

Meaning of Sub-Prime Mortgage

In a mortgage market, borrowers are categorised either as '**prime**', which indicates their good credit-worthiness, based on their sound track record; or as '**sub-prime**', meaning that their track record in repaying loans is below par.

Many mortgages issued in recent years in the US were sub-prime. There was little or no down payment made for loans, and they were issued to households with low incomes and assets, or with troubled credit histories. Thereafter, when home prices in the US began to decline in 2006-07, mortgage delinquencies rose, and securities backed by sub-prime mortgages that were widely held by financial institutions, lost most of their value. This resulted in sharp decline of the capital of many banks, creating a credit crunch around the world. This article focuses on various facets of the aforesaid credit cycle.

Reasons Attributable to Current Crisis

Various reasons can be attributed to the current crisis, that are varied, complex and have emerged over a number of years. Some of these are: imperfect monetary policy and lack of government regulation; poor judgment of credit-worthiness of borrowers by lenders; borrower's inability to re-pay principal amount and installments of mortgage availed; speculation and overbuilding during the boom period; distribution of risky financial products in mortgage market.

The lack of government regulation refers to the lack of government's foresight to analyse the consequences of the various mortgage products that were offered at low interest rates and with many other features that encouraged borrowers to avail risky loan with much ease. Much can be attributed to political pressure, imposed by the US federal government on banking and financial system to provide houses at an affordable price to Americans, to raise their standard of living. In addition to that, self-regulation of investment banks also contributed to the crisis, as conceded by **Securities and Exchange Commission (SEC)**.

It is pertinent to note that the period from 1996 to early 2005 was a period of innovation in house loan sector, with adequate boom to sustain demand and supply balance. But in the enthusiasm to go after the lucrative sub-prime market and create an artificial buying power for borrower, lenders introduced newer riskier products with insufficient asset value as collateral. They sought higher yields without an adequate appreciation of risk and by not conducting proper financial due diligence.

As such, top investment banks in the US significantly increased their financial risk and their vulnerability to the declining value of **mortgage-backed securities (MBS)**. As a result, investment banks across the world incurred about \$30 billion in debts leading to the global credit crunch.

As, later on, when this housing bubble busted, three out of five large investment banks

of the US failed, augmenting instability in global financial system.

Understanding the Vicious Cycle

In cases where the person or entity, availing loan from a bank on account of good credit rating, sound track record and ability to repay, in-turn offers and extends loan facility to individuals or entities, whose ability to service the debt and principal amount is poor, such loan facilities are categorised as '**sub-prime loans**'. Therefore, individuals or entities, who do not have a good credit rating and to whom the bank would not have ordinarily given a house loan, now have the advantage of availing the same through intermediate lenders, ie persons or entities, who secure loan for onward distribution to such persons at a much higher rate of interest than the rate at which the loan is originally borrowed, by such intermediate lenders, from the bank. This higher rate is referred to as the '**sub-prime rate**' and this house loan market is referred to as the '**sub-prime house loan**' market.

The motivation for the intermediate lenders is to act on the incentive theory of extending the house loan facility to large number of individuals and/or entities, and thereby hedge the underlying risk on to them by reducing the threat of default. What seems to flow from the foregoing is that even if few of the borrowers (ie. individuals and/or entities) default, the overall position would not be affected much, and the intermediate lender may end-up making a neat profit.

A very interesting fact to notice next is that such a lender, who extends loan facilities in the sub-prime house loan market, does not stop here. That is to say, it does not wait to realise the principal and the interest in respect of the sub-prime house loans, so that it can then repay its loan (that such lenders (being the prime borrower) had originally availed from the bank (being the prime lender). Here the question that may come to one's mind is: What makes these lenders feel that they could take on the extra risk introduced by these financial products? and the answer lies in the booming "**credit derivative market**" that has made risk transfer easy! The lender goes ahead and securitizes these sub-prime loans, whereby the sub-prime loans are converted into **financial securities** that would yield a certain rate of interest.

These financial securities are further sold to big institutional investors, thereby creating a secondary market for mortgages (where those issuing mortgages were no longer required to hold them till maturity. Many investment banks (which are in the business of sub-prime mortgaging) and other financial institutions sell these complicated financial securities, backed by risky debt to institutional investors. As a result of this sale, the principal and the interest payable by the sub-prime borrowers through **equated monthly instalments (EMIs)** to the intermediate lender, is passed onto these institutional investors, who have purchased these securitized loans.

It may now be worthwhile to analyse few figures regarding MBS. The total amount of MBS issued tripled from 1996 to 2007 at \$7.3 trillion. The securitized share of sub-prime mortgages, which is passed to third party by investors through MBS, increased

from 54% in 2001 to 75% in 2006.

It is to be noted that the US kept its interest rates very low for a very long time, thus, encouraging Americans to go for housing loans or mortgages, and further, encouraged them to take on bigger loans. As a result, during 2006, 22% of houses purchased (1.65 million units) were for investment purposes. While houses, had not traditionally been treated as investment options, this behavioral change during the housing boom due to aforesaid factors led to houses being refinanced to repay the original loan and book profits due to continuous increase in value.

Another very important feature of these sub-prime house loans is that such loans are given on a **floating interest rate** (meaning that the rate of interest to be charged is not fixed but fluctuating) except for a certain initial period, say two-three years. This gives the borrower leverage for the initial period, where he repays the loan at a fixed interest rate EMI under **fixed rate mortgages (FRM)**, but once that initial period expires, the borrower will have to repay the remaining portion of the loan at a floating interest rate EMIs under **adjustable rate mortgages (ARM)**. In the event of the interest rates going up due to government intervention or otherwise, the interest rate on floating rate house loans would also soar, thereby increasing the EMIs required to be paid to service the loans.

Consequently, sub-prime borrowers, who already have a bad credit rating and unsound financial status, may not be able to bear the pressure of mounting interest rates, and may, thus, start defaulting. Once more and more sub-prime borrowers default, payments to the institutional investors, who had bought the MBS, stop, leading to huge financial losses.

One pertinent question that may arise is, "Why default became a preferable option for the borrowers?" The answer is simple enough, the sub-prime house owners began to default not only as they could no longer afford to pay the inflating EMIs, but also because they were fully aware of a sharp decline in the value of the house (being the only collateral for the loan that they had taken). Earlier, this easy availability of credit and house price explosion led to a housing boom, which eventually culminated into a surplus of unsold houses. This surplus of unsold houses led to an unprecedented increase in the supply of houses, leading to a sharp fall in the value of houses in the US. In very simple words, for the borrower, his liability exceeded the value of his mortgaged asset (i.e. the house), and thereby, leaving him with negative liquidity in the house. Thus, declaration of bankruptcy seemed to be a better alternative than servicing of the loan through inflated EMIs for securing the house, whose value had already diminished immensely.

By September 2008, the average US housing prices had declined by over 20% from their mid-2006 peak. As of March 2008, an estimated 8.8 million borrowers, constituting approximately 10.8% of all home-owners, had negative equity in their houses, the figure that would have substantially increased by now. Consequently, borrowers in this situation had an incentive to "walk away" from their mortgages and

abandon their houses, even though doing so, would potentially result in damaging their credit rating and reputation for a number of years. The potential reason that prompted the borrowers to abandon their houses and “walk away” from the mortgage obligation could be, that **in the US the house mortgages are non-recourse loans; ie once the creditor (the lender) has control and possession of the mortgaged property, such a creditor does not have any further claim against the defaulting borrower’s income and/or other assets.** As more and more borrowers opted to default and “walk away” by declining to service the loans that they had obtained, there was a sudden spurt in the supply of houses for re-sale. This placed a phenomenal downward pressure on housing prices, which further added to reduction of homeowners’ equity. The decline in mortgage payments also reduced the value of MBS, which eroded the net worth and financial health of banks and the institutional investors, who had invested in such MBS.

These banks and the institutional investors were hit by an unstoppable flood of such defaults, adversely and severely affecting their net-worth. Their MBS were almost worthless as real estate prices crashed and reached to rock bottom levels, breaking the backs of these financial entities, and thus, leading to the current meltdown, not only of the US economy but, of the global economy.

The problem worsened because the individuals and the entities (the intermediate lenders) giving out sub-prime house loans could easily securitize the same and quickly get rid of it from its balance sheet. Hence, the intermediate lenders do not take the risk of the loan going bad. The bank (being the prime lender) is also repaid by the intermediate lenders (who are the prime borrowers) along with interest, does not have any inhibitions in subsequent lending of money. Thus, the ultimate risk is passed on to the institutional investors, who buy the mortgaged backed financial securities issued for securitizing the loan.

Adverse Effect on Stock Markets in India

This recessionary trend in the US has had its impact, not only on the stock markets in India, but on other Asian markets as well. The institutional investors, who had invested in securitised paper from the sub-prime house loan market in the US, witnessed their investments melting into irreversible losses. But as most big investors have a certain fixed proportion of their total investments invested in various parts of the world, therefore, once investments in the US turned into irreversible losses, these big investors started liquidating their investments in emerging markets, like India, to maintain equilibrium and to fund the working capital requirements of their respective establishments in the US.

Since the volume of selling in such emerging markets (including the Indian stock exchanges) rose much higher than the amount of buying, in India both the Sensex and Nifty began to tumble to the dismay of all the investors.

Conclusion

To sum it up, it is clear that the banks and institutional investors have to look at secured approaches to manage credit risk, given the weakness of the existing approach. There is a need to liquidate the inventories of newly built houses (real estate) in the US, such that the price deflation comes to an end and house loan market, as much as possible, stabilises. Undoubtedly, it will initially incur huge losses for the economy but gradually the US will be able to get back on tracks and attain the state of normalcy. Further, there is a need to end the uncertainty prevailing around, as to how bad this slowdown could get and how long it's going to last.

Lastly, as we know, the US Federal Government is on a move and is making all efforts to bail out different sectors of the US economy, most importantly the banking sector, but it cannot, conclusively, be assured that this infusion of liquidity into the banking sector by purchase of their bad debts, would quickly flow down into the US economy, as the banking sector may now be shy in lending having had an adverse experience with easy lending schemes. The banking sector, currently, is in a survival mode rather than dynamic mode, which suggests that the banks at this time would be very skeptical or hesitant in lending. Therefore, there is a clear need for the banks to develop a healthy equilibrium between continuous lending (so as to give an upward thrust to the economy by raising liquidity levels) and taking a careful approach in future lendings by judging, the credit-worthiness of the future borrowers, and real value of collateral being offered as security by the borrowers (so as to avoid further default and decline in its net worth).

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