

## SUB PRIME

In this article we will first understand the meaning of the term Sub prime taking it further to the Sub prime Crisis and its impact on Economy, Banking Sector, Stock Market, Job Market etc.

**Sub Prime:** Sub Prime as the word defines, means subordinate to primary. The word is used in the lending industry to define a borrower who does not have a good credit history and hence is not able to qualify for best market rates vis-à-vis the prime category borrower. The term "sub prime" reflects not the lending rate but the borrower's credit status. Potential sub-prime borrowers may comprise of financially troubled people, meaning thereby that the sub-prime lenders take a higher degree of risk. Hence to offset the risk to an extent the lenders increase the interest rates. *Sub-prime lending may be utilized for sub-prime mortgages, sub-prime car loans, sub-prime credit cards etc.* Sub prime mortgages totaled \$600 billion in 2006, accounting for about one-fifth of the US home loan market.

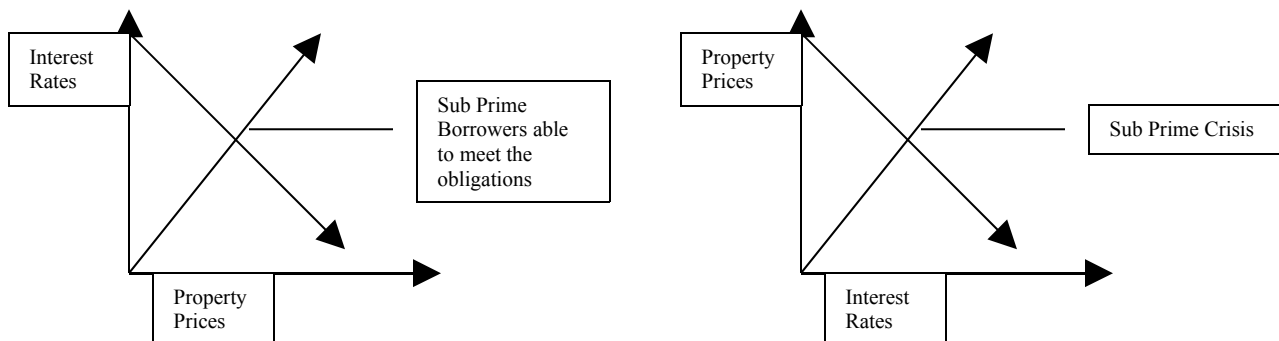
Federal National Mortgage Association, a government sponsored enterprise of the US government has standards to differentiate between prime and sub prime loans. Eligible borrowers for prime loans have a credit score above 620 (credit scores are between 350 and 850 with a median in the U.S. of 678 and a mean of 723), a debt-to-income ratio (DTI) no greater than 75% (meaning that no more than 55% of net income pays for housing and other debt), and a combined loan to value ratio of 90%, meaning that the borrower is paying a 10% down payment.

*Sub prime lending is also called B-Paper, near-prime, or second chance lending.*

**Types of Sub Prime Mortgages:** Sub Prime Mortgages can be classified in 3 categories:

- \* Interest-only mortgages, which allow borrowers to pay only interest for a period of time, typically 5-10 years.
- \* "Pick a payment loans", for which borrowers choose their monthly payment (full payment, interest only, or a minimum payment which may be lower than the payment required to reduce the balance of the loan).
- \* Initial fixed rate mortgages that can be converted to variable rates.

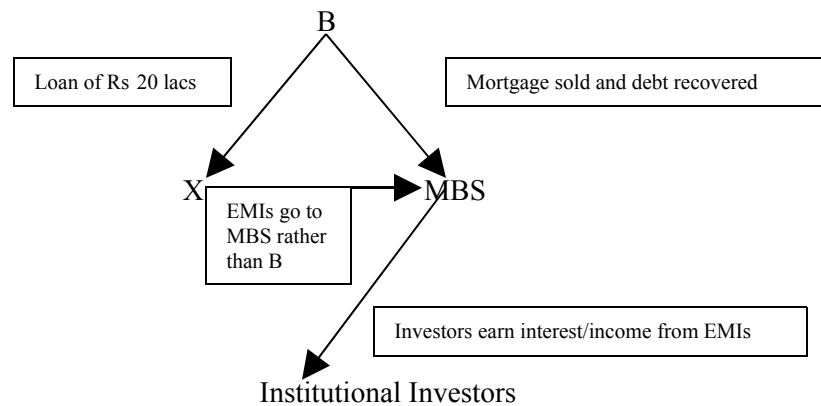
**Sub Prime Crisis:** It all started in 2006 with US Market tumbling down due to defaults by the sub prime borrowers. The doubled edged sword, increase in interest rates and simultaneously fall in property prices, hit the market leading to sub prime mortgage crisis. Between the years 2000-2005, along with very low interest rates, property prices were also on a rising trend and the sub prime borrowers were able to meet their obligations as they were building equity by selling the properties or getting the properties refinanced. However, in 2005, the property prices started falling, interest rates started touching the roof top, leaving no room for the sub prime borrowers to meet their liabilities leading to meltdown of the US sub prime mortgage industry.



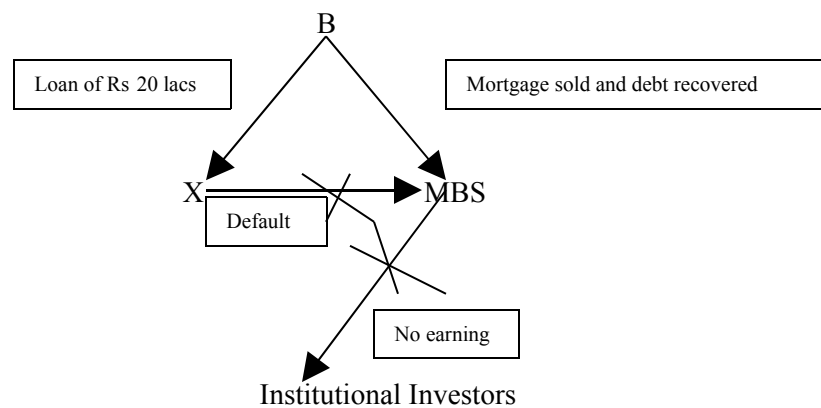
In 1994, less than 5% of total mortgages were sub prime in US. But within 2005, that figure went up to 20%. The sudden changes in the banking system were mainly the reasons behind it. Earlier, mainly the commercial banks were used to serve the American communities and they offered fixed rate mortgages. As the competition increased several mortgage products and choices, such as sub prime loans of different varieties for the consumers were offered along with adjusted rate mortgages. However, in 2005, the rates of interest began to increase. Therefore, demand for home came down which also brought down the property prices leading to start of sub prime crisis.

**How does it work?** A borrower “X” with poor credit history approaches a lender/financial institution “B” for loan. Seeing his poor records, the financial institution declines the mortgage to him at prime lending rates. However, “B” has an appetite to take risk by charging higher interest rate from “X”. This is called sub prime rate and sub prime mortgage market. “X” agrees to avail loan at sub prime rate. “B” further securitizes these loans i.e. it converts these home loans into financial securities, which promise to pay a certain interest. This is called investment in Mortgage Backed Securities (MBS). **So where is the problem?**-The sub prime home loans were given at floating rate of interests. So as interest rates increased, the rates on floating home loans too went up, and so did the monthly installments needed to service these loans. Simultaneously, the property prices declined hitting the sub prime borrowers who started defaulting. Once, more and more sub prime borrowers started defaulting, payments to the institutional investors who had bought the financial securities stopped, leading to huge losses.

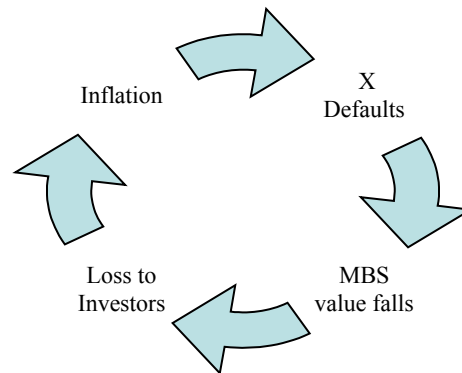
#### Ideal Scenario



#### Sub Prime Crisis



### Vicious Circle of Economy



**Mortgage-backed securities** resemble bonds, instruments issued by governments and corporations that promise to pay a fixed amount of interest for a defined period of time. They are created when a company buys a bunch of mortgages from the primary lender and then uses monthly installment payments of borrowers as the revenue stream to pay investors who have bought chunks of the offering. They allow lenders to sell the mortgages they make, thus replenishing their capital and allowing them to lend again. For their part, buyers of mortgage-backed securities take security in the knowledge that the value of the bond doesn't just rest on the creditworthiness of one borrower, but on the collective creditworthiness of a group of borrowers. When the housing market is doing well and interest rates are low, investing in a mortgage-backed security is a fairly safe bet. So long as homeowners stay current with their payments, holders of mortgage-backed securities receive a stream of payments. Even those investors who buy lower-quality mortgage-backed securities, in the hopes of receiving higher interest payments, generally fare well in a bull market. But when the housing market goes south, or if interest rates rise, even the safest of these investments are in serious jeopardy. Rising interest rates reduce the value of securities that pay a fixed rate of interest. When borrowers default on mortgages, the stream of payments available to holders of mortgage-backed securities declines. And when a firm has borrowed heavily to finance the purchase and trading of such securities, it doesn't take much of a fall in value to trigger serious problems.

**Risks associated with Sub Prime Mortgage-** There are four primary categories of risks involved with sub prime mortgage which can lead to sub prime crisis:

- \* *Credit Risk:* This risk is borne by the lending institution and is the risk of prospective default by the mortgage seeker. However, with the introduction of MBS, this risk is covered to an extent.
- \* *Asset Price Risk:* This risk relates to the valuation of MBS, whether it will be able to overcome the credit risk or not. However, valuation of MBS is very subjective. It is derived by calculating the collection chances of sub prime mortgage along with existence of viable market into which these assets can be sold. Due to increasing mortgage delinquency rates, value of MBS has started declining. On the other hand, Banks and Institutional investors have recognized substantial losses on revaluation of their securities downwards due to Mark to Market accounting. This is due to asset price risk.
- \* *Liquidity Risk:* This risk is on account of wiping or reduction of liquidity in market on account of above two risks. To run its operations, and generate cash, many companies rely on access to short-term funding markets such as commercial papers and repurchase market. Companies often obtain short-term loans by issuing commercial

paper by pledging MBS. Investors provide cash in exchange for the commercial paper, receiving money-market interest rates. However, because of concerns regarding the value of the MBS due to sub prime crisis, the ability of many companies to issue such paper has been significantly affected leading to liquidity risk.

- \* *Counterparty Risk:* This is risk on account of related parties affected by the vicious circle of sub prime crisis. Investment banks help companies and governments raise money by issuing and selling securities in the capital markets (both equity and debt), as well as providing advice on transactions such as mergers and acquisitions. Major Investment Banks and other financial institutions have taken significant positions in credit derivative (MBS) transactions. However, due to above mentioned risks, the financial health of investment banks has taken a southward position, potentially increasing the risk to their counterparties and creating further uncertainty in the market.

**India, Jobs and Sub Prime-**Indians feel how we are affected by Sub Prime. A situation that rose in world market cannot make India stand out without being impacted by it. However, the impact is not too big to create a crisis. Economists feel that even if the sub prime crisis leads to a global credit crunch, it still may not have a big effect because there is quite a lot of liquidity in domestic markets in countries like India. Lack of exposure to U.S. mortgage securities; availability of liquidity in domestic markets; and the possibility of lower capital inflows could help countries such as India with macroeconomic management to face the crisis. The first Indian Organization to be affected by this Crisis is ICICI Bank Ltd. ICICI Bank's profit took a hit of more than Rs 1,050 crores (\$264 million) in the year 2007-08. This is an indirect effect. ICICI lost money due to depreciation in the value of securities it bought in the international markets. Due to a rise in global interest rates after the sub prime loan crisis, the value of these securities fell, forcing the bank to provide for the difference from its profits. The loss, however, is notional since the bank has not actually sold these securities. Public Sector Banks, viz State Bank Of India, Bank Of India, Bank Of Baroda, Canara Bank, Punjab National Bank etc do not have major exposure to credit derivatives market due to their limited overseas operations. However, the impact of the global crisis on Indian Stock Market is on a negative side. Once investments in the US turned bad, more money had to be invested in the US to maintain the fixed proportion of the investments by institutional investors. In order to invest more money in the US, money came in from emerging markets like India, where their investments have been doing well. These big institutional investors, to make good of their losses on the sub prime market, have been selling their investments in India and other emerging markets. Since the amount of selling in the market far outweighs the amount of buying, Indian stock prices have been falling. Taking it forward to the job market, Multinational Corporates have adopted a wait and watch policy and have softened their hiring plans both in India and abroad. However, major hit is again on the existing employees of ICICI Bank Ltd. The bank has publicly announced reduction in its bonus percentages with no increments and promotions. Further it has decided to scale down its headcount by 4000-5000 employees. Similarly, Citigroup across the globe, alone has plans to cut over 30,000 jobs over the next one and half years because of sub prime related debt write-downs.

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