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Analysis of Banking System Performance Of Select Global Economies With That Of India - During And After The Global Financial

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Abstract

Banks and Financial Institutions (FI) are in the business of financial intermediation i.e., channelizing investible financial resources to investment opportunities. Banks and FIs create Liabilities and Assets in their operations. The liabilities and assets, though in the books of the FI, are subject to influence by prevailing markets conditions and regulatory norms. Thus, optimum mix of Liabilities and Assets in the portfolio of Banks / FIs is required to ensure their survival and growth. The economic environment is subject to various external economic and non-economic forces beyond the control of the individual institution. The changed economic environment leads to unforeseen impact on the institutions. This paper evaluates performance of Indian Banking System during the Global Economic Crisis with that of select global markets.

The paper also focuses on the change required in business and operational strategy by Banks and FIs in during economic slowdown i.e., re-strategizing in economic slowdown for converting adverse economic environment into a favourable business and operational opportunities.

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Keywords: Words: Business Strategy; Asset, Liability; Regulatory Norms; Provisioning; Restructuring, Settlement

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1. Introduction

Financial system is the backbone of any economy as it has direct bearing on the economic growth of a country and thereby prosperity and welfare of the populace. The financial system services other sectors of the economy viz., the real economy. Stability of the financial system is critical to the stability of the economy itself. The banking sector is the principal constituent of the financial system. Banking sector is directly linked to the country's economy; each compliments the other for growth, strength and status. A strong and resilient banking system is the foundation for sustainable economic growth. Banks are the core transmission system of wealth and growth in the economy. The basis for efficient banking is simplicity in operations based on effective risk management, transparency and accountability. Trust and confidence are the bedrock of banking. A major challenge for Regulators in administering the regulatory restrictions on 'exuberance' and 'excesses' in financial markets is to make a distinction between 'growth enhancing' credit and finance, and 'speculation enhancing' ones.

2. Objectives of the Study

The broad objectives of the study are as follows:

i. To understand the impact of Global Financial Crisis on the banking companies in select global economies including that of USA
ii. To understand the performance of banking entities (select economies) in the years immediately preceding Global Financial Crisis
iii. To understand the impact prudential banking norms on profitability of banking entities during the period of financial as well as the period post financial crisis
iv. To understand the current performance status of banking entities in India
v. To suggest measures/steps that can be taken by entities to safeguard themselves in time of crisis

3. Literature Review

It is generally believed that though the financial system is fraught with risk, it is a self-equilibrating system on account of the competitive markets and market forces. There also has been general belief that consistent credit provisions and dispensation of credit risk by the banks makes them more resilient to external economic shocks. Same view was expressed by the IMF (International Monetary Fund) in its 'Global Financial Stability Review - April 2006'. To quote certain excerpts from the Global Financial Stability Review of April 2006 'There is growing recognition that the dispersion of credit risk by banks to a broader and more diverse group of investors, rather than warehousing such risk on their balance sheets, has helped make the banking and overall financial system more resilient. Credit derivatives enhance the transparency of the markets' collective view of credit risks and thus provide valuable information about broad credit conditions and increasingly set the marginal price of credit' [7].The above stated belief and confidence in the International financial system was soon shattered by the Global Financial Crisis (2008) that impacted financial systems across countries.

Importance of Risk Management for banks has been highlighted by Verena Ross [9], Director of Strategy and Risk, Financial Stability Institute, Financial Services Authority, United Kingdom. As per Verena for understanding risk in banking entities, it is important to consider some lessons in the context of four (seemingly) basic questions: (i) who owns the risk, (ii) how is risk measured, (iii) how is it funded and (iv) how is it transferred." Verena states that it is important to embed risk management within the governance of the firm and having a process for determining risk appetite.

As per Noeth and Sengupta (2012), Banks in the European region exhibited unprecedented growth of leverage between the period '1997 to 2009'. The capital of the banks in Europe thinned in comparison to their liabilities during the period. As per Noeth and Sengupta (2012), introduction, growth and stability of euro (currency) encouraged risk taking by the European banks [14]

As per Dam (2010), in the financial sector leverage was exploited more in the Europe than in the US. European banks were leveraged to a far greater extent than US banks. However, it was the multiple regulatory environment that created regulatory complications in USA resulting in financial crisis of 2008 [6].

4. Global Financial Crisis and Experience of Some Select Economies

The Global Financial crisis impacted banking systems worldwide. Various markets reported fall in growth of Bank credit. Return on Assets (ROA) of Banks (indicator of Banking system's profitability and soundness) showed variation during the period 2007 – 2010, initially reducing and thereafter improving by the year 2010 on account of recovery post crisis.

Table 1: Return on Assets of Banks for Select Economies

Country	2007	2008	2009	2010	2011	2012
France	0.4	0.0	0.4	0.6	0.4	N.A.
Germany	0.3	-0.1	-0.2	N.A.	N.A.	N.A.
Greece	1.0	0.2	-0.1	-0.6	-2.1	N.A.
Italy	0.7	0.3	0.2	N.A	-0.9	N.A.
Japan	0.3	-0.3	0.2	0.4	0.3	N.A.
Portugal	1.2	0.4	0.4	0.5	-0.3	0.1
Spain	1.1	0.8	0.6	0.5	0.2	N.A.
United Kingdom	0.4	-0.4	0.1	0.2	0.1	N.A.
United States	1.2	-0.1	-0.1	0.9	0.1	N.A.

Country	2007	2008	2009	2010	2011	2012
Emerging Market Economies						
Russia	3	1.8	0.7	1.9	2.5	N.A.
China	0.9	1.0	0.9	1.0	1.3	N.A.
India	0.9	1.0	1.1	1.1	1.0	1.0
Malaysia	1.5	1.5	1.2	1.5	1.5	1.6
Brazil	3.4	1.5	2.4	3.2	1.5	1.4
Mexico	2.3	1.4	1.5	1.8	1.5	1.8

[Source: Report on Trend and Progress of Banking in India, RBI, 2010-11 and 2011-12]

Following table captures the information pertaining to Return on Equity of top banks in following three regions; North America, Asia Pacific and Europe.

Table 2: Average Return on Equity of Select Banks in N. America, Asia-Pacific and Europe

Banks in Region	ROE - 2007	ROE – 2008	ROE - 2009	ROE - 2010	ROE - 2011
North America	14%	1%	7%	10%	8%
Asia Pacific	12%	2.5%	13%	15%	12%
Europe	14%	-2.5%	5%	8%	5%

Source: Ernst and Young [13]

Above table indicates that on account of global financial instability the return on equity of banks in almost all regions went down from the financial year 2007 to 2008. The position improved in the year 2009 and 2010. However on account of renewed global concerns the ROE of banks in all the regions again dipped from the 2010 level. The performance of banks in the Asia Pacific regions bettered that of North America and Europe during all years under consideration except the year 2007.

5. Analysis of Banks in European Region in Comparison to the rest of the World

As highlighted earlier, a study by Noeth and Sengupta the capital of the banks in Europe thinned in comparison to their liabilities during the period 1997-2008. The introduction, growth and stability of euro (currency) encouraged risk taking by the European banks. The banks in Europe did not merely restrict their lending to Europe and United States. The introduction of euro and its appreciation resulted in European banks increasingly lending within (to countries like Greece, Spain etc) and outside Europe. Banks in the other regions on the other hand (except in North America) on the other hand remained more conservative in approach. Following table indicates the exposure of European Banks to Euro area sovereign debt.

Table 3: Sovereign Exposure of Banks in Europe

Country	Exposure in Greece	Exposure In Ireland	Exposure In Portugal	Exposure In Italy	Exposure In Spain
Greece	56,148	-	-	-	-
Ireland	-	5,322	257	-	-
Portugal	1,739	839	13,707	1,179	345
Italy	1,778	299	304	1,44,856	1,383
Spain	1,076	-	6,807	6,017	2,03,310
France	11,624	2,476	4,864	48,185	6,592
Germany	18,718	12,922	10,888	72,717	31,854
UK	4,131	5,580	2,571	10,029	5,916
Netherlands	3,160	559	2,272	10,313	1,685

Source: Report on Trends and Progress of Banking, Reserve Bank of India

Above table confirms that the collapse of Lehman brothers and related liquidity crunch brothers resulted in strong pressure on the assets and liabilities of the European banks. This pressure was stronger in comparison to the banks in North America.

Following table exhibits the capital to risk weighted asset ratio of banks in select global economies including that of countries in the European region.

Table 4: CRAR rates of Banks in Select Economies pre and Post Global Financial Crisis

Country	2007	2008	2009	2010
France	10.2	10.5	12.4	12.3
Germany	12.9	13.6	14.8	16.1
Greece	11.2	9.4	11.7	11.4
Italy	10.4	10.8	12.1	12.3
Japan	12.3	12.4	15.8	16.7
Portugal	10.4	9.4	10.5	10.2
Spain	11.4	11.3	12.2	11.8
UK	12.6	12.9	14.8	15.9
USA	12.8.	12.8	14.3	15.3
Emerging Market Economies				
Brazil	18.7	18.2	18.9	17.6
China	8.4	12.0	11.4	12.2
India	12.3	13	13.2	13.6
Malaysia	14.4	15.5	18.2	17.5
Russia	15.5	16.8	20.9	18.1

Source: Report on Trend and Progress of Banking in India, RBI, 2010-11

Above table again highlights that banks in European markets have operated on lower CRAR in comparison to the banks in the emerging markets and even that of Banks in USA. The financial sector leverage was exploited more in

the Europe than in the US and thus the European banks were leveraged to a far greater extent than US banks. In 2007 the leverage ratio (defined as total assets to equity) was 63.9 for the UBS, 54.5 for Deutsche bank and 52.7 for the Barclays Bank. Moreover the European Banks have been far more exposed to the borrowers in the emerging markets economies in comparison to the US Banks.

6. Analysis of Banking Performance in USA

USA was centre for the emergence of subprime mortgage crisis of 2008. Between 1997 and 2006, the price of a regular house in USA increased by 124%. At the same point of time lower interest rates in the market resulted in increased borrowing including the subprime borrowing for retail and home loan purposes. This resulted in further intensifying the growth of Housing Price bubble. The contribution in worsening the problem was made by massive purchases of risky loans by government sponsored entities Fannie Mar and Freddie Mac. This resulted in building up confidence in subprime loans based on which the investment banks created mortgage backed securities and collateralized debt obligations that were provided with safe ratings by the credit rating agencies in US. Decline in House prices in 2008 thus finally resulted in massive financial crisis in the USA and Europe. In simple words, overleveraging by banks in USA and the poor asset quality base which the banks created by lending to subprime borrowers resulted in crisis.

As per Dam (2010) the multiple regulatory environment in USA, also contributed to the crisis. The Federal government of US recognizes five bank regulatory agencies, all performing similar functions but with different types of banks:

- The Office of the Comptroller of the Currency (OCC) for the nationally chartered banks
- The Federal Reserve (Fed) for the state chartered banks that are the members of the Federal Reserve System. Fed also regulates the 'Bank Holding Companies'
- The Office of Thrift Supervision (OTS) for so called 'thrifts' which used be called as saving and loan associations. Not all thrifts are small. For example 'Washington Mutual' the largest thrift was the fifth largest bank in USA in terms of deposits till it faced the problems in the subprime crisis.
- The National Credit Union Administration (NCUA) for the credit Unions, which are small local banks that usually service employees of a single employers or members of a union.

In addition to the above there are investment banks that do not accept consumer deposits. These investment banks are covered by Financial Industrial Regulatory Authority (FINRA) as over seen by Sec (Securities Exchange Commission). The above multiple regulatory structures further contributed to the Banking crisis in USA. High levels of non-performing loans, particularly in the real estate sector, remained the weakest spot in the US banking system. The delinquency rate for the real estate loans was as high as 10% in the second quarter of 2010.

Table 5: Sectoral Delinquency Rates of US Banks

Year	Real Estate	Credit Cards	Individual Loans	Commercial and Industrial Loans
Q2 - 2006	1.6	4.1	2.8	1.6
Q2 – 2007	1.9	4	2.9	1
Q2 - 2008	3.8	4.8	3.3	1.8
Q2 - 2009	8.1	6.4	6.4	3.8
Q2 - 2010	10	4.6	4	3.3

Source: Report on Trend and Progress of Banking in India, RBI, 2010-11 (Based on Federal Reserve Data)

The US Banking market is still recovering from the subprime crisis. However, in comparison to the European Banking entities, the Banking entities in US seem to be more stable on basis of their CRAR values, leveraging and international exposure.

7. Analysis of Banking Performance in South-East Asia:

The Banking entities in South- East Asia entered into the Global financial crisis of 2008 in much stronger position in comparison to what they were in during the 1997 South-East Asian Crisis. The consolidation of banks post South-East Asian Crisis, better Risk management frameworks, capacity building, improvement in capital base, improvement in asset quality etc which was taken up extensively by the banks in the region ensured that in spite of the global financial crisis of 2008, the banks in the region maintained their stability.

Table 6: Banking System in Malaysia – Key Financial Indicators

Head	1997	2006	2007	2008	2009
Average Total Assets Per Institution – USD billion	2.1	11	11.2	11.7	11.9
CRAR	10.5	13.5	13.2	12.6	14.5
ROA	-0.9%	1.3%	1.5%	1.5%	1.2%
ROE	-12.3%	16.2%	19.8%	18.6%	13.0%
Net Non Performing Loans	13.2%	4.8%	3.2%	2.2%	2.1%

Source: Bank Negara Malaysia

8. Analysis of Banking Performance in Latin America:

The Latin American countries like Mexico, Argentina, and Brazil have during last ten years made consistent

attempts to improve upon the capital to risk weighted assets ratio, to improve the asset quality of banks, to improve the risk management practices etc. The outcome of the same was visible during the global financial crisis of 2008. Following is the data pertaining to ARAR of Mexican and Brazilian Banks pre and post global financial crisis.

Table 7: CRAR of Mexican and Brazilian Banks

Head	2007	2008	2009	2010
Mexican Banks	15.5%	16%	17%	n.a.
Brazilian Banks	18.7	18.2	18.9	17.6

Source: BIS

Following is the data pertaining to Banking System of Argentina during the crisis years

Table 8: Key Banking Performance Indicators – Argentina (Argentina Peso)

Head	2006	2007	2008	2009
Total Assets	2,54,900	2,92,588	3,93,743	3,70,870
Total Capital (Tier 1 Capital as % of Total Assets)	11.2	11.2	10.4	10.2
Total Loans	97,848	1,25,606	1,48,858	1,55,960

Source: BIS

The ROA and ROE of the banking systems in markets like Brazil, Mexico etc did not become negative during the global financial crisis of 2008

9. Analysis of Banking Performance in Gulf Region

On account of decent economic conditions, conservative supervisory framework, counter cyclical banking policies etc the gulf region was not impacted much (except for the Dubai Financial Centre) during the global financial crisis of 2008. The banking system in the region was well capitalised by the international standards to face the crisis. The quality of assets of the Banking entities also stayed strong in the region. . The non performing loans were marginal. In order to understand the Banking in Gulf region, the banking system Saudi Arabia is being taken as a representative example. The average Basel capital adequacy ratio in Saudi Arabia stayed around 16% pre and post global financial crisis. The non performing loans of Banking entities in Saudi Arabia was only 1.4% to total loans and advances given out by the banking system in Saudi Arabia in the beginning of 2009. The provision coverage was 153% of such loans.

10. Banking Performance in India Pre and Post Global Financial Crisis

The Banking system in India, as among the emerging market economies displayed resilience during the global

financial meltdown. As per RBI ‘Report on Currency and Finance’ the strength and resilience was derived from well capitalized banking system, greater exposure to domestic conventional assets. The only pressure Indian bank encountered was the liquidity pressure which was an outcome of the foreign investors pulling out their short term investment funds from the economy. Indian banks also maintained good CRAR during the global financial period. They however generated lower ROA (Return on Assets) in comparison to some the emerging market economies. Following table exhibits the Average operating performance of the banking entities in India.

Table 9: Average Operating Performance of Banks in India during the Global Financial Crisis

Head	**Large Banks**		**Medium Banks**		**Small Banks**	
	2008	2009	2008	2009	2008	2009
CRAR	13.12	13.15	13.06	13.67	14.93	16.28
Net NPA Ratio	1.04	1.06	0.80	0.92	0.87	1.42
% of Liquid Assets to Total Assets	31.30	31.39	33.48	32.51	38.13	37.26
Return on Advances	8.86	9.40	9.52	11.25	8.62	10.50

Source: Report on Trends and Progress of Banking 2008-09

Table further exhibits the growth of balance sheets of commercial banks in India pre as well as post global financial crisis.

Table 10: Growth of Balance Sheet of Scheduled Commercial Banks in India (%)

Head	**All Scheduled Commercial Banks**		
	2007	**2008**	**2009**
Capital	17.3	35.2	10.2
Deposits	24.6	23.1	22.4
Loans and Advances	30.6	25.0	21.2

Source: Report on Current and Finance, RBI, 2010

Banks in India have now become more selective in terms of their clients and in pricing their derivative products. This has been largely driven by the credit standing of obligors, the need to use capital judiciously and also the ability to charge for risk appropriately given the increased market volatility. The banks that had aggressively grown their retail credit portfolios during the pre-crisis period significantly reduced their lending to this segment and tightened their credit underwriting standards, shifting the emphasis from volume to quality. Credit demand from the corporate sector also weakened for the reasons referred to above.

11. Current Status of Banking Performance in India:

As already discussed banks in India have exhibited resilience during the crisis period. However during last two years (year 2011 and 2012) banks are exhibiting that they are experiencing pressure on their margin. The CRAR ratios of Indian banks have declined marginally and non-performing assets are on the rise. Indian banks are also exhibiting signs that their asset quality is on the decline. Above is on account of slow down experienced by the Indian economy.

Table 11: Indian Banking Sector at a Glance

	Amount Outstanding as end of the March 2011 (billion)	**Amount Outstanding as end of the March 2012 (billion)**	**% Variation**	**% Variation**
Deposits	56,159	64,537	18.3	14.9
Loans and Advances	42,975	50,746	22.9	18.1
Net Profit	703	817	23.2	16.1
Return on Asset (ROA - %)	1.10	1.08	–	–
Return on Equity (ROE - %)	14.96	14.60	–	–
Capital to Risk Weighted Asset Ratio (CRAR) (under Basel I) (Per cent)	13.02	12.94	–	–
Gross NPAs	979	1,423	15.7	45.3
Net NPAs	417	649	7.7	55.6
Slippage Ratio (Per cent)	2.03	2.51	–	–

Source: Trends and Progress of Banking, 2011- 12

Table 12: Following table further exhibits the performance of banking institutions in India

	Gross NPA's to Gross Advances		**Net NPA's to Net Advances**		**Slippage Ratio**		**CRAR (%)**	
Banks	Jun -12	Sep - 12	Jun - 12	Sep - 12	Jun - 12	Sep - 12	Jun - 12	Sep – 12
Public	3.57	4.02	1.75	2.02	3.49	2.89	12.78	12.33
Foreign	2.90	2.90	0.83	0.76	2.43	1.38	15.72	17.07

New Private	2.19	2.1	0.45	0.45	1.31	1.12	16.11	16.34
Old Private	1.92	2.16	0.61	0.81	0.02	1.61	13.82	13.78
All Banks	3.25	3.59	1.45	1.66	3.04	2.50	13.74	13.60

Source: Financial Stability Report – December 2012, Reserve Bank of India

Above table further highlights the pressure that is emerging on the banking institutions in India.

12. Some key Actionable Points for Banks to Re-strategize Operations for Preparing themselves against Economic Slowdown

Based on the recent experience in the varied regions and countries as discussed above, the key actionable points for banks to re-strategize operations to prepare themselves against economic slowdown relate to Capital, Liquidity, Asset Management, Core activities of banks and the use of technology in operations.

(a) **Decision on appropriate Quantum and Quality of Capital -** The moot objective of capital requirement by banks is to absorb shocks. Hence, based on the risk management policy, the bank needs to decide the quantum and quality of capital. The regulatory norms on Capital Adequacy are the minimum norms from the Regulator's perspective, taking the Banking system as a whole. However, each bank is the best judge for deciding its capital requirement. There is cost attached to the capital held by a bank. Prudence demands that in the economic decision making by the management of the bank, due consideration is given to the objective of survival in worst case scenario.

(b) **Liquidity Management -** Liquidity management is the most critical element in the risk management by banks. As financial intermediaries, banks are required to manage liquidity vide both liability and asset. Liquidity management has two critical aspect viz., quantity and time. Liquidity risk is omnipresent, requiring constant monitoring and adequate timely action else it triggers other risks and concerns for the bank and said risk has a ripple effect on the banking system. Liquidity management is required both from short-term perspective as well as from the perspective of relative long term.

(c) **Asset Management** - **Quality and Maturity of Portfolio** - Banks are in the business of maturity transformation of funds. Banks have little manoeuvrability on the liability side due to the competitive market forces. Hence, both, the Quality of Asset and Asset Liability Management (ALM) is very important for banks. Banking per se is risk taking. Banks will always be exposed to the risk associated with different assets in their portfolio. Banks need to make provision of Capital on the loan portfolio based on Regulatory norms.

(d) Review of Non-Core Activity - During economic slowdown, it is imperative for banks to remain focused on core competency. Most of financial trading and position taking activity by participants in a particular market is zero sum in impact. Economist and columnist Roger Bootle makes the very insightful and significant point by stating that much of the economic activity is at least to a degree 'distributive' (i.e. rent extracting), rather than 'creative' (i.e. value added) in its primary economic effect.

(e) Technology usage in operations - Banking, now, is technology driven. Business Process Reengineering and innovations in systems and processes lead to transformation of entire banking operations from the front-end till back-end. Outsourcing is a strategic decision for operational transformation as also for cost management. Banks that are able to ride the technology wave for improvement in internal business processes and in bringing about innovations in products and services will outpace others in growth.

13. Conclusion

The experience gained by banks across various countries post recent global financial crisis has given another opportunity to the banking sector to review and renew its approach towards factors decisive to its extant working and future sustenance. Irrespective of the market dynamics, individual banks need to decide their positioning and develop their strategic plans in cost-effective manner.

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