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**Title**

**IMPACT OF GLOBAL FINANCIAL CRISIS ON  
INDIAN BANKING SECTORS: STRATEGIES FOR  
ACHIEVING SUSTAINABLE GROWTH**

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**ABSTRACT:**

The World Financial System is now undergoing a Global Economic Crisis of staggering proportions. The root cause of the economic and financial crisis was the United States mortgage market by selling sub-prime mortgages to large number of consumers with inadequate income. These mortgages were bundled into securitized paper investments and sold by Wall Street to major financial institutions across the globe. When the mortgages became non-performing, these securitized assets were transformed into toxic acid infecting the entire worldwide financial system.

Indian Banking System comprises of Nationalized Banks, Private Sector Banks and Foreign Banks. This combination has been working marvelously since our liberalization process started in 1991. On the backdrop of recessionary trends in US, European and other developed countries, the under developed and developing countries including India have also experienced the pinch. During the worldwide recession that began in the later part of 2007, Indian Banking Industry felt immense pressure, but it could wither away those in a very systematic manner.

There are various reasons for these tremendous achievements, including a conservative approach by Indian Banks on providing loans, exploring new markets which are immune to Global Meltdown, heavy focus of cost cutting and most importantly adhering to the strict guidelines issued by Reserve Bank of India (RBI). The methodology adopted to analyze the performance of Indian Banking Industry is to study the three most significant parameters such as Net non-performing assets as a percentage of Net Advances, Capital Adequacy Ratio and Return on Assets. The period of study covers from 2005-2010. All the data are secondary in nature. This paper focuses on the various factors with respect to Global Recession and the challenges faced and the strategies adopted by the Indian Bank to sail through the difficult times of recession.

**Introduction:**

The impact of the global crisis has been transmitted to the Indian economy through three distinct channels, viz, the financial sector exports and exchange rates. The financial sector including the banking sector, equity markets, external commercial borrowings and remittances has not remained unscathed though fortunately, the Indian banking sector was not overly exposed to the

sub-prime crisis. Only one of the larger banks, ICICI, was partly affected but managed to through a crisis because of its strong balance sheet and timely action by the Govt. which virtually guaranteed its deposits.

The equity markets have seen a near 60 percent decline in the index and a wiping off about USD 1.3 trillion in market capitalization since January 2008 when the sensex had peaked at about 21,000. This is primarily due to the withdrawal of about USD 12 billion from the market by foreign portfolio investors between September and December 2008.

### **Research Methodology and Data Analysis:**

For the present study, the data have been collected from mainly secondary sources which cover the period from 2006 to 2010. The three significant parameters are taken such as Capital Adequacy Ratio (CAR), Net Performing Assets (NPA), Return on Assets (ROA) are selected to analyze the financial performance of Indian Banking Sectors. The major statistical techniques such as Time Series Analysis and Regression are used to analyze the data. The sample of Scheduled Commercial Banks in Indian Banking Industry comprises of 27 Nationalized or Public Sector Banks, 22 Private Sector Banks and 31 Foreign Banks in India as on 31st March 2010. All these commercial banks are considered for finding out the combined weighted average of the given parameters for the Indian Banking Industry and hence they are significant

### **Analyzing the Capital Adequacy Ratio (CAR) of the Indian Banking Industry:**

The Capital Adequacy Ratio (CAR) is a measure of a bank's capital and is expressed as a percentage of a bank's risk weighted credit exposures. It is also known as "Capital to Risk Weighted Assets Ratio (CRAR)."

Investopedia explains Capital Adequacy Ratio (CAR) as a ratio which is used to protect depositors and promote the stability and efficiency of financial systems around the world. CAR is derived as given below:



$$CAR = \frac{\text{TierOneCapital} + \text{TierTwoCapital}}{\text{RiskWeightedAssets}}$$

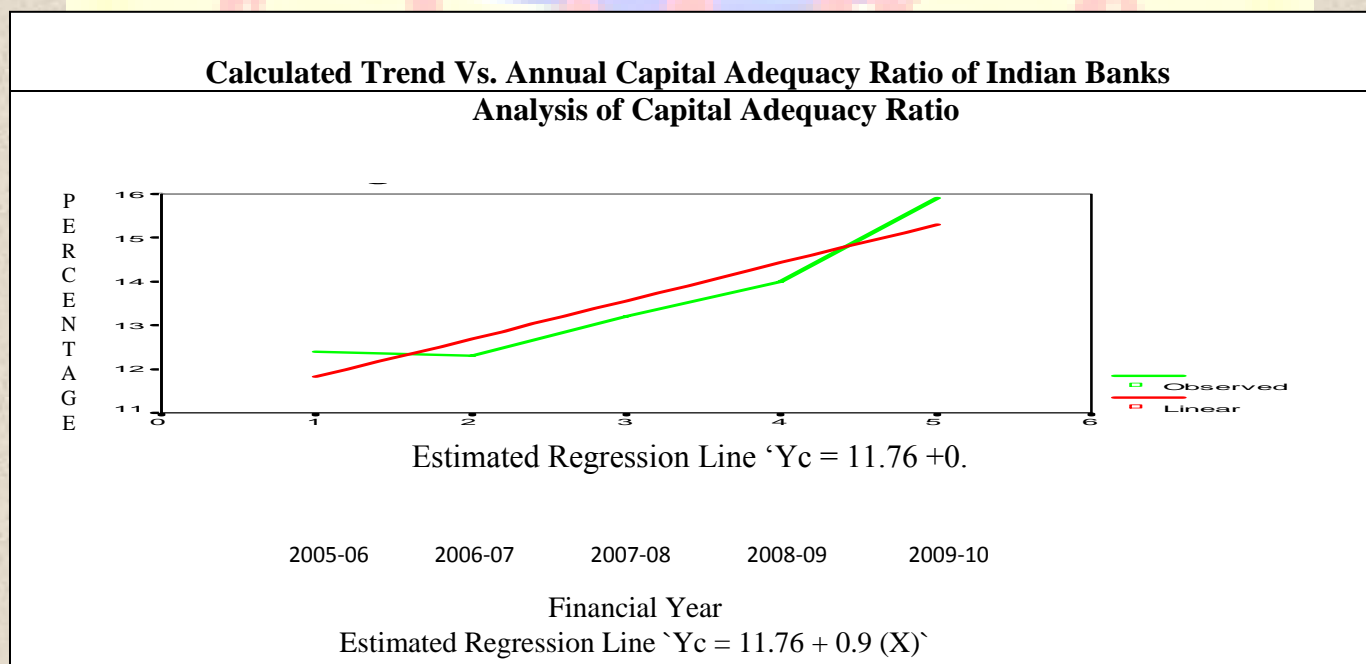
Two types of capital are measured: tier one capital, which can absorb losses without a bank being required to cease trading, and tier two capital, which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors. Table 1 reveals the Capital Adequacy Ratio for the period from 2006 to 2010 for all the Indian banks.

**Table 1: Analysis of Capital Adequacy Ratio for the period year 2006 to 10**

S.No.	Category of Indian Banks (No of Banks in '06,'07,' '08', 09,10)	Capital Adequacy Ratio(In Per cent)				
		2005-06	2006-07	2007-08	2008-09	2009-10
1	Nationalized Banks (28,28,28 ,27,27)	12.2	12.4	12.5	12.3	13.3
2	Private Sector Banks (27,25,23,22,22)	11.9	12.0	14.2	14.5	17.4
3	Foreign Banks in India (29,29,28,31, 31)	13	12.4	13.1	15.1	17.3
	<b>Weighted Average of 1, 2and 3</b>	<b>12.4</b>	<b>12.3</b>	<b>13.2</b>	<b>14.0</b>	<b>15.97</b>

Source: Reserve Bank of India

**Figure- 1**



Since the weighted average of all Scheduled Indian Banks showed highs and lows, Time Series Analysis was used to derive a straight line equation using the method of Least Squares. The Equation of the straight line as calculated is  $Y_c = 11.76 + 0.9(X)$ . Here  $Y_c$  denotes the calculated value of Capital Adequacy Ratio and  $X$  denotes the Financial Year. The year 2005-06 has been taken as the year of origin and is denoted as ' $X=0$ '. The analysis shows a positive slope albeit a very a small number.

Basel II mandates Capital to Risk Weighted Assets Ratio (CRAR) of 8% . The RBI has stated that Indian banks must have a CRAR of minimum 9%, effective March 31, 2009. All private sector banks are already in compliance with the Basel II guidelines as regards their CRAR. Further, the Government of India has stated that public sector banks must have a capital cushion with a CRAR of at least 12%, higher than the threshold of 9% prescribed by the RBI (stockmarketsreview.com).

It can be observed from the above figure that the Capital Adequacy Ratios across Indian bank groups have remained significantly above the regulatory minimum of 8% as per Basel II norms which is indeed an encouraging result.

### **Analyzing the Non Performing Assets (NPA) of the Indian Banking Industry:**

The fast rising NPA of Banking Industry is the root cause of the Sub-prime crisis world over. This has now grown into a Financial Crisis which is fast engulfing other countries. Therefore it is significant to analyse the trend of Net NPA as a % to Net Advances for the banking sector in India.

Net NPA = Gross NPA – (Balance in Interest Suspense account + DICGC/ECGC claims received and held pending adjustment + Part payment received and kept in suspense account + Total provisions held) (Source rbi.org.in). The table given below illustrates the Net NPA as a percentage to Net advances in respect of the Indian Banking Industries from 2006 to 2010.

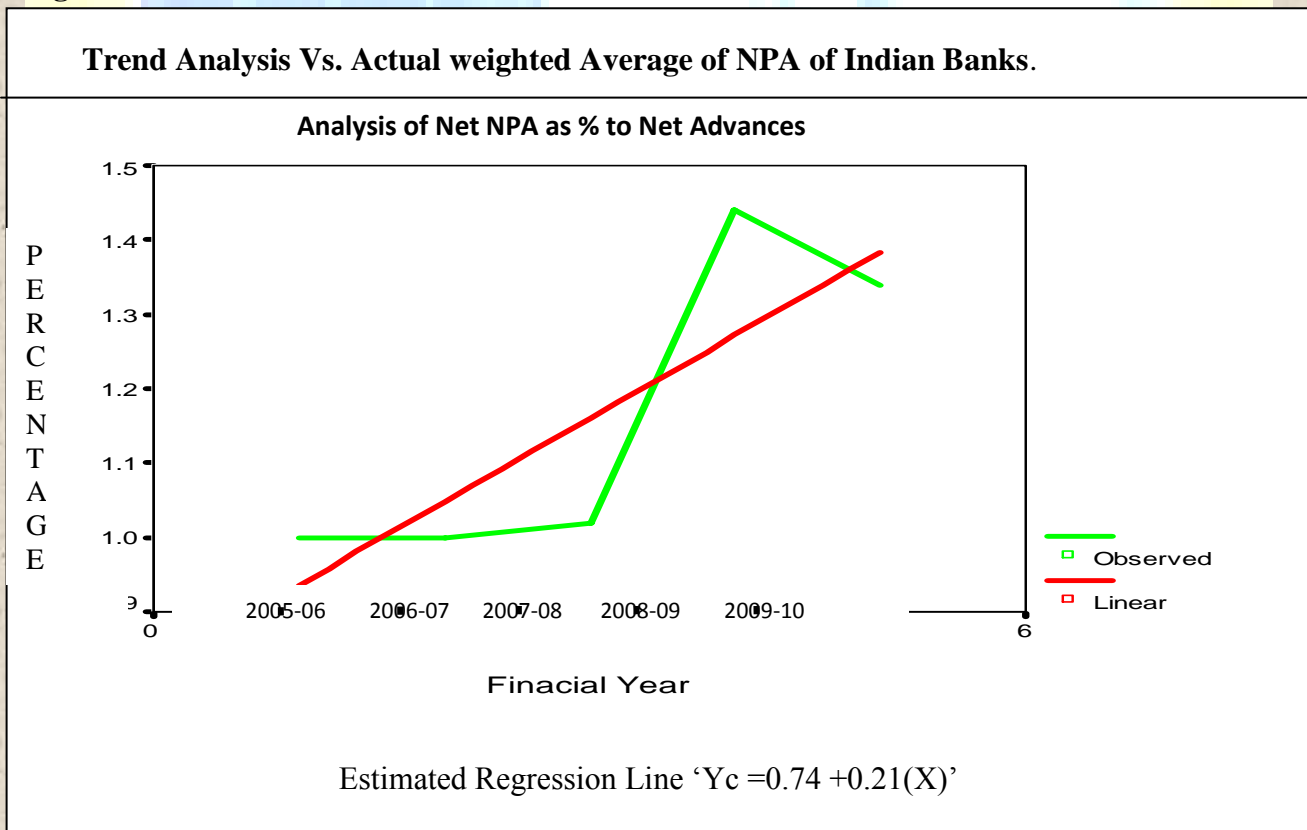
**Table 2: Analysis of Net NPA as Percentage to Net Advances from Years 2006 -10**

S.No.	Category of Indian Banks (No of Banks in	Net NPA as % to Net Advances (In Per cent)				
		2005-06	2006-07	2007-08	2008-09	2009-10
1	Nationalized Banks (28,28,28,27,27)	1.2	1.0	1.0	1.1	1.1
2	Private Sector Banks (26,24,23,22,22)	1.0	1.0	1.2	1.5	1.0
3	Foreign Banks in India (29,29,28,31,31)	0.8	1.0	0.9	1.7	1.2
	<b>Weighted Average of 1, 2 and 3</b>	<b>1.0</b>	<b>1.0</b>	<b>1.02</b>	<b>1.44</b>	<b>1.34</b>

Source: Reserve Bank of India

The results for Nationalized banks and Private Sector Banks are either equal to or just above 1% while it is ranging from 0.8% to 1.7% in case of foreign banks.

**Figure- 2**



The line equation which represents the consolidated trend of NPA of Indian Banks is  $Y_c = 0.74 + 0.21(X)$ . Note that the Y intercept is at .74 and has consistently shown a positive slope since the base year. It is currently above 1%.

### Analyzing the Return on Assets of the Indian Banking Industry:

Return on Assets (ROA) or Return on average assets (ROAA) is used as a very important ratio to evaluate Banks and other Financial Institutions. It gives investors a reliable picture of management's ability to pull profits from the assets and projects into which it chooses to invest. The metric also provides a good line of sight into net margins and asset turnover - two key performance drivers.

The simplest way to determine ROA is to take net income reported for a period and divide that by total assets. To get total assets, calculate the average of the beginning and ending asset values for the same time period.

$$ROA = \frac{NetIncome}{TotalAssets}$$

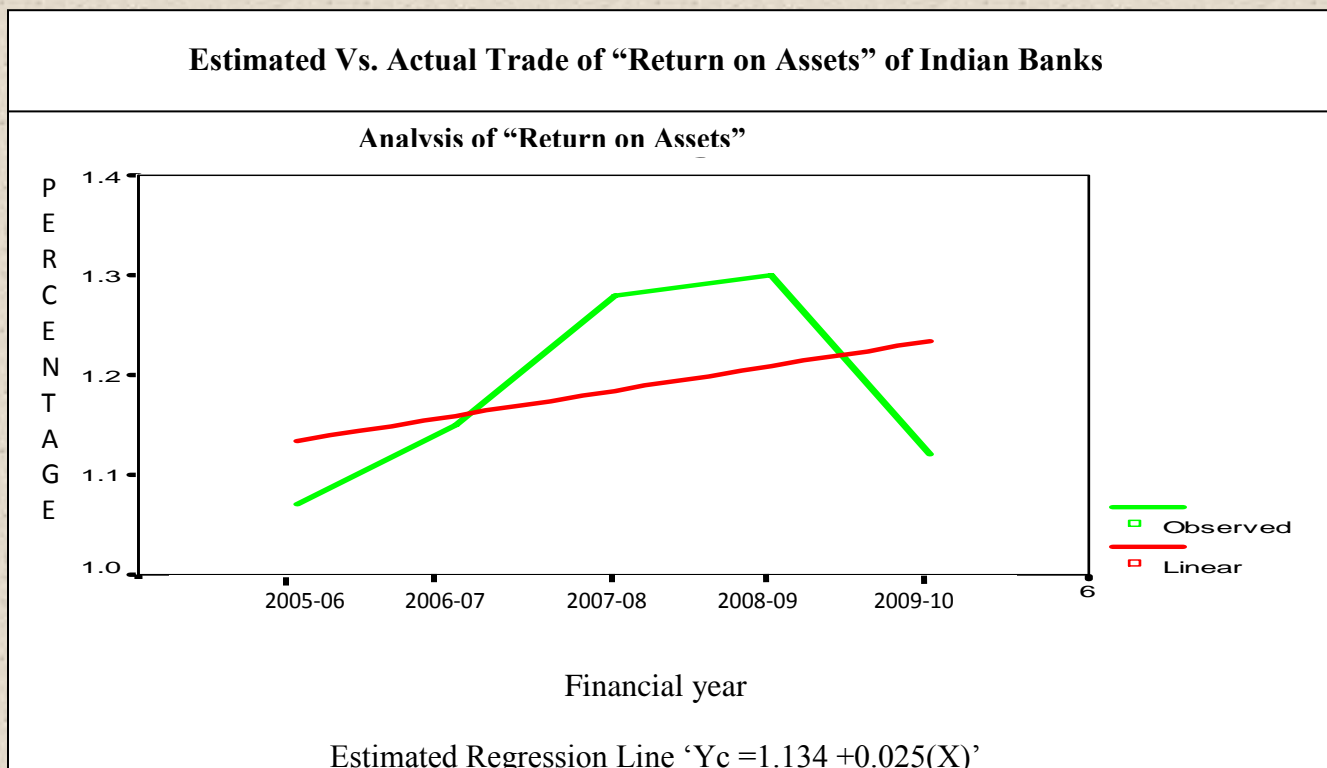
Some analysts take earnings before interest and taxation, and divide over total assets:  $ROA = EBIT/Total\ Assets$ . This is a pure measure of the efficiency of a company in generating returns from its assets, without being affected by management financing decisions. Table 3 exhibits the ROA of the Indian banks for 2005-06 to 2009-10 in all its categories.

**Table 3: Analysis of Return on Assets (In %). Years 2006 -10**

S.No.	Category of Indian Banks (No of Banks in '06,'07,'08,09,10)	Return on Assets (In Per cent)				
		2005-06	2006-07	2007-08	2008-09	2009-10
1	Nationalized Banks (28,28,28,27,27)	0.8	0.8	1.0	1.02	0.97
2	Private Sector Banks (27,24,23,22,22)	0.9	0.9	1.12	1.1	1.2
3	Foreign Banks in India (29,29,28,31,31)	1.5	1.7	2.87	1.7	1.2
	<b>Weighted Average of 1, 2 and 3</b>	<b>1.07</b>	<b>1.15</b>	<b>1.28</b>	<b>1.30</b>	<b>1.12</b>

Source: Reserve Bank of India

Figure- 3



The Return on Assets of Indian Banks is increasing steadily upto a period of 2009. But in the year 2010, the value of return on asset is slightly low i.e. 1.12. The estimated line using method of least squares is  $Y_c = 1.134 + 0.025(X)$  has a positive slope of 0.025. In contemporary times when large multinational banks are booking huge losses or are on the verge of filing bankruptcy these numbers speak well about the stability of the Indian Banking Industry during the global crisis.

### **Strategies by Indian Banks:**

The Indian Banking Industry stayed somewhat insulated largely due to Reserve Bank of India’s (RBI) proactive steps to check reckless lending to the housing sector by stipulation of stringent credit assessment, higher provisioning for standard assets and higher margin requirements. Secondly the volume of home loans is still small and securitization of the home loans was yet to gain ground in India. Moreover the gradualist approach of the RBI in shaping the derivatives

market and prudent regulation of the overseas investments averted the subprime contagion. The various proactive steps of RBI which has resulted in a real combat during global melt down are listed hereunder.

1. Low penetration of Financially Engineered products. The banks portfolio managers were not well versed with mortgage based products and derivatives based on them. Hence most banks did not have them on their Balance Sheets.
2. RBI the central bank advocates stringent lending norms. Indian banks at present cannot lend to subprime borrowers like stated income and/or stated assets (SISA) loans or no income/ no assets (NINA) loans or no income/ no job or assets (NINJA) loans or to Alt-A mortgage.
3. The right steps from RBI at the right time. Sometimes RBI encourages lending by reducing PLR, SLR, repo rates and CRR. This creates more funds available with banks for lending.
4. RBI through a large number Public Sector Banks has a fair control on the credit flow. Sometimes despites funds availability the bank is reluctant to lend, RBI breaks this situation by advising state owned banks to increase lending upwardly and by revising their credit disbursement targets.
5. A partially convertible rupee went in India's favor as rupee fluctuated only within the administered price band.
6. Also, since investing in Foreign Financial Products was restricted this reduced the exposure to US Mortgage based bonds and hence the losses.

### **Conclusion:**

The banking sector in India seems to be unaffected from the global financial crises which started from US in the last quarter of 2008. Despite the fallout and nationalization of banks across developed economics, banks in India seems to be on the strong fundamental base and seems to be well insulated from global crises. The conservative approach of Indian banking industry in providing loans, exploring new markets has attributed to the tremendous achievements in combating the global financial crisis. All the parameters under study have shown consistent growing trend which is quite encouraging and satisfactory. The phenomenal achievement of the

banking industry could be the outcome of the fiscal and monetary policy of the Reserve Bank of India (RBI) to achieve sustainable economic growth.

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