Crisis 2008 Turned Out to be a Game Changer for Banks and Financial Institutions

Sugandha Sharma*, Aishwarya Khatri and Umang Puri
Department of Finance, Jagan Institute of Management Studies, India

Abstract

The very survival of financial institutions and banks depends on various factors. While financial institutions have faced difficulties in over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to credit defaults by borrower. For most banks, loans are the largest and most obvious source of credit risk. Credit risk continues to be the leading source of problems in banks world-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Discussing about the crisis 2008, Risk got new dimension in banking and financial institution. More stringent acts and policies were framed. To control risk is the main concern. Arvind and Jason are both discussing about current policies in their own countries banking system. Expected Credit Loss and Mark to market concept need more focus on controlling the risk. The discussion showed the major reasons for increasing risk. This also recommends about the strengthening of regulatory frameworks to identify risk.

Keywords: Financial institutions; Financial crisis; Capital adequacy; Asset quality

Case Study

Banks losing money on mortgage defaults, freezing of interbank lending and drying up of credit to consumers and businesses. This is the situation that Jonas faced in US and discussing about it with Arvind staying in India.

Jonas is working in the MNC company since 2005. He is sharing all the situation of 2009 subprime crisis with Arvind. This crisis was a big turning point for US economy and impacted other economies as well. Somewhere it was a herding behavior and somewhere there was a complete effect. Arvind asked Jason to continue their discussion that they couldn’t finish last time. So, Jason was telling Arvind about his job switch to ABC co. in Year 2008 and how Sub Prime Crises made a change in his life being a US Citizen”. Jason replied to this by telling that many of the highly professional people knew about the approaching crises and acted accordingly, but there were thousands of people like me who lost their jobs”. Arvind asked Jason to tell him about Sub Prime Crisis. Jason started telling year 2004 when Fannie Mae and Freddie Mac purchased huge numbers of mortgage assets including risky Alt-A Mortgages. They charged large fees and received higher margins from these subprime mortgages and used this as collateral for obtaining private-label mortgage backed securities. Many foreign banks bought collateralized US debt as sub-prime mortgage loans were re-bundled into collateralized debt obligations and sold to financial institutions around the world. Many US consumers defaulted on their mortgaged loans, US banks lost all their money and banks in other countries too. With this, Banks stopped lending and no credit facility with consumers and businesses. The bubble of 2008 crisis bursted out like this. We were in the worst situation and this acted globally. Arvind then understood the complete scenario of 2008 that how US economy was affected. He also tells that many depositors of the bank pulled out their money from their accounts in our country after the crisis. There was no perfect timing for any bank at that time. Arvind being inquisitive asked Jason about the solution for the same.

To this Jason said that Like ‘Every problem has a solution’ similarly DODD FRANK and Basel III came into picture and provided with guidelines and set of proposals for Banking and Financial Institutions to comply with the Regulatory framework requirements. The Dodd-Frank Wall Street Reform and Consumer Protection Act bring comprehensive reforms to the regulation of swaps. These products, which have not previously been regulated in the United States, were at the center of the 2008 financial crisis. This helped in enhancing the transparency and improve the pricing in derivatives market leading to lowered risks for American Public. To this Arvind told to Jonas that he is right!! As India was equally hit the same way. Lending Rates were impacted [1].

Arvind discusses about the present situation of Banks in India. Arvind being the Risk manager shares his experience of working with Risk Credit Department of XYZ bank. In his working tenure rejection cases are more than accepted one. Expected Credit loss and mark to market valuation of property creating loss and default situation for bank. Both ECL and Mark to market concept needs to come under revision side of RBI Guideline. For sanctioning of loans, the pre sanctioning requirements include:

These requirements were expressed in the form of a caselet by Arvind- Mr. Kapoor wanted to expand his business so he approached bank for loan. Certain documents were required to apply for loan like KYC, last few years audited financials or CA certified provisional, Last few years ITR along with computation of income, Credit Information Report, Vintage documents (as per the nature of loan), banking statements. These documents were required at the very first stage of loan application.

All above requirement carry their own significance – to know the background of the borrower, to know the financial status of the borrower, to get proper hygiene check of borrower. Arvind further
explains that all these are necessary to reduce the chances of credit defaults by borrowers. Credit scoring of the borrower evaluates the confidence and risk level associated which further helps banks to make the decision regarding acceptance or rejection of cases. Possible reasons for rejection of loan application are defaults in credit history, poor financials, duplicate KYC and return and also low collateral value. To which Jason questions Arvind that how do we know which borrower is creditworthy. Arvind then advises a theoretical model. Arvind then shares the current data of bank credit in India.

The value of loans in India increased 12.70 percent year-on-year in the two weeks to August 3rd 2018. Loan growth in India averaged 11.63 percent from 2012 until 2018, reaching an all-time high of 18.70 percent in April of 2012 and a record low of 4.10 percent in March of 2017 (Figure 1).

Current Data of Sectoral Credit Shared by Arvind

Credit to agriculture and allied activities increased by 6.5 per cent in June 2018 in comparison with an increase of 7.5 per cent in June 2017. Credit to industry increased by 0.9 per cent in June 2018 as compared with a contraction of 1.1 per cent in June 2017. Credit to major sub-sectors such as ‘textiles’, ‘all engineering’, ‘food processing’, ‘chemical and chemical products’, and ‘cement and cement products’ accelerated. However, credit to ‘basic metal and metal products’, ‘construction’ and ‘gems and jewelry contracted/declined [2]. Credit to the services sector increased by 23.3 per cent in June 2018 as compared with an increase of 4.7 per cent in June 2017. Personal loans increased by 17.9 per cent in June 2018.

Now after understanding the Indian present scenario, Jason tells that in US the banks and financial institutions also adhere to the regulatory requirements of addressing the financial stability, cyber security simplification, provisions related to safety, standardization of due diligence through financial services like – Counterparty Manager, know your third party, CTI (consider FATCA), Tax Utility provide the end to end solutions to the clients in order to meet the regulatory requirements.

After all this conversation, Arvind realized that how the crisis gave birth to strict regulations related to risk management. Bank Lending became a risky conduct for banks and financial institutions. To measure the risk, main focus was on risk mitigation. It is very important to keep every system in check to stabilize the economy.

**Teaching Manual**

**Target audience**

Management students (to upgrade their knowledge in banking and financial institutions).

**Learning objectives**

To know about the financial crisis 2008.
To know about the regulatory frameworks for identification of risk.
To understand the working of credit risk department in banks and risk analysis in financial institutions.

**Case reading**

Following models have been used in above case study to completely understand the case situations:

**Altman Z model:** This model helps in knowing the output of a credit strength that measures a publicly trading manufacturing company’s likelihood of bankruptcy. This model evaluates the score that is based on 5 financial ratios (can be calculated from company’s annual reports). It uses profitability, leverage, liquidity, solvency and activity ratios to anticipate the company’s probability of being insolvent.

\[ Z \text{ Score}=1.2 \times A+1.4 \times B+3.3 \times C+0.6 \times D+1.0 \times E \]

where,

\[ A=\text{working capital/total assets} \]
\[ B=\text{retained earnings/total assets} \]
\[ C=\text{earnings before interest and tax/total assets} \]
\[ D=\text{market value of equity/total liabilities} \]
\[ E=\text{sales/total assets} \]

![Figure 1: Trading economics.](image-url)
A score below 1.8 means that company is moving towards bankruptcy, while score above 3 means that company is at safer side that it is not likely to go bankrupt.

Altman Z Score model can be used by investors to determine whether they should buy or sell a stock. This is important to determine if investors are more concerned about the underlying company’s financial health. Investor will purchase a stock if score is near to 3 and will sell if it is near to 1.8.

**CAMELS rating system:** CAMELS is a recognized international rating system developed by US that is used by bank supervisory authorities to rate financial institutions according to six factors represented by its acronym. CAMELS framework was proposed to assess financial institutions. Supervisory authorities assign each bank a score on a scale. It is used to measure risk and financial stability of bank. This rating is like the likert scale. A rating of 1 is considered the best, and a rating of 5 is considered the worst for each factor.


**Capital adequacy ratios:** Capital Adequacy ratio evaluates the banks' available capital expressed as a percentage of banks' risk weighted credit exposures. It is also known as capital to risk weighted ratio. This ratio is used to promote the efficiency and stability of financial systems by lowering the risk of banks becoming insolvent. In this ratio, tier one capital and tier two capital are measured.

\[
\text{CAR} = \frac{\text{Tier 1 capital} + \text{Tier 2 capital}}{\text{Risk Weighted Assets}}
\]

Risk weighted assets takes into account credit risk, market risk and operational risk. Minimum capital adequacy ratios are critical and need to make sure that banks before becoming insolvent and lose depositor's fund, must have enough cushion to absorb losses.

Tier one capital is the capital that is easily and permanently available to buffer losses suffered by a bank without it being required to stop operating. For eg. Ordinary share capital.

Tier two capital is the one that shield losses in case the bank is winding up, so it provides a lesser degree of protection to depositors and creditors. It is used to absorb losses if a bank loses all its tier one capital.

**ECL (Expected Credit Loss) model:** It is of great significance in the Indian context, considering the Non-Performing Asset situation in the banking sector, as the ECL model would require banks to start provisioning for expected credit losses from the time when the loan is originated rather than based on trigger events when the loss is looming or the current rule based provisioning norms.

To meet the regulatory framework set by US government, big financial institutions have availed financial services mainly-counterparty manager which helps in sharing of documents of data and tax, KY3P it helps in third party risk management by due diligence and vendor management, CTI helps to adhere to guidelines under Foreign Account Tax Compliance act by completing the various forms like W8, W9 etc. and it further helps in eliminating tax evasion by US citizens [3].

**Questions for Discussion**

- How mark to market concept in bank lending increasing the level of credit risk default in banking?
- How provisions related to Expected credit loss can be strengthened in banks?
- What are the regulatory frameworks to identify the risk?
- The case uses Altman Z Model. Do you think that this model perfectly applies in controlling risk?

**Recommendations and Conclusion**

As it has been found that there is credit risk default in banks and financial institutions. It is recommended that Central banks need to revise their guidelines for expected credit loss and credit risk. Because if banks are in big default then contingent liabilities may increase and turn out to be explosive situation in the banking industry and economy. This is all what happened in US financial crisis. Due to which international regulatory frameworks were planned and designed to be followed by banks and financial.

**References**

1. Trading economics.com – Reserve Bank of India.