

Emerging Challenges for Indian Banking Industry in the backdrop of Global Financial Crisis

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Abstract

A spell of severe credit crunch, salary cuts, rehiring and a lot of news on loans going bad, lead this research paper to test the hypothesis that the Indian Banking Industry has been performing badly in contemporary times and was adversely impacted due to the continuing Global Financial Crisis. The methodology adapted to analyse the performance of all the Scheduled Commercial Banks of the Indian Banking Industry was to study the trend of the three most significant parameters/ratios applicable for Banking Industry. Among the parameters of performance, the most significant ones comprise Net Non Performing Assets as a percentage of Net Advances, Capital Adequacy Ratio and Return on Assets. A single composite weighted average of all Nationalised banks, Private sector banks and Foreign banks in India has been considered to view the trend in the period 2005-06 to 2007-08. The analysis shows that the Indian Banking Industry is stable and still growing albeit at a slow pace. The conclusion has certain learning's for the US Banking Industry.

Introduction

The US Sub Prime crisis created a hurricane that lead to a Financial Crisis in the US. Thanks to the full convertibility of the USD and large scale participation by FII's in US markets the Financial Crisis soon spread to the rest of the world. With subprime crisis spreading its tentacles far and wide, the global economy faces one of the biggest financial shocks of such a magnitude.

A growing stream of foreclosures due to higher readjustments of floating interest rates first started taking its toll on sub-prime lenders like New Century Financial Corporation (March 2007), Accredited Home Lenders Holding, WMC Mortgage of General Electric (July 2007), Countrywide Financial (Aug 2007). Next in line impacted by sub prime crisis were hedge funds like Bear Sterns (May 2007), Investments funds of BNP Paribas (Aug 2007) due to exposure to Mortgage Based Securities and Credit Default Swaps. Investment Banks like Goldman Sacs, Merrill Lynch, Morgan Stanley also had to write off in Billions of \$. Banks such as Northern Rock, Citibank, Macquarie, UBS were also badly impacted.

The economic meltdown peaked with the bankruptcy of 158 years old US Investment Bank Lehman Brothers in September 2008 which had secured creditors of \$75 billion and as per one estimate, the volume of unsecured creditors was as high as \$200 billion. Plus acquisition of Merrill Lynch by Bank of America and Financial crisis of American International Group (AIG) have shaken the entire financial world (Ammannaya, 2008).

The US Federal Reserve had to rescue financial giants like Citigroup, American International Group (AIG), etc and subsequently, to prevent a financial collapse it had to pump in \$1 trillion. The European Central Bank (ECB), Bank of Canada, Bank of Japan, Reserve Bank of Australia and Bank of England similarly took steps to inject funds into the market and break the Financial Crisis. The recent financial crisis in developed economies is attributed to the credit crunch and features of a free market economy (Sharma, 2008).

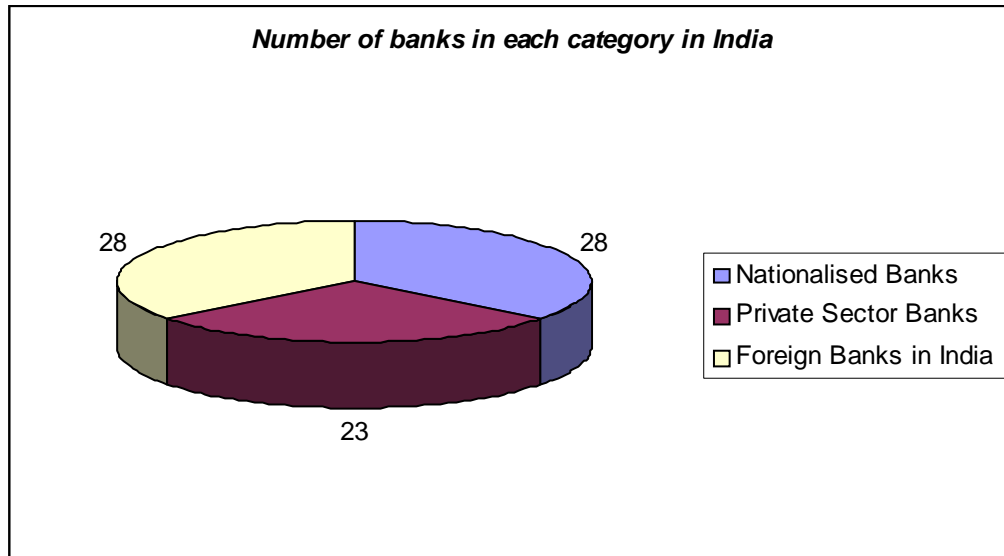
An Analysis of Indian Banking Industry

Recession has impacted all the sectors and on the backdrop of recessionary trends in US, European and other developed countries, the underdeveloped and developing countries are also experiencing the pinch. The direct and indirect effect of global slowdown has its impact on India too in the form of reduced money flow and reduced trade.

The methodology adapted to analyse the performance of Scheduled Commercial Banks of the Indian Banking Industry was to study the three most significant parameters for Banking Industry. Among the parameters of performance analysed, the most significant ones comprise Net Non Performing Assets as a percentage of Net Advances, Capital Adequacy Ratio and Return on Assets. The ASSOCHAM Eco Plus (AEP) analysis of the Indian banking sector's solvency is also based on two broad parameters including net non performing assets and capital adequacy ratio.

Since sub prime crisis started surfacing in 2007 and the global economy is still not out of the woods the period of analysis chosen is from year 2005-06 to 2008-09. Scheduled Commercial Banks in Indian Banking Industry has 28 Nationalised or Public Sector Banks, 23 Private Sector Banks and 28 Foreign Banks in India as on 31st March 2008. In Tables 1 to 3 the numbers written in bracket after the category of bank for example Nationalised Banks (28, 28, 28, 27) signifies the number of banks in year 2005-06, 2006-07, 2007-08 and 2008-09 less data considered as outliers if any. These numbers have been used for finding out the combined weighted average for the Indian Banking Industry hence they are significant.

Figure 1: No. of banks in each category of Indian Banking Industry



Source <http://www.iba.org.in/Glance/004-No.of%20banks.pdf> (data as on 31st March 2008).

Analyzing the Capital Adequacy Ratio (CAR) of the Indian Banking Industry.

It is measure of a bank's capital. It 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:

This ratio is used to protect depositors and promote the stability and efficiency of financial systems around the world.

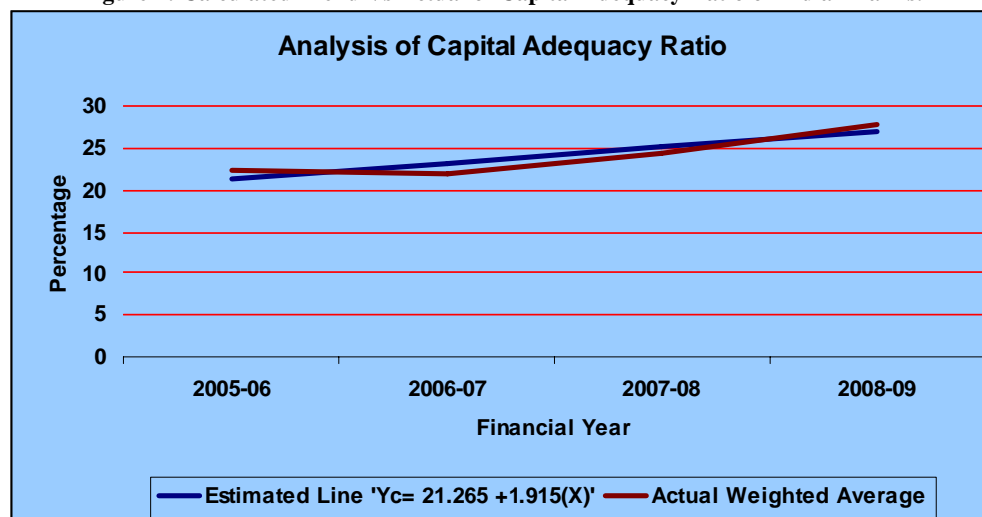
$$CAR = \frac{\text{Tier One Capital} + \text{Tier Two Capital}}{\text{Risk Weighted Assets}}$$
 Two types of capital are measured: tier one capital, which can absorb losses without a bank being required to cease trading, and tier two capital, which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors.

Table 1: Analysis of Capital Adequacy Ratio for the period year 2006 to 09

S.No.	Category of Indian Banks (No of Banks in '06,'07,'08,'09)	Capital Adequacy Ratio (In Percent As on Mar 31)			
		2005-06	2006-07	2007-08	2008-09
I	Nationalised Banks (28,28,28,27)	12.2	12.27	12.05	12.17
II	Private Sector Banks (27,25,23,22)	11.71	12.98	15.37	16.238
III	Foreign Banks in India (29,29,28,29)	41.84	39.25	44.1	54.09
	Weighted Average of I, II and III	22.27	22.03	24.38	27.87

Source: Derived from data of Indian Bankers Association and Reserve Bank of India

Figure 2: Calculated Trend Vs Actual of Capital Adequacy Ratio of Indian Banks.



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 $Y_c = 21.265 + 1.915(X)$. Here Y_c denotes the calculated value of Capital Adequacy Ratio and X denotes the Financial Year. Note that 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 small number.

The efficacy of capital adequacy norms, particularly the revised norms mandated by the Bank for International Settlements (BIS) are also known as Basel II norms (Chadrsekhar, 2008). Indian banking companies were required to ensure full implementation of Basel II guidelines by March 31, 2009. The first phase of Basel II was implemented in India with foreign banks operating in India and Indian banks having operational presence outside India complying with the same effective end of March 2008. With Basel II norms coming into force in 2009, maintaining adequate capital reserves will become a priority for banks.

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).

The capital adequacy ratios across Indian bank groups have remained significantly above the regulatory minimum of 8% as per Basel II norms as reflected in Table 1 and Figure 2.

Analyzing the Non Performing Assets (NPA) of the Indian Banking Industry.

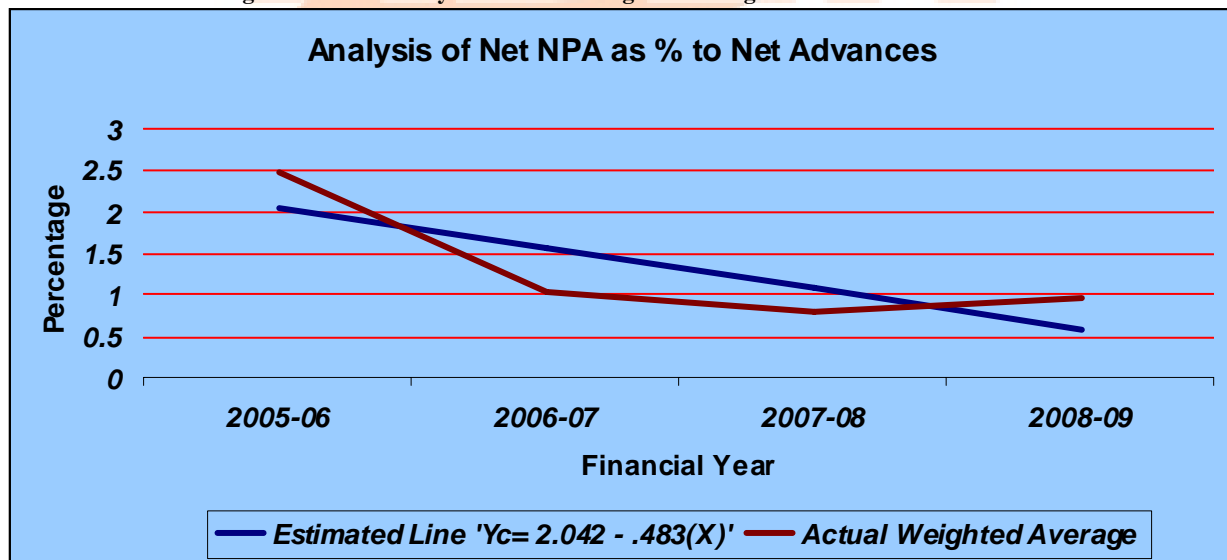
The fast rising NPA of Banking Industry is root cause of the Sub-prime crisis. This has now grown into a Financial Crisis which is fast engulfing other countries. It is significant to analyse the trend of Net NPA as a % to Net Advances.

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).

Table 2: Analysis of Net NPA as % to Net Advances. Years 2006 -09

Source: Derived from data of Indian Bankers Association and Reserve Bank of India

Figure 3: Trend Analysis Vs Actual weighted average of NPA of Indian Banks.



The line equation which represents the consolidated trend of NPA of Indian Banks is $Y_c = 2.042 - .483(X)$. Note that the Y intercept is at 2.042 and has consistently shown a negative slope since the base year. It is currently below 1%.

Analyzing the Return on Assets of the Indian Banking Industry.

Why ROA? ROA or Return on average assets (ROAA) is used 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.

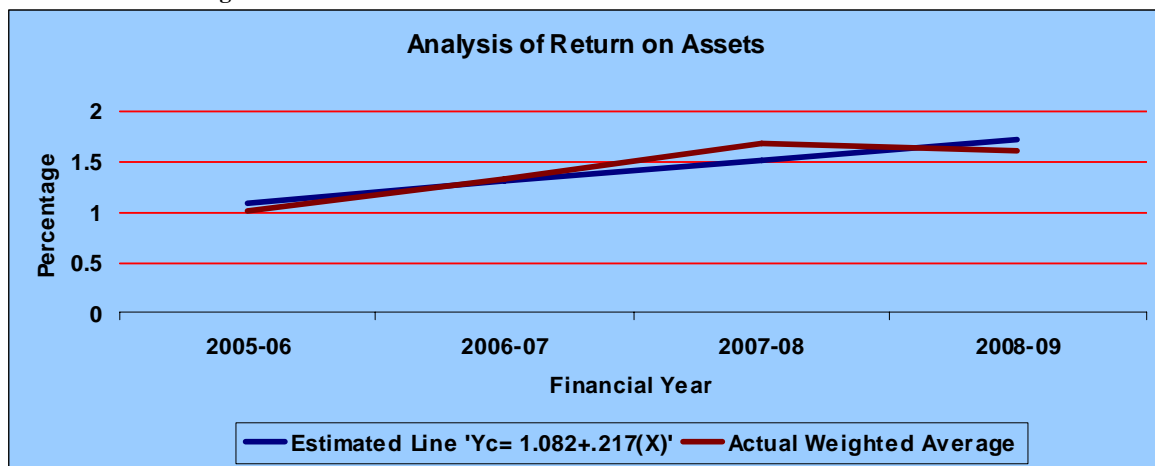
Some analysts take earnings before interest and taxation, and divide over total assets: $ROA = EBIT/Total\ Assets$. This is a pure measure of the efficiency of a company in generating returns from its assets, without being affected by management financing decisions. This analysis uses Net Profits.

Table 3: Analysis of Return on Assets (In %). Years 2006 -09

S.No.	Category of Indian Banks (No of Banks in '06,'07,'08,'09)	Return on Assets (In Percent as on Mar 31)			
		2005-06	2006-07	2007-08	2008-09
I	Nationalised Banks (28,28,28,27)	0.84	0.94	0.98	0.98
II	Private Sector Banks (27,24,23,22)	0.59	0.88	1.12	1.08
III	Foreign Banks in India (29,29,28,29)	1.56	2.06	2.87	2.62
	Weighted Average of I, II and III	1.01	1.32	1.69	1.61

Source: Derived from data of Indian Bankers Association and Reserve Bank of India

Figure 4: Estimated Vs Actual Trend of 'Return on Assets' of Indian Banks.



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

The Return on Assets of Indian Banks is increasing steadily. The estimated line using method of least squares is $Y_c = 1.082 + .217(X)$ has a positive slope of .217. 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.

The key indicators analysed in this paper indicate that the Indian Banking Industry seems to be stable or slightly growing despite the financial crisis predominantly raging in the US and Europe. However in the backdrop of other developed Banking Industries these are certain shortfalls that the Indian Banking Industry should work on.

Challenges Being Faced By The Indian Banking Industry

1. Ratios of NPAs have shown a significant decline. But from the risk management perspective, there has been an increase in the growth of off-balance sheet exposure in recent years, particularly in the case of foreign banks and new private sector banks.
2. Independent and foolproof credit history maintenance of Individuals/Corporate entities to be developed. The current system of defaulters list is not adequate.
3. All lenders and agencies should follow uniform credit rating and credit tier awarding norms.
4. Indians are also converting into debt-happy citizens. The debt recovery process has established Fair Practices Code but we lack a powerful institution to ensure compliance. Australia has ACCC, US has an umbrella body like the Federal Trade Commission which are responsible for ensuring compliance with the FDCPA (Mazumdar, 2008).
5. Better financially engineered products can be launched in India. Many of the complicated financially engineered products such as Residential Mortgage Backed Securities (RMBS), Collateralised Debt Obligations (CDO's), Mortgage Backed Securities (MBS's), Credit Default Swaps (CDS) are conspicuous by their absence in India. Having analysed the merits and demerits of each of these, some of them can be adapted to Indian markets.

What Saved The Skin For Indian Banking Industry In The Current Scenario?

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 (Nishank, 2009a).

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 (Nishank, 2009b).
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 despite 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.

Limitations

This analysis covers the period from April 2005 to March 2009. It fairly covers the period when the world was passing through a phase of financial crisis. However, IMF says that the global economy is still not out of the woods. This paper needs to be upgraded to incorporate the current years financial ratios of banks performance to analyse the performance of Indian Banking during the entire phase.

Conclusion

'Keep an eye on the long-term while dancing in the flames' (Sir Philip Hampton, chairman, Royal Bank of Scotland)

A robust banking and financial sector is critical for facilitating higher economic growth (Kainth, 2008). The analysis of the Indian Banking Industry shows stability and growth.

The Government of India and the RBI have attempted to implement a proactive and responsive monetary policy and fiscal policy with timely, targeted, and temporary measures. While the RBI has reversed its earlier stance of a tight monetary policy, the government recently announced a fiscal stimulus package to push overall economic activity. Indian Banks have put in place a constellation of measures both on interest rates and liquidity to ward off the impending crisis.

As a result Indian Banks have been able to perform well globally. Certain aspects and learning's from the Indian Banking Industry can be adopted as best practices by other financial crisis affected countries.

Are There Any Learnings For The US Banking Industry From This Analysis?

1. Too much freedom will get misused especially if most banks are non state owned and profit maximization is high on the agenda.
2. A mixed setup of PSU banks along with public and private helps. It ensures PSU banks are as service oriented as other banks and the Federal Bank will be able to execute its agenda more efficiently.
3. A tighter reign by the central bank required. Due to the earlier low interest rate policy, the 'risk' became the most undervalued asset leading to sloppy risk management. Further, most of the firms that became the target of crisis were illiquid and insolvent or bankrupt of 'mark to market' accounting practice of valuation of assets every quarter (Nayak, 2008). Having given too much freedom it would be difficult to put roadblocks but we must ensure guaranteed non-repetition.
4. Economy's interest over political interest.
5. Never short term gains at the cost of long term gains!

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Appendix I

List of Abbreviations

ACCC	Australian Competition and Consumer Commission
AIG	American International Group
BIS	Bank for International Settlements
CDO	Collateralised Debt Obligations
CDS	Credit Default Swaps
CRR	Cash Reserve Ratio
ECB	European Central Bank
FDCPA	Fair Debt Collection Practices Act
MBS	Mortgage Backed Securities
NINA	No Income/ No Assets loans
NINJA	No Income/ No Job or Assets loans
NPA	Non Performing Asset
PLR	Prime Lending Rates
PSU	Public Sector Units
RBI	Reserve Bank of India
Repo	Repurchase Order
RMBS	Residential Mortgage Backed Securities
SISA	Stated Income and/or Stated Assets loans
SLR	Statutory Liquidity Ratio