

# Soundness Indicators of Public & Private sector Banks: a Comparative Study

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*Financial Crisis 2008-09 ascertained the connotation of bank performance in national as well as international economies. Thus, falling short of managing capital standards has received a great deal of consideration from regulators and researchers to maintain the capital adequacy requirements. Maintaining capital adequacy and asset quality are two important soundness indicators of banks. In this paper we analyse and compare the status of capital adequacy ratio in the light of Basel Norms of selected Public and Private Sector Banks in India from 2006-2014, and also assess the quality of assets by examining the ratio of Gross Non Performing Assets of banks. We find that all the Public and Private Sector Banks are maintaining the prescribed norm of CRAR by RBI i.e. 9% and BCBS i.e. 8%. Category wise CRAR of Private Sector Banks is much higher than Public Sector Banks. Public Sector Banks pose poor quality of assets as their NPAs show increasing trend. Contrarily Private sector Banks demonstrate less credit defaults.*

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**Keywords:** CRAR (Capital Adequacy Ratio), Gross NPAs, Soundness Indicators, Public and Private Sector Banks.

## INTRODUCTION

The banking system of an economy is the fuel injection system which stimulates the economic proficiency by mobilizing saving to investment channels. It acts as a bridge between savers and borrowers and to accomplish all tasks concerned with the profitable and secure channelizing of funds. Banking Sector being one of the leveraged sectors of an economy faces high risks. Risk Management i.e. trade off between risk and return in the banking sector is a vital issue linked to financial system stability. Financial crisis 2008 established the connotation of bank performance in national as well as international

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economies. Thus, failure of managing capital standards has received a great deal of consideration from regulators and researchers to maintain the capital adequacy requirements. Over the past years, the bank regulators have introduced a number of measures to link the regulation and supervision of commercial banks to the level of risk and financial viability (Aspal & Nazneen, 2014). Not only the Capital Adequacy is the benchmark or Soundness Indicator of Banks but quality of assets held by banks is extremely important for the banks, as it is the guiding factor in the decisions related to the incremental credit disbursement. Nevertheless, the survival and growth of the banks crucially depends upon the size of the balance sheet as well as asset quality since the assets are the major source of income and life-line for the banks. The major deteriorating factor in asset quality is Non Performing Assets which are accelerating at high pace. NPAs have a detrimental effect on Return on Assets in many ways like current profits through provisioning requirements are gradually reduced and also the interest income decreases. NPAs precipitate the Credit risk, they restrain the recycling of funds and hence the asset quality mismatch.

## **1.1 Soundness Indicators of Banks**

### **1.1.1 Capital Adequacy**

#### **1.1.2 Asset Quality – Level of NPAs**

##### **1.1.1 Capital Adequacy:**

Ever since the introduction of Basel Norms in 1988, Capital Adequacy ratio has turned out to be an imperative parameter to assess the financial strength and soundness of banks. The capital adequacy requirement and risk constraints were pointed out by Narasimham Committee on Financial Sector Reforms (1991) which proposed the concept of Risk Management in India through devising necessary prudential norms by RBI. The Basel I Capital Accord in 1988 focused on reducing credit risk, prescribing a minimum capital to risk adjusted ratio (CRAR) of 8% to the Risk Weighted Assets. Reserve Bank of India has always taken a conservative view and setup Capital Adequacy Standards higher than international standards.

Basel Committee on Banking Supervision (BCBS) in Basel II Accord in 2004 stressed on 8% of CAR of Risk Weighted Assets but RBI has set a standard of maintaining 9% CRAR in comparison to minimum 8% CRAR for Indian Banks. Basel III also walked upon the same lines. Advent of Basel III is the corollary of Financial Crisis of 2008 in U. S and aimed at promoting a more resilient Banking Sector. In contrast to Basel II the minimum capital requirement has been unchanged i.e. 9% according to RBI of Risk Weighted

Assets but Capital Conservation Buffer of 2.5% of Risk Weighted Assets over and above the minimum capital requirement has been introduced. Capital Adequacy Ratio is arrived at by dividing the sum of Tier I and Tier II capital by aggregate of Risk Weighted Assets (RWA) symbolically.

$CAR/CRAR = \frac{\text{Capital Funds (Tier I Capital + Tier II Capital)}}{RWA} \times 100$

- **Tier I Capital:-**

Tier I capital (core capital) is the most reliable form of capital. The major components of Tier I capital are - paid up equity share capital and disclosed reserves viz. statutory reserves, general reserves, capital reserves (other than revaluation reserves) and any other type of instrument notified, by the RBI as and when for inclusion in Tier I capital, Examples of Tier I capital are common stock, preferred stock that is irredeemable and non cumulative, and retained earnings (Pasha & Swamy, 2012).

- **Tier II Capital:-**

Tier II capital (supplementary capital) consists many of undisclosed reserves, revaluation reserves, general provisions, subordinated debt, and hybrid instruments. This capital is less permanent in nature. The reason for holding capital is that it should provide protection against unexpected losses. This is different from expected losses for which provisions are made (Pasha & Swami, 2102).

- **Risk Weighted Assets:-**

Funded Risk Assets i.e., On Balance Sheet items and Non – Funded Risk Assets, i.e., Off Balance Sheet items are ranked from less risky to more risky categories. BIS (Bank of International Settlements) has prescribed five categories of risk weights viz., 0,10,20,50,100. The higher the risk, greater the weightage. Funded Risk Assets are those appearing in the balance sheet excluding equity investments in subsidiaries and intangible assets and losses. Non- funded are contingent liabilities viz., guarantees, letters of credit, forward exchange contract, etc (Nathwani, 2004).

### 1.1.2 Asset Quality

Level of NPAs: In banking terminology, assets of a bank include all the different types of loans that it gives to borrowers and other investments

made by the bank in relatively risk - free instruments such as government bonds, corporate bonds, etc.

The trouble of managing NPA is not only distressing the banks but also the whole economy. The term asset quality implies the quality of loans that a bank has given out. A bank is said to have good asset quality assets if loans given out by it are repaid on time. Bad quality assets include loans that are not being paid on time. An important measure of the asset quality is the metric Non Performing Assets (NPAs). Now a days Non Performing Assets are the foremost concern for Indian Banks. A high level of NPA leads to a large number of credit defaults that affect the net worth and profitability of banks and also wear down the value of the asset. Today managing NPAs has become a challenge for Financial Companies and Institutions. At a glance, we may come to know that Public Sector Banks in the year 1995 faced Rs.38385 crore NPAs and in the year 2011 it reached up to Rs.71047 crore. Private Sector banks have strict control and their NPAs are less than Public Sector Banks, in the year 1995 NPAs of Private Sector Banks were Rs.6410 crore and Rs.17972 crore in the year 2011 respectively. As per Narasimham Committee Report, it is mandatory for Banks to identify and reduce the NPAs and their treatment should be taken as national priority because they lead to Credit risk directly which banks face.

### 1.2.1 Rationale of NPAs

#### Non Performing Assets:

An asset becomes non performing when it ceases to generate income from a bank. The reason for calling it non performing, is that it does not bring copious income to its owner. With effect from 31st March, 2004 an NPA shall be a loan or an advance where,

- Principal amount and/or interest remain unpaid or overdue for a period of more than 90 days in respect of term loan.
- In case of overdraft/cash credit the account remains out of order for a period of more than 90 days.
- In respect of Bills purchased and discounted the bill remains overdue for a period of more than 90 days.
- A loan granted for short duration crops will be treated as NPA if the installment of principal or interest thereon remains overdue for two crop's seasons, but for long duration crops principal or interest remains overdue for one crop season.

Reserve Bank of India's prudential norms recommended that a bank cannot book interest on an NPA on accrual basis. In other words such interests can be booked only when it has been actually received.

### 1.2.2 Gross NPA vs. Net NPA

Gross NPA is advance which is considered irrecoverable, for which bank has made provisions, and which is still held in banks' books of accounts.

Net NPA is obtained by deducting items like interest due but not recovered, part payment received and kept in suspense account from Gross NPA (Satpal, 2014).

### 1.2.3 Asset Classification

- (a) Standard Assets- Standard assets are the category of loan accounts, which does not pose any problems and does not carry normal risk attached to the business. If the assets fail to be in the category of standard asset, that is, amount due for more than 90 days then it is to be called as NPA. Following are the three categories of NPAs based on the period for which the asset has remained non performing and the reliability of the dues:
- (b) Sub - Standard Assets- With effect from 31st March, 2005 a sub standard asset is one, which has remained NPA for a period less than or equal to 12 months.
- (c) Doubtful Assets- an asset is classified as doubtful if it remained in the sub standard category for 12 months with effect from 31st March, 2005.
- (d) Loss Assets- A loss asset is one which is of such small value that its continuance as a bankable assets is not warranted – although there may be some salvage or recovery value and which is considered uncollectible. Also banks' internal and external Auditors have identified these assets as loss assets or the RBI inspection, but the amount would not have been written off wholly.

### 1.2.4 Reasons for Accelerating NPAs

As per RBI records Gross NPA ratio of Public Sector Banks raised from 2.10 to 3.84 for the period 2008-09 to 2012-2013. Whereas Private Sector Banks successfully reduced their Gross NPA ratio from 3.25 to 1.1 for the period 2008-09 to 2012-13 respectively.

$$\text{Gross NPA Ratio} = (\text{Gross NPA} / \text{Gross Advances}) \times 100$$

These NPAs are growing due to Internal and External factors.

### **Internal Factors**

- **Defective Lending Process and Poor Credit Appraisal:** There are deficiencies on the part of the banks in defective lending process, strictly relying on three cardinal principles of Safety, Liquidity and Profitability. Poor credit appraisal is the other crucial factor for rise in NPAs.
- **Improper selection of the Borrowers:** Banks generally provide unsecured advances to the borrowers depending on honesty, integrity, financial soundness, paying capacity and credit worthiness. Lack of knowledge and improper SWOT analysis escort to improper selection of borrowers.
- **Inappropriate Technology:** MIS (Management Information System) and Financial Accounting system is not implemented thoroughly in banks which result to poor credit collection, thus NPAs.
- **Absence of regular Industrial Visit:** Bank Officials should regularly visit the customer point for the collection of loan amount and interest. Psychologically it creates the pressure in the minds of the borrowers to return the money.

### **External Factors**

- **Willful Defaults :** Today borrowers are in the practice of intentionally not paying the loan and interest amount. Banks should take strict but ethical measures against that type of borrowers so that loans and advances could be recovered.
- **Natural Calamities :** Every now and then India is hit by major natural calamities like drought, floods and tsunamis making the borrower (Priority Sector and Non Priority Sector) incapable to pay their loans.
- **Sickness of Industries :** Ineffective Management, lack of contemporary technology, deprivation of inadequate resources, improper project handling and changing of Government Policies give birth to sickness of industries. High infant mortality rate due to inexperience in industries is also a major contributing factor for the sickness of industry.
- **Demand and Supply Mismatch :** Improper demand and supply prediction by Entrepreneurs in India leads to piling up the products in factories and stores, due to losses the borrowers are unable to pay back money to Banks.

The level of NPAs should be controlled timely because it impacts the performance and profitability of Banks, further the below mentioned points should be considered.

- **Presence of NPAs indicates adverse asset quality of the Balance Sheet.**

- NPAs reduce the earning capacity of assets & badly affect the ROI.
- It will lead to widen the Asset – Liability mismatch.
- NPAs require provisioning which creates implication with respect to maintaining high capital adequacy ratio by banks.
- Declining CAR adversely affects shareholders value and restricts the ability of the bank to access the capital market for additional equity to increase capital adequacy.
- It affects the risk facing capability of banks.

## 2. REVIEW OF LITERATURE

Following is the review of literature pertaining to Soundness Indicators of Banks.

- Reynolds et al (2000), in their study “Bank Financial Structure in Pre – crisis East and South East Asia” studied financial structure and bank performance using dependent variables namely – capital adequacy, liquidity , profitability and loan preference were regresses to structural variables namely- bank assets, net income, administrative expenses and time. They concluded that profitability and loan preference increase with the size, but capital adequacy decreases with size, so large banks have smaller adequacy ratios and profit is directly related to capital adequacy.
- Bidani (2002), in his book titled “Managing Non Performing Assets in Banks” highlighted that banks are concerned with their heavy NPA (Non Performing Assets) portfolio. Banks have achieved a reasonable degree of success to bring down their current NPAs but due to heavy slippage of standard accounts to NPA category the overall position continues to deteriorate. The main reasons are - slump in capital market, slow economic and industrial growth, financial indiscipline, willful defaults by the borrowers, slow judiciary, competition faced by the local industry from the MNCs, lack of support to the borrowers from the bank at the time of the need. The author has also made an attempt to deal with the practical aspects of the problem of management of NPAs right from the identification stage till recovery of the dues including other aspects connected with the subject like asset classification, assessment of provision, pre sanction appraisal and post sanction appraisal and supervision, monitoring system for existing and likely NPAs, Capital Adequacy, reduction of NPAs, rehabilitation of sick non performing units.

- Batra (2003), in his research article “Maximising Value of Non Performing Assets” observed higher level of NPAs in Indian Banking. He expressed that the most significant implication of the NPAs is that, it leads to the Credit Risk Management assuming priority over other aspects of bank’s functioning. The bank’s whole machinery is pre occupied with recovery procedures rather than concentrating on expanding the business. The author recommended that along with the recovery of NPA accounts, fresh inflows of NPA should be brought down at a level much less than the quantum of its exit.
- Reddy & Mallikarjuna (2003), in their research paper “NPAs: Threat to Financial stability” confirmed that financial stability is an essential prerequisite for sustainable long term growth of the country. Banking system being the largest component of financial system should take care to vaccinate itself from the macroeconomic shocks through maintaining optimal and quality asset portfolios to achieve the objective of smooth flow of funds into the most economic channels. NPAs are posing a serious threat to this objective of the banking system. They propounded that micro and macro level reforms and adherence to cleaner practices on the part of the banks, regulators, borrowers and government will enable the system to reduce the NPAs overhang and let financial system be an essential adjunct for economic growth.
- Mohan & Rakesh (2004), in their descriptive study on “Management of Non Performing Assets in Institutional Agencies” pointed out the crucial role played by the Prudential Norms in the management of NPA of Commercial Banks. They stressed on strengthening the Debt Recovery Tribunals (DRTs) to deal with defaulters diligently.
- Rekha and Kumar (2005), in their case “Risk Management in Commercial banks – A Case Study of Public and Private sector Banks” examined credit risk management practices, Non Performing Assets and Risk based supervision in the light of Basel Norms between Public and Private sector Banks. The period of the study is 1994-2003. They explained that 70% of the risk is from credit risk, market risk and operational risks cover the remaining 30%. They recommended that better portfolio equilibrium, establishing risk management information system, redesigning the internal rating system and early warning signals can be better management methods for handling risks. .
- Arvanam & Vijaykumar (2007), in their study “Impact of NPAs on Performance of Banks” explained the impact of NPAs on the performance of banks using statistical data for the period 2000-01 to 2005-06. They observed that the levels of NPA are a critical indicator for assessing



banks' credit risk, asset quality and efficiency in allocation of resources to productive sectors. Based on the analysis, they recommended improvements in credit appraisal systems of the banks.

- Fifiack (2008), in his research paper "Non Performing Loans in Sub Saharan Africa: Causal Analysis & Micro Economic Implications" investigated the leading causes of NPAs during the economic and banking crisis in the 1990s. Using correlation and causality data analysis based on data drawn from 16 African Countries for the period 1993-2002, the study highlighted strong causality between loans and economic growth, real exchange rate appreciation, the real interest rate, net interest margins and interbank loans. They concluded that macroeconomic stability and economic growth are associated with a declining level of NPA, where as adverse macroeconomic shocks coupled with the higher cost of capital and lower interest margins are associated with a rising scope of NPA.
- Makesh (2008), in his research paper "Financial Performance Analysis of Commercial banks: A comparison of Federal bank, Dhanalaxmi Bank and SBI" assessed the financial management practices of Federal Bank and Dhanlakshmi Bank, along with SBI, for the financial year 2006-2007. He evaluated that all the three banks maintained capital in excess of stipulated norms of RBI. Federal Bank had the lowest NPA Ratio to net advances and had the maximum return on equity. Dhanalakasmi Bank maintained a very high liquidity. But Federal Bank performed well in cost management, as compared to the SBI and Dhanalakshmi Bank.
- Rao and Tiwari (2009), in their study "Efficiency Indicators of Commercial Banks in Liberalized Environment in India" discussed about the banks that they are paying more attention to their cash trade and treasury business. They summed up that all the top rated banks have succeeded in reducing their Non Performing Assets by around 65% to 100% and growth in business is 24-41%. The study enabled to identify efficiency factors affecting the banks individually as well as an industry.
- Singh & Vyas (2009), in their research paper titled "Capital Adequacy & Scheduled Commercial Banks in India" given the importance to one of the Banking Regulations i.e. Capital to Risk Weighted Asset Ratio (CRAR). They attempted to analyse the Capital to Risk Weighted Assets ratio for Public, Private and Foreign Banks for the period 1996 – 1997 to 2006-07. They described that in India, the average CRAR of Foreign Banks group operating in India is the highest during the period of the study.

- Ayyappan & Ramachandran (2011), in their study “Credit Risk Determinants of Public and Private Sector Banks in India” analysed 22 Public Sector banks and 15 Private Sector banks to forecast the determinants of the credit risk in the Indian Commercial Banking Sector by using an econometric model. The outcome of the study is that NPAs had a strong and statistically significant positive influence on the current Non Performing Assets. They concluded that the problem of NPA is not only affecting the banks but also the whole economy.
- Chaudhry and Sharma (2011), in their research paper “Performance of Indian Public Sector Banks and Private Sector Banks: A comparative Study” stated that an efficient Management Information System (MIS) should be developed to get rid of NPA problems. The bank staff involved in sanctioning the advances should be trained about the proper documentation, charge of securities and motivated to take measures in preventing advances into Non Performing Assets. Moreover Public Banks must pay attention on their functioning to compete with Private Banks. Banks should be well versed in proper selection of borrowers/projects for taking the huge credit risk. Analysing the financial statements accurately by bank staff for further loans disbursement is also the need of the day.
- Moorthy & Pathi (2013), in their study “Risk Management Learning from past failures” appraised Risk Management in Banking Sector by carrying out an analysis to highlight the NPAs (Non Performing Assets) position of Public and Private Sector Banks for nineteen years. They also focused on Capital Adequacy ratio for a period 2001-2012. The study included that extent of NPA is comparatively higher in Public Sector Banks as compared to Private Sector Banks.
- Aspal and Nazneen (2014), in their study “An Empirical Analysis of Capital Adequacy in the Indian Private Sector Banks” investigated the determinants of capital adequacy ratio in Indian Private sector Banks. They examined whether specific bank performance factors particularly loan, Asset Quality, Management Efficiency, Liquidity and Sensitivity have an impact on capital adequacy requirements among Private Sector Banks of India. The study period is 2008-2012 and multiple regression analysis is applied to explain the effect of explanatory variables. They revealed with the help of regression analysis that Loans, Management Efficiency, Liquidity and Sensitivity have statistically significant influence on the capital adequacy of Indian Private sector Banks. They also concluded that Indian Private Sector banks maintain a higher level of capital requirements than prescribed by Reserve Bank of India. Private

Banks of India have excessive funds to meet their obligation and have opportunity to give more advances to public by protecting owner's stake.

- Das et al (2014), in their paper "Management of NPA via Capital Adequacy Norms: its effect upon the profile of Indian Banks and Credit Deposit ratio" examined the profile of all Scheduled Commercial Banks in all ranges of CRAR overtime in aggregate and bank group specific . They measured degree of correlation of NPA Deposit Ratio with CRAR trends and Credit Deposit Ratio in all ranges of CRAR and their significance levels for the time period 1995-96 to 2009-2010. They observed the rising trend of the proportions of banks in the above 10% range of CRAR. The NPA/D ratio and C-D ratio have been observed to be positively and negatively correlated respectively for the first three ranges of CRAR and reverse in the above 10 % range.

### **3. OBJECTIVES OF THE STUDY:**

The study aims to gain insights into the Soundness Indicators of Public and Private Sector banks.

- To identify and compare the status of Capital Adequacy Ratio in light of Basel Norms of selected Public and Private Sector Banks in India.
- To assess and compare the NPA (GNPA ratio) trends of selected Public and Private Sector banks.

### **4. RESEARCH METHODOLOGY:**

The research works is analytical in nature as it is based on secondary data only. A major portion of data is extracted from Statistical Tables relating to Banks in India, A Profile of Banks – annual publications of RBI. Further, various articles, research papers relating to Risk Management, Capital Adequacy and NPAs published in various journals, magazines and periodicals are concerned. Usage of internet cannot be disregarded. The study is conducted on a period of 8 years, i.e. from 2006-2007 to 2013-2014. For the purpose of the study 10 banks i.e. five Public Sector Banks and five Private Sector Banks, which are chosen on the basis of five year average of gross assets ranging from 2007-2008 to 2011-2012. The Public Sector selected Banks are - State Bank of India, Punjab National Bank, Bank of Baroda, Bank of India and Canara Bank and Private Sector Banks are ICICI Bank, HDFC Bank, Axis Bank, Federal Bank and Jammu & Kashmir Bank.

## 5. ANALYSIS AND INTERPRETATIONS

Table No. 1.1 CRAR of Public Sector Banks (in percentage)

Banks Years	SBI	BOB	PNB	BOI BANK	CAN
2007	12.34	11.8	12.29	11.58	13.5
2008	13.54	12.94	13.46	12.04	13.25
2009	14.25	14.05	14.03	13.01	14.1
2010	13.39	14.36	14.16	12.94	13.43
2011	11.98	14.52	12.42	12.17	15.38
2012	13.86	14.67	12.63	11.95	13.76
2013	12.92	13.3	12.72	11.02	12.4
2014	12.96	12.28	12.11	9.97	10.63
Average	13.15	13.49	12.97	11.83	13.30

Source: compiled from Statistical Tables relating to Banks in India, (various issues), www.rbi.org.in

Fig 1.1: CRAR of Public Sector Banks (in percentage)

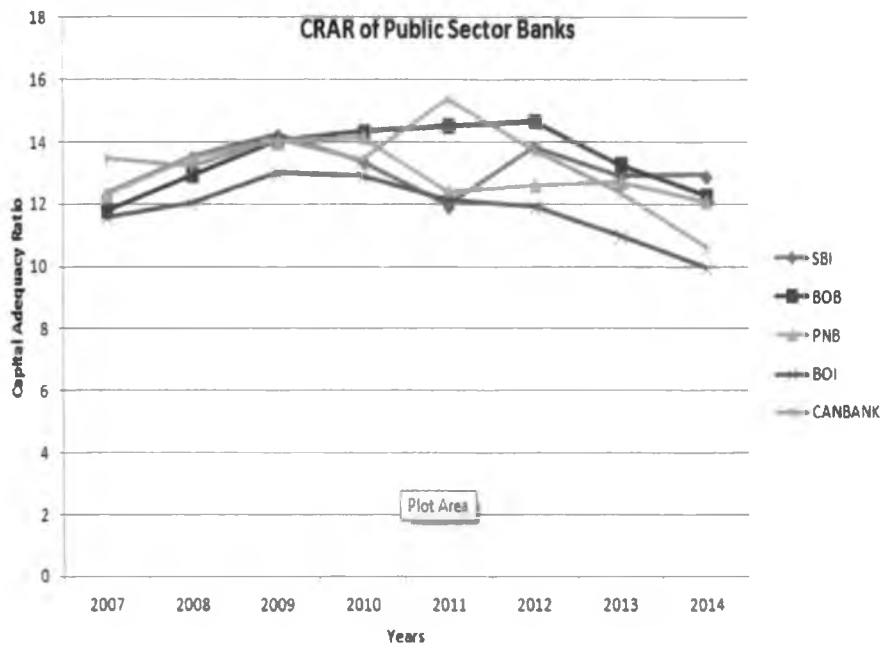


Table 1.1 The perusal of Table No. 1.1 shows that selected Public Sector Banks have achieved CRAR norm of 8% prescribed by BCBS and 9% prescribed by RBI for the year ending from March 2007 to March 2014. Bank of Baroda

has the highest average of 13.49% CRAR from 2007 – 2014 followed by Canara Bank (13.30%), SBI (13.15%) and PNB (12.97%). The average lowest CRAR has been reported by BOI, i.e., 11.83%. State Bank of India has accounted the maximum CRAR in the year 2009 i.e.14.25% and minimum CRAR in the year 2011 i.e.11.98%, While Canara Bank has shown the maximum CRAR in the year 2011(15.38%) and minimum in the year 2014 (10.63%). CRAR of Bank of Baroda is high in the year 2012-14.67% and low in the year 2007-11.8%. PNB and Bank of India have high capital adequacy ratios 14.16% and 13.01% in the years 2010 and 2009 respectively. Their capital adequacy ratio is low in the year 2014; PNB has depicted 12.11% and BOI 9.97%. Over the years 2007-2009 every Public Sector Bank is indicating the increasing trend of CRAR ranging between 11.8%-14.25% due to strong capital cushioning against the backdrop of financial crisis of 2007-08, which was having the nature of Systematic Risk. Well capitalized banks face lower risks, hence all the Public Sector banks pose high capital adequacy ratio. CRAR from the period 2012-2014 is showing the decreasing trend except SBI and PNB (slight increase in two years) due to banks instigation of adoption of Basel III standards. As per RBI- capital requirement for the implementation of Basel III guidelines may be lower during the initial years and higher during the later years.

**Table No. 1.2 CRAR of Private Sector Banks (in percentage)**

<b>Banks Years</b>	<b>SBI</b>	<b>BOB</b>	<b>PNB</b>	<b>BOI BANK</b>	<b>CAN</b>
<b>2007</b>	12.34	11.8	12.29	11.58	13.5
<b>2008</b>	13.54	12.94	13.46	12.04	13.25
<b>2009</b>	14.25	14.05	14.03	13.01	14.1
<b>2010</b>	13.39	14.36	14.16	12.94	13.43
<b>2011</b>	11.98	14.52	12.42	12.17	15.38
<b>2012</b>	13.86	14.67	12.63	11.95	13.76
<b>2013</b>	12.92	13.3	12.72	11.02	12.4
<b>2014</b>	12.96	12.28	12.11	9.97	10.63
<b>Average</b>	<b>13.15</b>	<b>13.49</b>	<b>12.97</b>	<b>11.83</b>	<b>13.30</b>

Source: compiled from Statistical Tables relating to Banks in India, (various issues), [www.rbi.org.in](http://www.rbi.org.in)

Fig 1.2: CRAR of Public Sector Banks (in percentage)

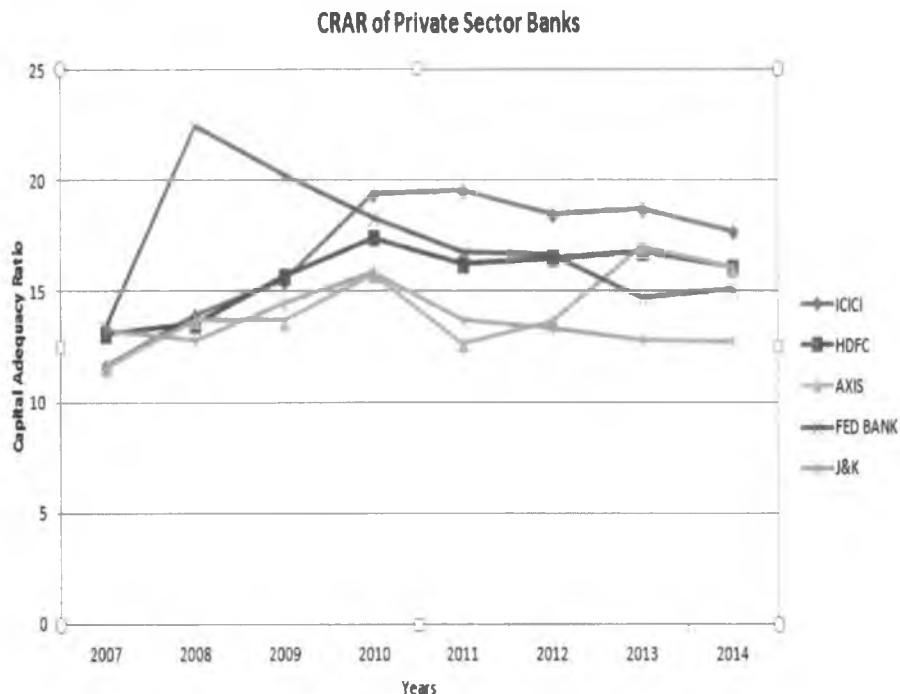


Table No.1.2 (CRAR of Private Sector Banks) shows that selected Private Sector Banks are maintaining the CRAR above the 9% stipulated requirement by RBI from the period March 2007 to March 2014. Federal Bank has the highest average of 17.72% CRAR from 2007 to 2014 followed by ICICI Bank (16.8%), HDFC (15.67%), Axis Bank (14.27%) and Jammu & Kashmir Bank (13.62%). ICICI has reported the maximum CRAR in the year 2011 i.e.19.54% and minimum in the year 2007 i.e.11.69%. HDFC has reported 17.44% the maximum one and 13.6%, the minimum one, CRAR in the year 2010 and 2008 respectively. Maximum CRAR of Axis Bank is in the year 2013 i.e. 17% and minimum is in the year 2007, i.e. 11.57%. Federal Bank has shown maximum CRAR and the highest among all the banks- 22.46% in the year 2008 and it was minimum in the year 2007 – 13.43%. J& K bank's CRAR is utmost in the year 2010 (15.89%) and least in the year 2008 (12.8%). Above stated Private Sector Banks are increasing their capital adequacy ratio over the years 2007 to 2009 (except the slender decline in capital adequacy of Axis Bank) like Public Sector Banks ranging from 11.57% to 22.46% for shielding themselves against the effects of financial crisis. Analysis of CRAR during the period 2012 -2014 portrays lowering of CRAR by Private Sector Banks except Federal bank in the year 2013 & 14. Banks

are lowering their CRAR due to low initial capital requirement by Banks according to Basel III norms.

**Table No. 2.1 GNPA Ratio of Public Sector Banks (% of Gross NPAs to Gross Advances)**

Banks Years	SBI	BOB	PNB	BOI BANK	CAN
2007	2.9	2.5	3.5	2.4	1.5
2008	3	1.8	2.7	1.7	1.3
2009	2.98	1.27	1.77	1.71	1.56
2010	3.28	1.64	1.71	3.31	1.53
2011	3.5	1.62	1.79	2.64	1.47
2012	4.9	1.89	3.15	2.91	1.75
2013	4.75	2.4	4.27	2.99	2.57
2014	5.09	2.99	5.38	3.2	2.51

Source: compiled from Statistical Tables relating to Banks in India, (various issues), www.rbi.org.in

**Fig. 2.1: GNPA Ratio of Public Sector Banks (% of Gross NPAs to Gross Advances)**

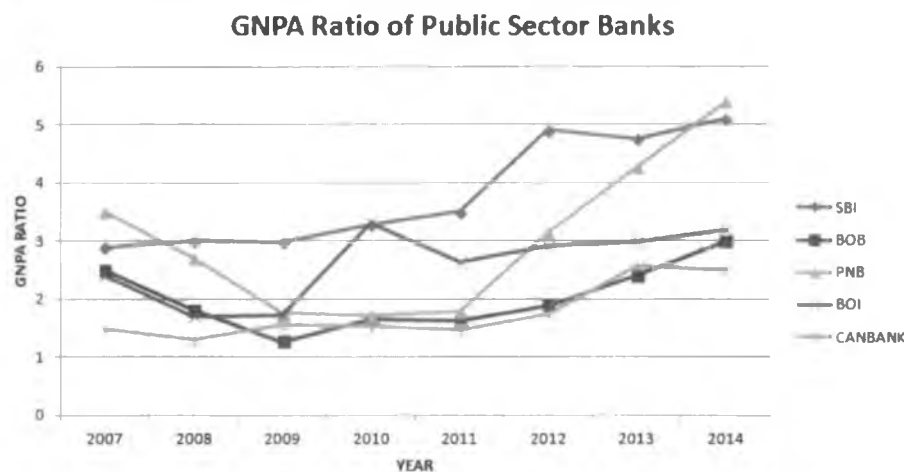


Table No. 2.1 exhibits the trend of Gross Non Performing Assets as a percentage to Gross Advances in Public Sector Banks during last 8 years. It is apparent from the table that asset quality of Public Sector Banks is deteriorating due to large number of credit defaults. It is observed from the table that from 2007-2014, SBI's GNPA ratio has been doubled almost from 2.9% - 5.09%. Bank of Baroda consistently reduced NPAs from 2007 to 2012(2.5% to 1.895) but it has again augmented in the years 2013 & 2014.

PNB's GNPA ratio has reduced from 3.5% to 1.79% during the years 2007-2011 but it has shown the rising trend in the last 3 years of study and rose up to 2.38%. Bank of India has tried to lessen NPAs during initial years but NPAs rose in the year 2010 from 2.4% -3.31 %, again the bank put all his efforts to control the mounting NPAs and successfully reduced NPAs in comparison to the year 2010 but NPAs again shoot up in the year 2014 by some points. Comparatively to all banks Canara Bank has less GNPA ratio, although NPAs have increased from 1.5% – 2.51% during the study period, yet it has the good asset quality. SBI has the highest GNPA ratio among all banks. Even after implementation of prudential norms and serious concern raised by Government about growing size of NPAs Public Sector Banks are paying less attention to these warnings and consequently much addition to bad loans. During the year 2014, every selected Public Sector Bank is showing the high level of GNPA ratio. The rise in NPAs in 2014 has been attributed to the effects of global recession coupled with internal factors such as slowdown in the domestic economy. This has adversely affected the corporate performance leading to a negative impact on credit quality.

**Table No. 2.2. GNPA Ratio of Private Sector Banks**  
(% of Gross NPAs to Gross Advances)

<b>Banks Years</b>	<b>ICICI</b>	<b>HDFC</b>	<b>AXIS</b>	<b>FED Bank BANK</b>	<b>J &amp; k</b>
2007	2.1	6.45	1.1	3	2.9
2008	3.3	1.4	0.8	2.4	2.5
2009	4.32	1.98	1.08	2.57	2.64
2010	6.52	1.44	1.39	2.97	1.97
2011	5.8	1.06	1.28	3.49	1.95
2012	4.83	0.95	1.18	3.35	1.54
2013	3.22	0.85	1.19	3.44	1.62
2014	3.1	0.98	1.36	2.5	1.68

Source: compiled from Statistical Tables relating to Banks in India, (various issues), [www.rbi.org.in](http://www.rbi.org.in)



Fig 2.2: GNPA Ratio of Private Sector Banks (% of Gross NPAs to Gross Advances)

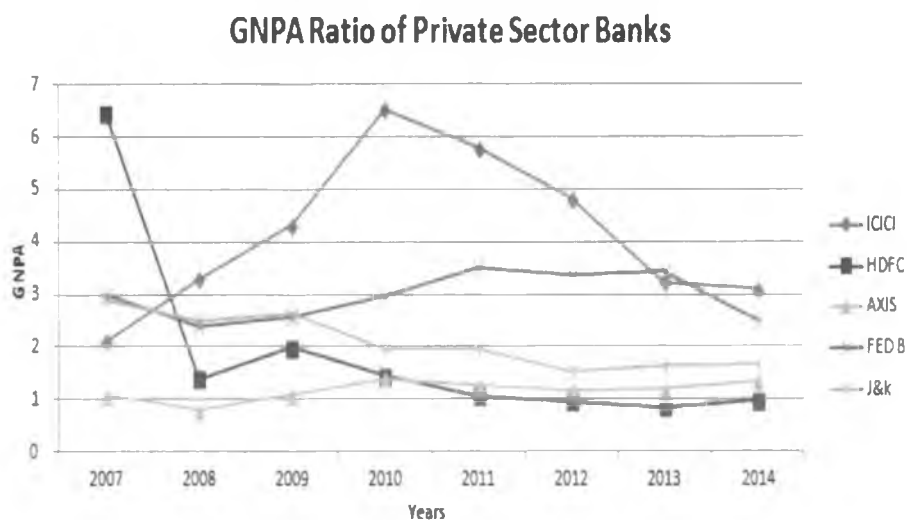


Table No.2.2 illustrates the percentage of Gross Non Performing Assets in Private Sector Banks from the period 2007 to 2014. ICICI Bank has indicated the increase in GNPA ratio from 2.1% - 6.52% during the year 2007-2010, which is highest among all banks, but from the year 2011 to 2014 it has restricted its GNPA ratio and brought down to 3 in 2014. HDFC Bank has the 2nd rank in credit defaults, in the year 2007 the GNPA ratio of bank is 6.45%. But HDFC Bank has successfully dropped its ratio up to 0.98% in the year 2014 and shown the sign of good asset quality. Axis banks has GNPA ratio around 1% among all the years. Initially from 2007-2009 Federal Bank has abridged its Non Performing Assets from 3%- 2.57%. Further it has increased and recently in the year 2014 Federal Bank has brought down the level of NPAs up to 2.5%. Jammu and Kashmir Bank has 2.9% of GNPA ratio of Gross Advances in the year 2007 and percentage of GNPA came down to 1.68 in the year 2014 with the constant and continuous efforts of Bank. ICICI Bank has the poor asset quality with the ratio 6.52% in the year 2010. While HDFC Bank has posed with 6.45% GNPA ratio, the second largest bank in mounting NPAs. Afterwards HDFC Bank has reduced GNPA to 0.98%. In contrast to Public Sector Banks, Private Sector Banks have low NPAs. Federal Bank, J& K Bank, HDFC Bank has decreased their NPA ratio remarkably except ICICI Bank and Axis Bank. The asset quality of Public Sector Banks has worsen in comparison to Private Sector banks as big ticket corporate loans form a larger share of credit portfolio of Public Sector Banks. The five sectors- Infrastructure, Steel, Textiles, Aviation and

Mining- where PSBs have large exposure, have contributed to the big rise in NPAs.

## 6. CONCLUSION

In this paper, we try to analyse and compare the status of capital adequacy ratio of selected Public and Private Sector Banks in the light of Basel Norms, and whether the assets have good quality or bad of both the categories. Capital adequacy is the crucial constraint for judging the soundness of banks as it can absorb the unforeseen losses easily and their cost of funding is trimmed down and improve the profitability of banks. We have found that Indian Banks are successfully maintaining the capital adequacy above the stipulated level of 9% by RBI and 8% by BCBS. Bank of Baroda has maintained the highest level of CAR followed by Canara Bank, SBI and PNB, while Bank of India has the lowest capital adequacy. On an average basis all the Public Sector Banks have CRAR between 11.83% and 13.495%. Among Private Sector Banks Federal Banks has the highest level of CRAR followed by ICICI, HDFC, Axis and J & K Bank, ranges from 13.62% to 17.22%. This is an indication that even implementation of Basel III norms will not create much trouble for Indian Banks at least initially.

The NPAs are a foremost difficulty and barrier faced by Banking Industry. NPAs have adverse impact on profitability as money locked up in NPAs is not accessible for productive use. The extent of NPAs is comparatively higher in Public Sector Banks. Among Public Sector Banks – Canara Bank, Bank of Baroda and Bank of India have good asset quality, while SBI and PNB need stringent measures to cut down their gross NPAs, as these are shooting up. HDFC Bank among Private Sector Banks has remarkably reduced its NPA level followed by Federal Bank, J& K bank and Axis Bank. ICICI Bank requires more efforts to improve the asset quality. Based on the above finding it may be concluded that the declining NPAs (gross NPAs) enabled Indian Private Sector Banks to maintain comfortable and higher CRAR in comparison to Public Sector banks under Basel Norms and thus substantiate the strength of the Banking sector in India. For better management of NPAs, it is useful to first appraise the contributory factors for NPAs, so that the remedial measures can be taken accordingly. Precautionary, banks can have meticulous screening process before granting loans and can make serious efforts for the recovery of NPAs.

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