% |
| | HDFC | Tier (CET1) | 15.72 | 13.18 |
| | | Tier 1 | 12.85 | 13.19 |
| | | Total CAR | 15.72 | 15.45 |
| | Axis Bank | Tier (CET1) | 12.14 | 12.56 |
| | | Tier 1 | 12.14 | 12.62 |
| | | Total CAR | 15.20 | 15.41 |
| | Yes Bank | Tier (CET1) | 11.0 | 10.3 |
| | | Tier 1 | 11.5 | 10.8 |
| | | Total CAR | 15.6 | 16.5 |
| | Federal Bank | Tier (CET1) | 14.28 | 13.66 |
| | | Tier 1 | 14.28 | 13.66 |
| | | Total CAR | 14.96 | 14.27 |

**Source:- Basel IIIPillar3disclosures**

Above table indicates that the total CAR (Capital Adequacy Ratio) that ICICI Bank is maintaining is highest among all the top five private sector banks followed by Yes Bank. Least ratio is that federal bank. The maximum negative change or fall in the CAR is reported by the Federal Bank and maximum positive change in the CAR (indicating rise/increase in CAR) is reported by the Yes Bank.

Above table also indicates that the Tier I Ratio that federal bank is maintaining is highest among all the top five private sector banks followed by HDFC bank. The least ratio is that Yes Bank. Maximum negative change or fall in Tier I is reported by the Federal Bank and maximum positive change in the Tier I ratio (indicating rise/increase in CAR) is reported by the ICICI Bank.

**Table 2:- As per the Basel III**

| Bank | Bank name | Head | 2015 (consolidated) | 2016 (consolidated) |
|---|---|---|---|---|
| **Public sector banks:-** | SBI Group | Tier (CET1) | 9.13 | 9.67 |
| | | Tier 1 | 9.49 | 9.87 |
| | | Total CAR | 12.00 | 12.92 |
| | Bank of Baroda | Tier (CET1) | 9.80 | 10.70 |
| | | Tier 1 | 10.35 | 11.22 |
| | | Total CAR | 10.35 | 13.54 |
| | Punjab National Bank (group) | Tier (CET1) | 9.14 | 8.48 |
| | | Tier 1 | 9.67 | 10.16 |
| | | Total CAR | 12.89 | 13.15 |
| | Union Bank of India | Tier (CET1) | 7.45 | 7.68 |
| | | Tier 1 | 7.70 | 8.51 |
| | | Total CAR | 10.30 | 11.36 |
| | IDBI Bank | Tier (CET1) | | |
| | | Tier 1 | | |
| | | Total CAR | | |

**Source:- Basel IIIPillar3disclosures**

Among the public sector banks highest CAR (Capital Adequacy Ratio) is being reported by Bank of Baroda followed by Punjab national bank and then State Bank of India. Least CAR (Capital Adequacy Ratio) is being reported by union bank of India. All public sector banks except for Punjab National Bank have reported rise in the Capital Adequacy Ratio.

Among the top five public sector banks highest Tier I Ratio is being reported by Bank of Baroda followed by Punjab National Bank. Least Tier I Ratio is being reported by Union Bank of India. It emerges that public sector banks need to further build up their Tier I capital position in comparison to leading private sector banks like ICICI, HDFC, AXIS etc.

**RISK ANALYSIS OF SELECTED BANKS PUBLIC SECTOR AND PRIVATE SECTOR BANKS IN INDIA:**

For the present study, top five private sector banks (in terms of revenue) were selected along with top five (again in terms of revenue) public sector banks and were evaluated on the basis of various risk parameters like Gross NPA's to Gross Advances, Net NPA's to Net Advances. The top five private sector banks selected for the study are ICICI Bank, HDFC, Axis Bank, Yes Bank, Federal Bank; the top five public sector banks selected for the study are SBI, Bank of Baroda, Punjab National Bank and Union Bank of India and IDBI Bank.

**RISK ANALYSIS OF PRIVATE SECTOR BANKS:**

Risk analysis of private sector bank on risk parameters like Gross NPA's to Gross Advances, Net NPA's to Net Advances are as follow:

**Table 3:- Gross NPA**

| Bank Name | 2016 | 2015 | Year on Year Change |
|---|---|---|---|
| ICICI Bank | **26,221.25** | **15094.69** | **11126.56** |
| HDFC | **4392.83** | **3438.38** | **954.45** |
| Axis Bank | **6087.51** | **4,110.19** | **1977.32** |
| Yes Bank | **748.96** | **313.40** | **433.56** |
| Federal Bank | **1667.77** | **1057.73** | **610.04** |

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The table 3 above indicates that on the basis of Gross NPA position to Gross Advances it can be stated that ICICI Bank has highest NPA's among the top five private sector banks as mentioned in the table followed by ICICI Bank. A banking entity with least ratio of Gross NPA's to Gross Advances is Yes Bank among the five chosen banks for the present study.

**Table 4:- Net NPA**

| Bank Name | 2016 | 2015 | Year on Year Change |
|---|---|---|---|
| ICICI Bank | **13,296.75** | **6,255.53** | **7041.22** |
| HDFC | **1320.37** | **896.28** | **424.09** |
| Axis Bank | **2522.14** | **1316.71** | **1205.43** |
| Yes Bank | **284.47** | **87.72** | **196.75** |
| Federal Bank | **950.01** | **373.27** | **576.74** |

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The above table 4 indicates that on the basis of Net NPA position to Net Advances it can be stated that ICICI Bank has highest NPA's among the top five private sector banks (2016) followed by Axis Bank. A banking entity with least ratio of Gross NPA's to Gross Advances is Yes Bank as stated above.

**OVERALL RISK ANALYSIS OF THE SELECTED PRIVATE SECTOR BANKS –**

Through the study of private sector banks, it is clear that ICICI Bank is holding high risk in spite of not having large-scale operations. This is being stated on account of its high Gross NPA's to Gross Advances and Net NPA's to Net Advances.

It also indicates that there is substantial risk associated with ICICI Bank on account of its Gross NPA's to Gross Advances. Such risk is also high in case of Axis Bank. However, at the same times, it appears that ICICI Bank also has high CAR (Capital Adequacy Ratio). This ration is highest among all the public sector and private sector banks selected for the study. Yes Bank is also building up its Capital Adequacy ratio and HDFC bank build up its Tier I ratio.

**Public Sector Banks –**

**Table 5:- Gross NPA**

| Bank Name | 2016 | 2015 | Year on Year Change |
|---|---|---|---|
| SBI | **98,172.80** | **56725.00** | **41447.8** |
| Bank of Baroda | **40,521.04** | **16,261.44** | **24259.6** |
| Punjab National Bank | **55818.33** | **25,694.86** | **30123.47** |
| Union Bank of India | **24,170.89** | **13,030.87** | **11140.02** |
| IDBI Bank | **24,875.07** | **12,684.97** | **12190.1** |

The above table 5 indicates that in the public sector banks, highest Gross NPA's to Gross Advances has been shown by State Bank of India followed by Punjab National Bank. Least Gross NPA's to Gross Advances is being reported by Union Bank of India.

**Table 6:- Net NPA**

| Bank Name | 2016 | 2015 | Year on Year Change |
|---|---|---|---|
| SBI | **55807.02** | **27590.58** | **28216.44** |
| Bank of Baroda | **19006.33** | **21806.16** | **2799.83** |
| Punjab National Bank | **15397** | **35423** | **(20026)** |
| Union Bank of India | **14,025.94** | **6,918.97** | **7106.97** |
| IDBI Bank | **14643.39** | **5992.52** | **8650.87** |

The table above 6 shows that among the public sector banks highest Net NPA's to Net Advances has been shown by State Bank of India followed by IDBI bank. Least Net NPA's to Net Advances is being reported by Bank of Baroda and PNB has no such credit risk.

**OVERALL RISK ANALYSIS OF THE SELECTED PUBLIC SECTOR BANKS –**

Among the top five Public sector Banks, State Bank of India at present seems to hold maximum risk. Though the Gross NPA's to Gross Advances as reported by union bank of India is low but at the same time, it has been noticed that it is increasing rapidly year by year. State Bank of India in spite of its substantial scale appears to be quiet sound and it exhibits high credit risk. Moreover, it needs to build up its Capital Adequacy Ratio and control its NPA's.

If a bank has high NPA, it tells the market (read investors) that that specific bank's large number of investment choices have gone bad. A high NPA thinks about seriously the ability of the management (CEO and so on.) of that bank. A bank with lower NPA is better than a bank with higher NPA. What's more, thus the negative implication with NPA in the managing a banking industry **(www.quora.com).**

Presently, banks have been hit hard by NPA. This has decreased profit; indeed, numerous are in loss. Thus, it likewise hits their reserve and Capital. This additionally implies they will have difficulty in meeting Basel III norms.

**Key Finding:** Through the above analysis, it has been found that

- ✓ The risk in public sector banks is higher than that of private sector banks.
- ✓ Most of the public sector banks have shown an increase in the Non-Performing Assets (Both Gross as well as Net) in the last one year.
- ✓ Among the public sector banks, State Bank of India has shown highest nonperforming assets risk.
- ✓ Among the private sector banks, ICICI bank indicates higher risk.
- ✓ All public sector banks need to work on enhancing their Capital Adequacy Ratio.
- ✓ Even the large private sector banks need to further build up their capital base to face any eventuality of credit risk.

## CONCLUSION

The objective of this examination was to evaluate how private banks vary from public banks as far as risk management is concerned. Better credit risk management brings about better bank performance. Consequently, it was of vital significance that banks practiced prudent credit risk management and safeguarding the assets of the banks and secured the investors' interests. The banks which are confronting low competitiveness on credit risk management and positive changes in profitability need to enhance their credit risk management to keep up high productivity. Notwithstanding, it needs to develop its capital ampleness proportion and control its non-performing resources. The poor credit risk management influences bank disappointments in India. In this way, credit risk management is essential in banks and as it enables them to enhance their execution and counteract bank distress.

## RECOMMENDATIONS

- The public sector banks are expected to successfully utilize innovation to counter the difficulties experienced and faced by the private sector banks, particularly in the retail business. Better customer services supported by predominant innovation and the absence of conventional systems have empowered the private sector banks to select a section of the entire industry from the public sector banks.
- Banks should make endeavors to embrace the new advancements keeping in mind the final goal to enhance their customers' service level and provide them with new convenience. The accomplishment of these activities will provide a new direction to the banks to sustain their market position.
- Banks required providing training to the employee to upgrade their ability and looking into the ampleness of credit training throughout.

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