

Global Financial Crisis: contemporary causes and impact on Banking Sector in India

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Abstract

This study aims to find out the impact of global financial crisis on banking sector in India. The descriptive analytical methodology was used. The study sample consists of some leading banks in India. The global financial crisis (GFC) refers to the period of extreme stress in global financial markets and banking systems between mid 2007 and early 2009. When growth saturate, recession began sooner or later. *The effects of the global financial crisis on Indian banking sector have been more severe than initially forecast.* During the GFC, a downturn in the US housing market was a catalyst for a financial crisis that spread from the United States to the rest of the world through linkages in the global financial system. Many banks around the world incurred large losses and relied on government support to avoid bankruptcy. Millions of people lost their jobs as the major advanced economies experienced their deepest recessions since the Great Depression in the 1930s, when the mortgage, banking, and insurance companies affecting the economy and cast a shadow over the various economic sectors, and this financial crisis spread from America to Europe and other developed and developing countries. Recovery from the crisis was also much slower than past recessions that were not associated with a financial crisis. The study use variables which includes Bank Share Price, Bank Capital Adequacy, Interest Rates, Non-performing Assets.

Keywords: Global financial crisis, GFC, MBS, banks, share price, capital adequacy, deposit-lending, interest rates, non-performing assets, NPA, GDP.

Introduction:

In general when countries gross domestic product (GDP) growth decline from the normal economic cycle for two or more consecutive quarters of a year or its economical growth slowed down from several quarters then it is considered that respective economy is in recession. The crisis was an outcome of the unbalanced interplay between both macroeconomic and microeconomic factors. From a macroeconomic perspective, the crisis has been attributed to the persistence of global imbalances, an excessively accommodative monetary policy and lack of recognition of asset prices in policy formulation. From a microeconomic perspective, the crisis has been attributed to rapid financial innovations without adequate regulations, credit boom and the lowering of credit standards, inadequate corporate governance, and inappropriate incentive schemes in the financial sector and overall lax oversight in financial systems. Recession is a global phenomenon; it is one side of economic coin with growth on other side. No country in the world can ignore growth and avoid recession as they move together. It is found that consumers trust and confidence also play vital role in economic growth and decline. Loss of trust in respective economy and growth due to prevailing circumstances results in minimized spending by consumers and fuel recession. In general economical growths of any country expands for six to ten years and further start declining and slip into recession which last between six months to two years. It has many attributes that can occur simultaneously and can lead to decreased demands for goods and services, which impact production, which result layoffs, sharp rise in unemployment, bankruptcy, credit crunches, deflation, foreclosures, investors sentiments, fall in stock values and returns and corporate profits. It happens due to reduction in the demand of products in the global market, currency crises, energy crises, war under consumption, overproduction, financial crises, and price of fuel. It can also be a result of falling prices due to lack of demand of products and generally termed as deflation. Or it could be the result of inflation or combination of eco- socio-political circumstances, increasing prices and stagnant economic growth of respective economy.

Objective of the Study:

The core objectives of the study is to evaluate the performance of Indian Banking Industry during contemporary period arising due to financial crises and recession, and to analyze their qualitative and quantitative performance and investigate risk and return factors in comparison

to Basil Norms, their collective impact on banks profitability and to come up with the best and worst performing among selected Indian *Nationalized Banks, Private sector Banks and Foreign Banks* by using modern performance evaluating techniques. In addition for better future growth, will develop rational and scientific approach for banks to assess and analyze their intrinsic value, practical risk, exposure and to visualize competitive and comparative efficiency and their profitability position which can be considered as a judicious recommendation for improvements of the bank performance.

Methodology:

The study is done with special reference to Indian banking industry in which all Indian *Nationalized Banks, Private sector Banks and Foreign Banks* are been taken for the purpose irrespective of their size. For the study secondary data are used for the period of 2005-2008 listed on Indian stock exchange and the data for the same have been collected from the stock exchanges, published reports, magazines, RBI annual report and websites of respective banks in terms of turnover and capitalization.

Modern Tools and Techniques:

In this study, for interpreting the results modern financial tools and techniques under the shadow of traditional approach have been applied which minutely evaluates and examine relevant components for banks smooth functioning in comparison to Basil Norms. For the purpose Capital Adequacy Ratio (CAR) in which Tier I Capital, Tier II, Analysis of Non Performing Assets (NPA), and Analysis of Return on Assets are tested. After judicious evaluation of all performance parameters banks are ranked according to their performance. The outcome of the study depends on the selected period by the researchers which may differ from other analysis.

Review of Literature:

A survey of literature revealed that in the field of economic slowdown, recession and in banking industry, large numbers of academicians and research agencies have carried out extensive research, and came up with vital findings which have given new dimension and set an ultimate parameter and explored obscure reality. However, it is been noted that most of the

studies were carried out in advance countries like UK, USA, and Europe etc. and very few studies is been carried out in developing and underdeveloped economies. Further, the critical analysis of these studies highlights that no systematic and scientific study has yet been made to test the authenticity and validity of economic slowdown, recession and their overall impacts on the banking sector operating in developing nations and thus the present paper seeks to make a humble beginning in these respects.

Sathye (2005) in his study examined the impact of privatization on the performance of banks and his study revealed that private sector banks have performed better than public sector banks in India under prevailing circumstances, Vradi, Vijay, Mauluri,

Nagarjuna (2006) in their study examined the stability of profitability, productivity, assets quality and financial management of banking industry as a whole which is important for survival with stability. For the purpose they adopted development envelopment analysis and revealed that public sector banks are more efficient than other banks in India,

Roma Mitra, Shankar Ravi (2008) in their study tries to model and evaluate the efficiency of 50 Indian banks and found the result insightful to the financial policy planner as it identifies priority area for different banks which can improves the performance,

NecmiAvkiran and Hiroshi Morita (2008) in their study examined the performance of banks through ratio analysis and they found that banks fail to capture the benefits of a simultaneous multi-dimensional benchmarking relative to a company's peers,

B Satish Kumar (2008) in his study found that with the adopted effective economic reforms banking sector has changed drastically and private sector have played crucial role in economic development of the nation. New generation banks with modern technology and professional attitude has revolutionized the sector,

Nishank (2009), in his study find that RBI proactive steps and effective regulations have protected Indian housing sector market from debacle. It is found that gradualist approach of the RBI in shaping the derivatives market and prudent regulation of the overseas investments averted the subprime contagion;

Kapoor (2009) in his study identifies the situations in which dividend policy can affect the firm value. It could matter, not because dividends are safer than capital gains, as was traditionally argued, but because one of the assumptions underlying the result is violated,

DrBhavet, Priya Jindal, DrSambhav Garg (2013) in their study analyzed the investment policy and strategy followed by the banks. They minutely examined the trend in deposits, investment and loans & advances in banking sector. The period of study was post reform period of five years (2008-12). They found that sound lending & investment policy is not only the prerequisite for a bank's profitability but also crucially significant for the promotion of commercial savings of a developing country like India.

Main Causes of the GFC

Although the exact causes of the financial crisis are a matter of dispute among economists, there is general agreement regarding the factors that played a role for all financial crises, a range of factors explain the GFC and its severity, and people are still debating the relative importance of each factor. Some of the key aspects include:

1. Excessive risk-taking in a favorable economic conditions

In the years leading up to the GFC, economic conditions in the United States and other countries were favourable. Economic growth was strong and stable, and rates of inflation, unemployment and interest were relatively low. In this environment, house prices grew strongly. Expectations that house prices would continue to raise led households, in the United States especially, to borrow imprudently to purchase and build houses. A similar expectation on house prices also led property developers and households in European countries (such as Iceland, Ireland, Spain and some countries in Eastern Europe) to borrow excessively. Competition increased between individual lenders to extend ever-larger amounts of housing loans that, because of the good economic environment, seemed to be very profitable at the time.

2. Ignorance to assess borrowers' abilities to make loan repayments

Many lenders providing housing loans did not closely assess borrowers' abilities to make loan repayments. This also reflected the widespread presumption that favourable conditions would continue. Additionally, lenders had little incentive to take care in their lending decisions because they did not expect to bear any losses. Instead, they sold large amounts of loans to investors, usually in the form of loan packages called 'mortgage-backed securities' (MBS), which consisted of thousands of individual mortgage loans of varying quality. Over time,

MBS products became increasingly complex and opaque, but continued to be rated by external agencies as if they were very safe.

3. Misunderstanding about MBS

Investors who purchased MBS products mistakenly thought that they were buying a very low risk asset: even if some mortgage loans in the package were not repaid, it was assumed that most loans would continue to be repaid. These investors included large US banks, as well as foreign banks from Europe and other economies that sought higher returns than could be achieved in their local markets.

4. Increased borrowing by banks and investors

In the lead up to the GFC, banks and other investors in the United States and abroad borrowed increasing amounts to expand their lending and purchase MBS products. Borrowing money to purchase an asset (known as an increase in leverage) magnifies potential profits but also magnifies potential losses. As a result, when house prices began to fall, banks and investors incurred large losses because they had borrowed so much. Additionally, banks and some investors increasingly borrowed money for very short periods, including overnight, to purchase assets that could not be sold quickly. Consequently, they became increasingly reliant on lenders – which included other banks – extending new loans as existing short-term loans were repaid.

5. Regulation and policy errors

Regulation of subprime lending and MBS products was too lax. In particular, there was insufficient regulation of the institutions that created and sold the complex and opaque MBS to investors. Not only were many individual borrowers provided with loans so large that they were unlikely to be able to repay them, but fraud was increasingly common – such as overstating a borrower's income and over-promising investors on the safety of the MBS products they were being sold. In addition, as the crisis unfolded, many central banks and governments did not fully recognize the extent to which bad loans had been extended during the boom and the many ways in which mortgage losses were spreading through the financial system.

Subsequences of global financial crisis

1. US house prices fell, borrowers missed repayments

The catalysts for the GFC were falling US house prices and a rising number of borrowers unable to repay their loans. House prices in the United States peaked around mid 2006, coinciding with a rapidly rising supply of newly built houses in some areas. As house prices began to fall, the share of borrowers that failed to make their loan repayments began to rise. Loan repayments were particularly sensitive to house prices in the United States because the proportion of US households (both owner-occupiers and investors) with large debts had risen a lot during the boom and was higher than in other countries.

2. Stresses in the financial system

Stresses in the financial system first emerged clearly around mid 2007. Some lenders and investors began to incur large losses because many of the houses they repossessed after the borrowers missed repayments could only be sold at prices below the loan balance. As a result, MBS prices declined, which reduced the value of MBS and thus the net worth of MBS investors. In turn, investors who had purchased MBS with short-term loans found it much more difficult to roll over these loans, which further exacerbated MBS selling and declines in MBS prices.

3. Spillovers to other countries

As noted above, foreign banks were active participants in the US housing market during the boom, including purchasing MBS (with short-term US dollar funding). US banks also had substantial operations in other countries. These interconnections provided a channel for the problems in the US housing market to spill over to financial systems and economies in other countries.

4. Failure of financial firms, panic in financial markets

Financial stresses peaked following the failure of the US financial firm Lehman Brothers in September 2008. Together with the failure or near failure of a range of other financial firms around that time, this triggered a panic in financial markets globally. Investors began pulling their money out of banks and investment funds around the world as they did not know who might be next to fail and how exposed each institution was to subprime and other distressed

loans. Consequently, financial markets became dysfunctional as everyone tried to sell at the same time and many institutions wanting new financing could not obtain it. Businesses also became much less willing to invest and households less willing to spend as confidence collapsed. As a result, the United States and some other economies fell into their deepest recessions since the Great Depression.

5. Policy Responses

Until September 2008, the main policy response to the crisis came from central banks that lowered interest rates to stimulate economic activity, which began to slow in late 2007. However, the policy response ramped up following the collapse of Lehman Brothers and the downturn in global growth.

6. Lower interest rates

Central banks lowered interest rates rapidly to very low levels (often near zero); lent large amounts of money to banks and other institutions with good assets that could not borrow in financial markets; and purchased a substantial amount of financial securities to support dysfunctional markets and to stimulate economic activity once policy interest rates were near zero (known as 'quantitative easing').

7. Increased government spending

Governments increased their spending to stimulate demand and support employment throughout the economy; guaranteed deposits and bank bonds to shore up confidence in financial firms; and purchased ownership stakes in some banks and other financial firms to prevent bankruptcies that could have exacerbated the panic in financial markets.

8. Stronger oversight of financial firms

In response to the crisis, regulators strengthened their oversight of banks and other financial institutions. Among many new global regulations, banks must now assess more closely the risk of the loans they are providing and use more resilient funding sources. For example, banks must now operate with lower leverage and can't use as many short-term loans to fund the loans that they make to their customers. Regulators are also more vigilant about the ways

in which risks can spread throughout the financial system, and require actions to prevent the spreading of risks.

An Analysis of Indian Banking Industry:

Impact of Global Financial Crisis on India India's economy has been one of the stars of global economies in recent years, growing 9.2% in 2007 and 9.6% in 2006 and has seen a decade of 7 plus per cent growth. Growth had been supported by markets reforms, huge inflows of FDI, rising foreign exchange reserves, both an IT and real estate boom, and a flourishing capital market. But, in the middle of 2008, price increases of global commodity (Hamilton 2008), especially those of oil, metal, and food took a toll on India. Inflation reached at 12.91 per cent, the highest level seen for a decade. With this growth softened, budget deficits widened and trade balances worsened. Before the India could recover from the adverse impact of high commodity prices, the global financial crisis has come knocking. Initially, it was argued that India would be relatively immune to this crisis, because of the 'strong fundamentals' of the economy and the supposedly well-regulated banking system. Economy began to slow down from the middle of 2007-08. After a long spell of growth, the Indian economy is experiencing a downturn. Industrial growth is faltering, inflation remains at double digit levels, the current account deficit is widening, foreign exchange reserves are depleting and the rupee is depreciating. IMF has also predicted that Indian economy can not remain immune from global financial crisis and crisis will hit India's growth story. Indian government is feeling the heat of global crisis in India. As a result, The Union Government has constituted a committee to consider issues raised by India Inc on global financial crisis and its impact on India.

US recession resulted global economic slowdown and has impacted all sectors which translated into banking and financial sabotage and led into further global economic chaos. All the respective economies associated with US have more or less experienced the heat of US slowdown. India also faced the heat of US recession in control parameters especially in export and import and in FDI. Indian banking industry was also hit and resulted increased bad loan and NPAs. Thus it became paramount to analyze the severity of recession on Indian banking and financial sector. In order to analyze the performance of Indian Scheduled Commercial Banks three significant parameters "net non performing assets as a percentage of

net advances, capital advocacy ratio and return on assets” were methodically and scientifically analyzed. Subprime alarmed the economic debacle in 2007, but it was having its existence from a long time and was gradually chewing the economic pace. Period of study chosen for analysis is from 2005-06, 2006-07, and 2007-08. Indian banking structure is a result of prudent process of expansion, reorganization and consolidation and comprises the public sector commercial banks, private sector banks, co-operative banks and regional rural banks. At the apex is the Reserve banks of India (RBI), the nation’s Central bank followed by State bank of India (SBI), major nationalize scheduled banks, other joint stock banks, co-operatives banks, Regional rural Banks. By the end of 31st March 2008 India has 79 scheduled commercial banks (SCBs) 28 public sector banks (that is with the Government of India holding a stake), 23 private banks (these do not have government stake; they may be publicly listed and traded on stock exchanges) and 28 foreign banks.

Capital Adequacy Ratio (CAR): Capital Adequacy Ratio is an important indicator to assess the financial soundness and solvency of the banks. It measures the bank’s capital and reflects its health. Efficient and effective survival of banks largely depends on adequacy of capital as it provides cushion against inherent in its operation and enable banks to discharge their responsibility efficiently. It reflects the confidential and strategically strength of a bank which work as a hedge during the time of crises. It is used to protect depositors and promote the stability and efficiency of financial system around the world. It is expressed as a percentage of a bank’s risk weighted credit exposure and is also known as “Capital to Risk Weighted Ratio (CRAR)”. According to latest RBI norms that it should be 9%. Below to it means bank is not adequately capitalized to expand its operations. In order to maintain the norms banks largely relied on retained earnings, but can also float capital issues in the financial market in order to supplemented retained earnings.

Analysis of Capital Adequacy Ratio

S.No	Category of Indian Banks	2005-06		2006-07		2007-08	
		units	%	units	%	units	%
1.	Nationalized Banks	28	12.2	28	12.27	28	12.05
2.	Private Sector Banks	27	11.71	25	12.98	23	15.37
3.	Foreign Banks in India	29	41.84	29	39.25	28	44.1
Weighted Average			22.27		22.03		24.38

Basel Accords and Norms:

Basel Accords generally refer to banking supervision accords. It is a kind of recommendations on banking regulations. With growing globalization it became important to protect the investment of banks and in banks across the world. Thus for the same Basel Committee on Banking Supervision (BCBS) in Basel city in Switzerland came into existence with a protective vision of cooperation among central banks with a common goal of financial stability and common standards of banking regulations. Its basic objective is to create an international standard for banking regulators to analyze and control that how much money is required by the banks to guard them against the financial and operational risks and collapse and to settle emerging global financial dispute at Bank of International Settlement, Switzerland. In 1988, BCBS in Basel, Switzerland with the cooperation of central banks of respective member's countries published a set of minimum capital requirements for banks which is generally known as the 1988 Basel Accord and in 1992 it was lawfully enforced on the G 10 countries as a Basel I. It focused entirely on credit risk. It defined capital and structure of risk weights for banks. In this first set of banking regulations norms, minimum capital required was fixed 8% of risk weighted assets (RWA). India adopted Basel I guideline in 1999. Later with growing economical engagement, changed financial conglomerates, financial innovations and risk management it became paramount to make it more effective and efficient and therefore, more comprehensive and effective set of guidelines, known as Basel II was introduced and implemented in June 04 by BCBS. India being integral part of BCBS has notified its banking industry through its central banks "RBI" that they must maintain CARR of minimum 9% of risk weighted assets (RWA). These new set of guidelines were refined and reformed version of Basel I accord and broadly base on three parameters "Capital Adequacy requirement, Supervisory Review and Market Discipline" which are recognized as it pillars. It became mandatory for banks to disclose their CAR, risk exposure, etc to central bank. India and many overseas countries are still lacking behind in adopting Basel II norms though Indian banking industry were required to ensure full implementation of Basel II guidelines by March 31, 2009. Due to US recession, global economic slowdown and deficiencies in global financial regulation revealed by the late 2000 financial crises, in 2008, it was felt to further strengthen the system of the banks and to make more judicious modification in Basel norms. During the period most of the developed

economies were undercapitalized, over leveraged and were largely depending on short term funding. In addition, the quantity and quality of capital under Basel II were not sufficient to absorb any risk arise in near future. Therefore, in 2010, Basel III norms were developed by the Basel Committee on Banking Supervision (BCBS) with a view of making most of banking activities capital intensive. The latest guidelines of Basel III norms aims to promote more effective, protective and transparent banking system by focusing on four significant banking parameters viz. capital, leverage, funding and liquidity and is scheduled to be introduced and implemented from 2013- until 2018. Currently there are 27 member nations in the committee and also have critics who advocate that greater regulation have reduced the speed of recovery and will further negatively affect the stability of the financial system.

Analysis of Return on Assets of the Indian Banking Industry:

Return on assets (ROA) or returns on average assets (ROAA) are effective tool to evaluate banks and other financial institutions. They measures the overall efficiency of capital invested in business by establishing relation of net profit with total assets of the organization. It gives investors a reliable picture of management's ability to pull profits from the assets and projects into which it chooses to invest. It is the net income profit generated by the banks on its total assets including fixed assets. This ratio indicates the efficiency of utilization of assets in generating revenue as what is the yield for every rupee invested in assets. The simplest way to determine ROA is to take net income reported from a period and divide that by total assets.

Analysis of Return on Assets

S.No	Category of Indian Banks	2005-06		2006-07		2007-08	
		units	%	units	%	units	%
1.	Nationalized Banks	28	0.84	28	0.94	28	0.98
2.	Private Sector Banks	27	0.59	25	0.88	23	1.12
3.	Foreign Banks in India	29	1.56	29	2.06	28	2.87
Weighted Average			1.01		1.32		1.69

RBI Prudent Measures Saved Indian Banking Industry:

Prudent policies laid by RBI have protected Indian banking industry during the crisis period. Its proactive steps to check reckless lending's to infrastructure sector especially to housing segment by stipulation of segment credit assessment, setting rational and higher provision for standard assets and higher margin requirements. RBI judicious and futuristic approach in shaping the derivatives market and timely effective regulation of the overseas

investment also helped in averting subprime contagion. With least knowhow of mortgage based product with derivative base, most of the banks kept them away and did not have such lending's on their balance sheet and followed the RBI time to time market analysis and economic prediction. RBI emphases' on stringent lending norms, thus, Indian banks under RBIs instruction cannot lend to subprime borrowers in any way. Due to RBI leading policy by reducing PLR, SLR, repo rates and CRR, banks in India creates more funds available for lending. Being banker bank it enjoys the privilege on the credit flow and exercise its strength to control other banks operating in India. To keep economic activity moving the RBI advice state owned banks to increase lending and it also revise the credit disbursement target of the banks accordingly. RBI policy of controlling the Rupee in international market also helped banks from losses as rupee fluctuates only within the administrated price band set by the RBI. Indian banks were also protected by the RBI restriction imposed on investing in Foreign Financial Products, which ultimately reduced the exposure to US mortgage based bonds and further losses.

Conclusion

The analysis of the Indian banking industry shows stability and growth with defensive approach. Though during the period it was found that economic scenario of India was far better than the other countries despite of facing lot of difficulties such as high price of crude oil, rising trend of high interest rates, rupee appreciation, volatile share market and cut down of corporate earnings, high inflation etc, which impacted its core business of borrowing and lending to a great extent, in addition the banks also drives income from other sources, such as case management business which is also facing the heat of global recessions. However banks lost income from the source since most banks transformed their systems to CBS. Besides, rising bonds yields have resulted into a lower other income from the banks for the past four stepped up operations and plans to derive higher income from third party product sales from insurance companies, guarantees, letter of credit etc. Further, banks NIMs net interest rate came under pressure due to hiking of interest rate by banking regulators RBI which curbed the banks profit. However, the banks renewed focus on increasing its share of CASA base might help it in reducing the hike in the overall costs of borrowing thereby driving its margins. It is noticed that from recent past and prevailing present the bank's assets quality seems to have deteriorated marginally. Very few banks were able to maintain NPA below 1%

during the period. Increasing Inflation, a hidden tax was absorbed by the banks with efficient financial policies to avoid low investment to prevailing opportunities as India rely highly upon foreign investment thus investors would be well placed to invest in inflation- hedging assets to protect their investment and return against the risk of a downturn in equities. But still when it compared to the other countries, India's banking system was found strong and it has been also noted that when large multinational banks are booking huge losses or are on verge of filing bankruptcy Indian banks have sailed smoothly with stability. All the key indicator analyzed in this paper also indicate that the Indian banking Industry seems to be stable and growing gradually despite of prevailing financial crises in US and Europe. The main reason behind, that all the Indian public banks are under the supervision of RBI and following its regulations.

In order to organize banking with growth, banks have to adopt rationale profit maximization policy in which it can protect the banking activities with minimum risk. Mixed banking system (PSUs and Private Banks) can only balance the banking activities effectively and efficiently. PSUs are state oriented and are prone toward providing safety and security to the society. Regulatory body should be made more empowered and tighter regulations should be adopted to protect the economic and financial activities. Interest rate policy should be futuristic and clear as its fluctuation largely depend upon overall internal and external economic conditions which are influenced by high growth and recessions thus they should be judiciously implemented with social structure for the betterment of the society as a whole. In order to grow, banks have to develop trust in society and have to develop mass motivation, later have to convert this motivation into investment. Banks have to float good schemes which are tax saving flaxy along with judicious guidance to the investors to invest their ideal money. They have to develop new horizons especially in the banking area of retail, housing, vehicle loans and credit cards etc. They have to become mentor to the society and have to develop healthy trust. More the trust between banks and society more will be the fund generation and further it will ultimately multiply the nation fortune and global leadership. To meet the global competition they have to adopt continuous up gradation and modernization policies and have to implement effective balance score card in order to evaluate their performance time to time.

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