

Full Length Research Paper

Role of the credit rating agencies in the financial market crisis

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The objective of this paper is to critically examine the role of credit rating agencies in the sub-prime crisis. The paper traces the development of the sub-prime crisis from its origin till the aftermath. It studies the weaknesses of credit rating agencies in performing their basic function of timely and accurate rating of bond obligations. The paper then scrutinizes the diversification of credit rating agencies into the structuring and rating of complex securitized products. This raises fundamental issue of the independence and accountability of these agencies. The paper comes to the conclusion that appropriate changes in the regulatory framework of credit rating agencies are necessary to help avert similar crises in the future.

Key words: Crisis, sub-prime, mortgage, credit ratings, default, global markets, accountability, regulation.

INTRODUCTION

Background

The institutional framework of the global financial system is far from perfect. It is periodically buffeted by successive crises and each crisis reveals a new gap in the institutional structure. Typically the gap is first spotted by astute and well-paid financial market participants, who then proceed to exploit it to the hilt for commercial gain. When the crisis erupts, it is followed by corrective action from the concerned regulators and policy-makers. There is often a risk of 'over-compensation' in this lagged response.

In this cat-and-mouse game there seems to be little chance of regulators getting ahead of the market and being able to identify potential gaps and plugging them, before the gaps are spotted by the wider market. Going forward, the role of the regulatory bodies should be pre-emptive and not functioning with the objective of undertaking corrective action.

The subprime crisis that started in the US financial markets led to a severe global financial meltdown. It was

the most severe financial crisis since the Great Depression, which, through a global liquidity freeze, very quickly spilled over into a global economic crisis. Only sustained and coordinated policy action on a global scale that was unprecedented in both its scope and size, has managed to pull the developed economies back out of recession.

Several studies have been carried out to cover the different aspect of the sub-prime crisis of 2008. Mohan (2008) has examined the impact of the financial crisis on India and other Asian emerging markets. Brunnermeier (2008) has traced the evolution of the crisis from the housing bubble burst to the liquidity crunch thereafter. He attributed the global market crisis to the process of securitization, and reasons for losses in the mortgage markets which led to the crisis. Gorton (2008) in his papers on the subprime crisis described the relevant securities, derivatives and vehicles related to the sub-prime mortgages, the sensitivity of these securities to housing prices and went on to identify four economic mechanisms which amplified the mortgage crisis translating it to a financial crisis. Bordo (2008) provided a historical perspective to the crisis of 2007 - 2008 stating

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that the crisis was part of a perennial pattern. He is of the view that the earlier big international financial crises of 1857, 1893, 1907 and 1929-33 were triggered by events in the U.S. financial system and though this crisis had many similarities to those of the past but also had some important modern twists. Farhi et al. (2008) drew attention to the fact that while the literature on intermediaries earlier has analyzed their incentives, their study on the other hand aimed at understanding how the certification industry catered to the certified party's demand through strategies such as the non-disclosure of rejections and have analyzed the welfare implications of such policies. Sy (2009) emphasized the fact that macro-prudential regulation is necessary to address the systemic risk inherent to ratings. Much of the studies have therefore contributed less on the role of credit rating agencies in correcting the effects of the financial crisis. With the worst hopefully behind us, now seems an opportune time to dispassionately analyze this crisis and critically examine the role played specifically by credit rating agencies in precipitating it.

Objectives of the study

The study aims to analyze the reasons for the emergence of sub-prime crisis and the role being played by the credit rating agencies towards this crisis. Based on the analysis, the study suggested the appropriate changes in the regulatory frame work of credit rating agencies to avert such crises in future.

Outline of the paper

The research paper has been divided into four sections. Section 2 deals with methodology used to address the issue at hand. Results and discussion are given in section 3 while section 4 presents the conclusion and recommendations on how to avert such crises by improving the way credit rating is done. References are given at the end of the paper.

METHODOLOGY

To achieve the objectives of the study, the authors relied on the secondary data to support their view point. Existing literature on the subject has been thoroughly reviewed to understand the scattered ideas on the subject and then present a comprehensive analysis on the problem at hand. Reports of the consultancy firms like Bloomberg, Mckinsey and KPMG were consulted to collect the relevant facts related with the problem. The available literature on the credit rating agencies and the methodology used by them to rate the different class assets, helped the authors to understand the weaknesses in the rating system and consequently the availability of wrong information to the decision makers. Discussion with bankers, academicians and officials of credit rating agencies in India like ICRA and CRISIL proved quite useful in shaping and presenting thoughts on the problem.

RESULTS AND DISCUSSION

This section presents the results and discussion. The section starts with an assessment of drivers of subprime lending. The section goes on with an overview of the financial alchemy and the final crisis; role of rating agencies in the crisis and implications for policy.

Drivers of subprime lending

The sub-prime mortgage market caters to customers who are unable to meet normal credit and/or documentation requirements for ordinary mortgages. By definition, sub-prime lending is more risky than normal lending. Accordingly, banks charge a higher interest rate to compensate for the higher risk. Over the past decade, this mark-up over prime rates has been about 2%, making such lending potentially very lucrative. However, banks had largely stayed away from this customer segment due to their perception of the segment's high default risk. Only by the mid-1990's did the subprime mortgage market begin to take off as a number of factors emerged which apparently mitigated the default risk on such loans and hence led to an increasing number of banks lending ever-larger amounts to this sector. Some important factors which contributed to a boom in sub-prime lending are discussed below.

Home price appreciation

Appreciation in home prices seemed an irreversible trend from mid-90's through till the end of 2006. With an annual growth of 5 - 10% in home prices, default was not seen as a real risk in mortgage lending since in the unlikely eventuality of a default, the repossessed house could be resold to recover the original loan amount (Figure 1).

Shiller (2008) had compared the housing boom prior to the crisis to three different boom scenarios in the past. He was able to predict the decline in housing prices as was seen post 2008. He has talked of the significance of rating the securities which were backed by sub-prime mortgages and has linked the default in these securities as being directly linked to the bust in the real estate.

The trends in housing prices showed that between 2001 and 2005 homeowners enjoyed an average increase of 54.4% in the value of their houses, as measured by the Office of Federal Housing Enterprise Oversight (OFHEO). However, there was no appreciation or depreciation in August, 2007 and starting September, 2007, house price appreciation was negative (Gorton, 2008).

Drastic reduction in risk horizon for original mortgage lender

As securitization became the rage, mortgage lenders

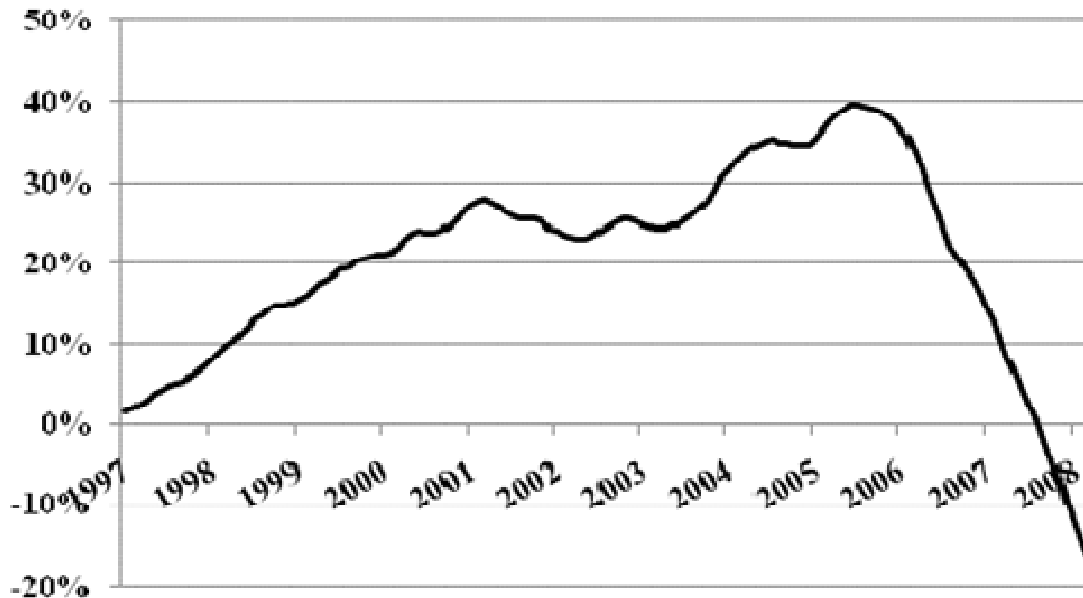


Figure 1. Lagging two-year house price appreciation (%). Source: Subprime panic by Gorton (2008).

started to resell their mortgage books to Wall Street firms and others. From being a holder of the loan till maturity, the original lender became an originator and distributor who would quickly pass on the risk to others.

Lax lending standards

This was almost a corollary of the previous point. With the backstop of being able to push off the loans from their own books into the financial market, lenders became more and more lax. Self-certification, documentation waivers etc became the norm. How else could anyone conceivably think of NINJA (no income, no jobs or assets) as a target segment for mortgage lending? Or who had heard of a home loan for 100% of the home value?

Low interest rates, abundant liquidity and a chase for yield

The venerable ex-federal reserve chairman, Alan Greenspan had responded to crisis after crisis by slashing U.S. interest rates. In the last interest rate cutting cycle, by the time Greenspan stopped cutting rates in 2004, inter-bank rates in U.S. were hovering around 1%. On the 'buy' side such low rates pushed up the demand for mortgages. On the 'sell' side, banks found themselves awash with liquidity which they were desperate to deploy profitably and investors (with surplus funds to invest) were desperately seeking investment opportunities which offered returns better than the pittance available from banks on deposits.

Adjustable rate mortgages and teaser rates

Unlike traditional fixed rate mortgages, lenders started offering variable rates to lure borrowers taking advantage of the then prevailing low interest rates. Often, an even lower "teaser" rate was offered for the first two years, to be reset to market rate plus a mark-up after two years. Such innovations drove more and more people from the subprime segment to take out mortgages. Of course, both these innovations started hurting the borrowers when U.S. interest rates started rising from 2004.

The financial alchemy and the final crisis

To free up their capital in order to make fresh loans, mortgage banks started issuing mortgage-backed securities (MBS) that is securities backed by pool of mortgaged loans made to home borrowers. Investors were keen to invest in such MBS as it provided them both yield and risk diversification. Wall Street firms then began to use these MBS as components for more complex structured products such as collateralized debt obligations (CDOs) which were essentially created by slicing and dicing the MBS into various tranches, each with a different level of risk and return. These CDO tranches were given credit ratings by the established credit rating agencies. Very often, the structuring of the product itself was done by the investment bank and the credit rating agency working together.

These CDOs were then sold across the world to a cross-section of banks, mutual funds, pension funds, state bodies such as municipal organizations and a host of others. A good credit rating was vital as many of these

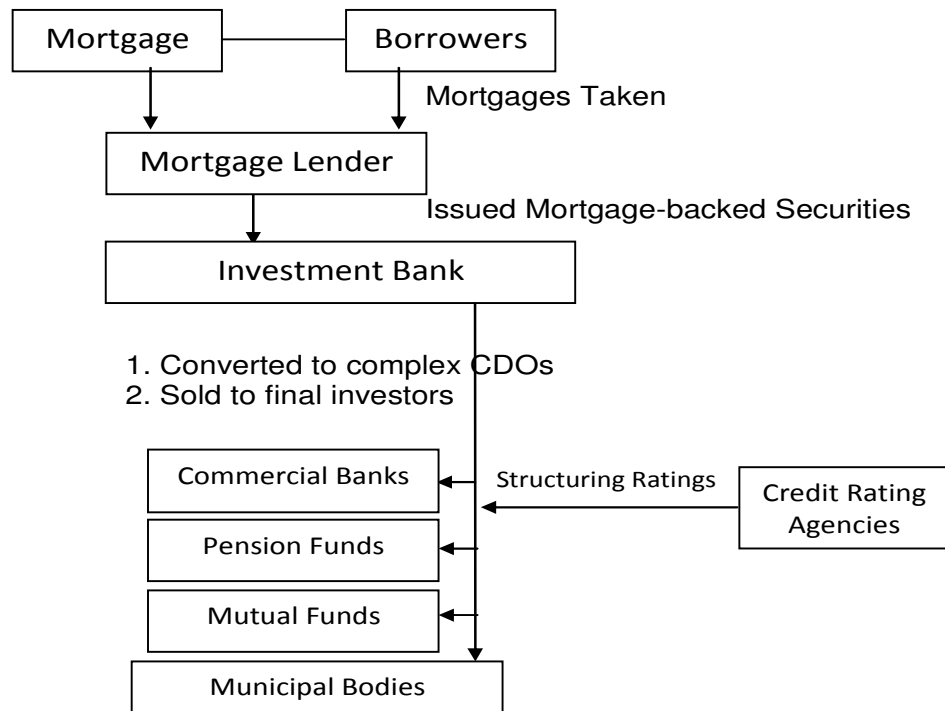


Figure 2. The process of sub-prime lending.

buyers were governed by strict internal rules of minimum credit ratings for their investments.

However, monetary policy had begun to tighten from 2004 when in order to control growing inflation the Federal Reserve raised its key short term interest rate. The Federal funds target rate shot up from 1% in 2004 to 5.25% by 2006. In line with this, subprime lending rates too increased substantially, which adversely affected this segment's repayment capacity. Simultaneously the boom in U.S. housing prices faded out and housing prices started to actually fall. The above two factors led to a jump in payment defaults by the original borrowers in the subprime segment. But by then the U.S. mortgage-backed-securities market (at \$8 trillion outstanding) had become the largest fixed-income market in the world, even bigger than the U.S. treasury market.

As borrowers started defaulting, first the market prices of MBS fell, and then the values of CDOs began dropping too. This was exacerbated when rating agencies slashed the ratings of billion of dollars worth of MBS and CDOs. Like all swaps and other financial derivatives, CDS may either be used to hedge risks (specifically, to insure creditors against default) or to profit from speculation. The volume of outstanding CDS increased 100 fold from 1998 - 2008, with estimates of the debt covered by CDS contracts, (November 2008), ranging from US\$33 to \$47 trillion.

This set off a vicious cycle. Banks had to report large losses on account of the mark-to-market of their sizeable

holdings of MBS and CDOs. Many mortgage lenders went bankrupt and large investment banks had to raise emergency capital. As their capital was eroded, they cut down on lending to maintain their capital adequacy ratio (CAR). The resulting liquidity crisis pushed the entire U.S. economy into a recession.

Faced with an unprecedented liquidity freeze and imploding balance sheets of virtually all investment and commercial banks, central banks of U.S., U.K. and Europe had to come to the rescue of large financial intermediaries to prevent systemic instability. However, and in hindsight, this action is being increasingly questioned as to its costs and objectives (Figures 2 and 3).

In the Indian contest, none of the Indian or foreign bank had any direct exposure to the sub-prime markets in the USA, though few of the Indian banks had invested in the collateralized debt obligations (CDOs)/ bonds which had underlying entities with subprime exposures. Thus, though no direct impact was evident, the banks suffered mark to market losses on account of the credit spreads arising from the subprime entities on the term liquidity markets.

Role of rating agencies in the crisis

Credit rating agencies have played an important role during the financial crisis. Some research papers have

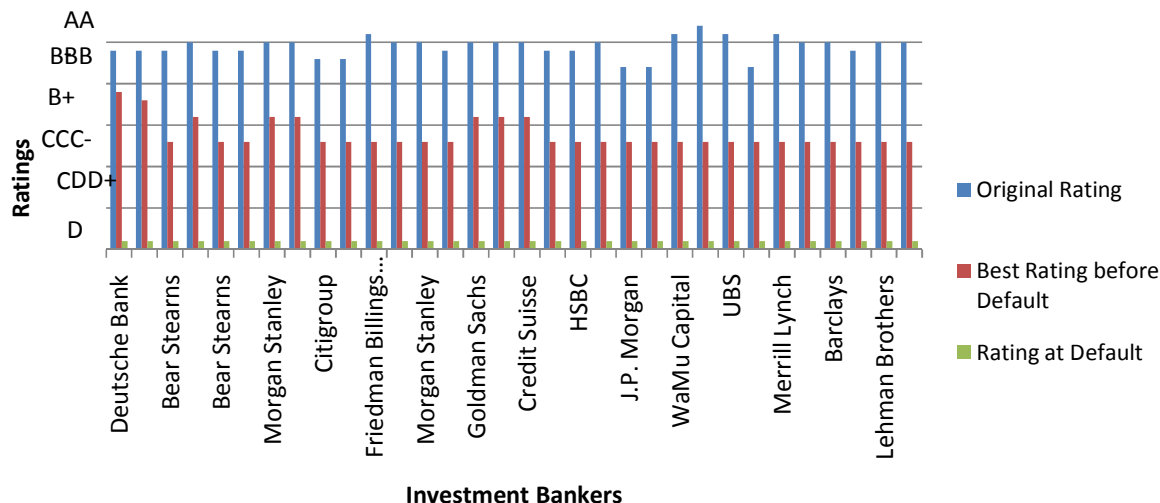


Figure 3. Trends in ratings (before and during the crisis). Source: Bloomberg (2008).

cited one of the reasons for the sub-prime crisis to be the gap in the functions of the CRAs. Bahena (2009) has reviewed the role of the rating agencies during the sub-prime crisis. ECB (2009) reviewed the assessments made by various international and national bodies about the need to strengthen the regulatory framework for credit rating agencies. Sy N.R. (2009) has in his paper advocated that macro-prudential regulation is necessary to address the systemic risk inherent in ratings which was a contributor to the financial crisis.

Rating the structured products

Credit rating agencies gave investment grade ratings to securitization transactions based on subprime mortgage loans. These ratings contributed in the flow of global investor funds into these securities, funding the housing bubble in the US. A total amount of \$3.2 trillion was the inflow on account of loans made to homeowners with doubtful creditworthiness between 2002 and 2007. These mortgages could be bundled into MBS and CDO securities that received high ratings and therefore could be sold to global investors. At the inception of the structuring process, the CRAs took lower rated mortgage bonds combined with equity, to form a Mezzanine CDO to enable it to receive a higher rating. During the second stage, these intermediate rated (AA or BB-) Mezzanine CDO or normal CDOs were combined together again to form AAA rated securities. The rating agencies advised their clients on structuring the debt of the products thereby creating a chain of multilayered mortgage products and then consequently rating them as AAA ratings. Thus, the products created at every stage carried more risk and illiquid securities than the previous ones, yet carried a rating of AAA. As mortgage securities

became increasingly complex with little transparency on composition and characteristics of these loans held in the pools, investors relied more on the CRAs.

Errors of omission

Such structured products were fundamentally different from vanilla debt offerings, not only in their design but also in the inherent liquidity, interest rate and credit risks. This was particularly harmful as a majority of the final investors lacked the analytical and technical background to fully comprehend the structure of the CDOs, much less the risks inherent in them. The investors were just relating their investment decisions on the attractive ratings assigned by the CRAs.

CRAs used the same credit risk metric for all instruments. Similar letter-grade scales (AAA to C or Aaa to C) were used to rank the relative default risk of all long-term, fixed-income securities, including structured credit products. Using similar rating scale for structured products lead to an underestimation of systemic risk as structured products have downgrade dynamics, which are different than those of corporate or sovereign bonds. This clearly highlighted the fact that the complexity of the structured products was something the CRAs were not adequately geared to rate. The CRAs assigned super-safe, triple-A ratings to structured products that later turned out to be extremely risky, and in some cases worthless, which was corroborated by the fact that almost 56% of the ratings were subsequently downgraded (Table 1).

To cite an example, certain money market and pension funds that were allowed to invest only in AAA-rated fixed-income securities could now also invest in a AAA-rated senior tranche of a portfolio constructed from BBB-rated

Table 1. Percent of securities downgraded during 2008 by S and P.

Rating	Total	Downgraded	% downgrade
AAA	1032	156	15.1
AA (+/-)	3495	1330	38.1
A(+/-)	2983	1886	63.2
BBB(+/-)	2954	2248	76.1
BB(+/-)	789	683	86.6
B(+/-)	8	7	87.5
Total	11261	6310	56.0

Source: Bloomberg (2008), Inside Mortgage Finance, Milken Institute.

securities. With the innovations in the financial markets and the growing complexities of financial products, the CRAs were expected to keep pace in terms of the reliability of ratings and the quality of ratings.

Errors of commission

There was a clear conflict of interest in rating agencies working closely with the investment banks to design these cutting edge sophisticated products. It would be difficult for the agency to assign a low rating to a product it had itself designed. CRAs played a dual role in this process by providing credit assessments of the underlying collateral asset pools as also being involved in designing the specific structure of SPs. Rating agencies began to see spectacular profits from the boom in these structured products. In fact, most of their incremental earnings were from such complex products giving them the biggest incentive in the success of these products. Brunnermeyer (2008) has discussed in his paper the possibility that the rating agencies granted favorable ratings to structured products, because of the high fees attached with these SPs. Conflicting interest was also motivated by the objective of magnifying earnings and profits at the cost of quality assurance because of the rating companies being publicly traded companies.

Impact of ratings on credit derivatives and credit default swaps

Credit default swaps (CDS) are financial instruments used as a hedge and protection for debt holders, in particular MBS investors, from the risk of default. CDS may either be used to hedge risks (specifically, to insure creditors against default) or to profit from speculation. The volume of CDS outstanding increased 100 fold from 1998 - 2008, with estimates of the debt covered by CDS contracts, as of November, 2008, ranging from US\$33 to \$47 trillion. Specific to the credit rating aspects, the crisis also highlights how ratings downgrades or their anticipation led to collateral calls, with devastating effects on market participants such as insurers like AIG. Credit

derivative product companies typically need an AAA rating to avoid posting collateral upon marked-to-market changes in their derivatives positions. Thus, the rating downgrades led such companies, as per their derivatives contract, to post more collateral.

The current crisis has also raised concerns about the use of structured products ratings by different types of investors. It is observed that as a greater proportion of SPs was held not by end investors intending to hold to maturity but by investing vehicles performing maturity transformation, some of these investors seem to have assumed quite wrongly that a rating carried an inference for liquidity and market stability, rather than solely for credit risk.

Anyone who purchased a AAA-rated tranche of a collateralized debt obligation, combined with a credit default swap, had reason to believe that the investment had low risk, because the probability of the CDS counterparty defaulting was considered to be small.

Downgrades by rating agencies

As of July 2008, Standard & Poor (S&P) had downgraded 902 tranches of U.S. residential mortgage backed securities (RMBS) and CDOs of asset-backed securities (ABS) that had been originally rated "triple-A" out of a total of 4,083 tranches originally rated "triple-A;" 466 of those downgrades of "triple-A" securities were having speculative grade ratings. S&P had downgraded a total of 16,381 tranches of U.S. RMBS and CDOs of ABS from all ratings categories out of 31,935 tranches originally rated, over half of all RMBS and CDOs of ABS originally rated by S and P.

Overall, rating agencies (S and P and Moody's) downgraded \$1.9 trillion of MBS (Fortune, 2008). This put pressure on the financial institutions holding these securities to write down their values, potentially requiring banks to acquire additional capital. Non-anticipation of default on these structured products: the traditional models of the credit rating agencies had not made provision for high degree of mortgage defaults. Between Q3 2007 and Q2 2008, rating agencies lowered the credit ratings on \$1.9 trillion in mortgage backed securities (Fortune, 2008). Also most of these AAA rated securities are now junk and formed the underlying reason of the global financial crisis.

A key aspect is that even if a downgrading is done by CRA, it is either done too late or is done after a relative downgrade by their competitor to be on the same benchmark.

Implications for the CRAs and policy recommendations

The credit rating agencies (CRAs) play a vital role of protecting the investors' interest in terms of the reliability

of the ratings being assigned, and in reducing the information asymmetry between the issuers and investors. It is thus imperative that their functions are well-defined and structured, and they are regulated as the lacunas in their functions may eventually erode the investors' confidence. This has put them under some cloud during the financial crisis, and has opened room for debate on the regulatory framework within which they should operate. IMF in its report on the Financial Stability Forum (2008) has come out with certain set of recommendations with respect to the functions of the credit rating agencies.

Some of the fundamental issues with respect to the role of CRAs have been examined here, thereby highlighting the need for accountability of the CRAs coupled with an independent role for them.

Who regulates the rating agencies?

The rating industry has largely been a self-regulated industry though there have been guidelines proposed by the SEC and international organization of securities commissions (IOSCO) from time to time. In May, 2008, the IOSCO reviewed its Code of Conduct for credit rating agencies. In the Indian context, SEBI, IRDA and PFRDA had set up a committee on reviewing the role of the CRAs in India as an aftermath of the financial crisis and have recommended SEBI as the lead regulator for the governance of rating agencies BS (2010). SEBI has come up with certain regulations which require rating agencies to make all their ratings and their subsequent rating actions publicly available. It would be critical that regulation of this industry should be against the backdrop of not just the micro issues but also the larger systemic issues.

Is it the reliability of the ratings on which the investors base their decisions on whether to invest or not?

Policy framework should be redefining the role of the rating agencies, in their ratings being mere opinions or judgments. Further, it should be clearly communicated, if the role of ratings be limited to expressing the credit worthiness of the borrower with respect to the specific instrument being rated or should it be a reflection on the creditworthiness of the borrower in totality. A more explicitly stated role would go a long way in preempting any crisis.

Business models adopted by the CRAs

Rating models which rely on historical performance alone do not account for risks arising from new innovations in

products and structures. It is imperative that rating symbols being assigned should clearly indicate the underlying risk of the instrument being rated. There has to be product differentiation in the rating symbols being assigned to the different products with rating symbols being spread across a wider spectrum. Different rating symbols for different products should reflect the risk characteristics. Suitable changes to these models would be required. Rating agencies will need to ensure that changes in the economy are reflected in their processes on an ongoing basis. Rating methodologies may need to change too, by becoming more predictive and identifying potential credit troubles at an earlier stage. The Review Committee has suggested that an agency or its subsidiary should be barred from providing advisory services, either formal or informal, on the design of a structured finance instrument and also rate the product. The models and processes used for issuing ratings should be based on sound assumptions that avoid an excessive volatility of ratings, which could result in a sharp repricing of assets and impair market confidence.

Due diligence in the rating process

This would call for focus on the quality and integrity of the rating process. Several proposals have been made by the SEC as a step in this direction. Better due diligence would provide for a more structured role of the rating agencies, with better documentation of procedures, better surveillance (frequency of surveillance, quality of surveillance procedure), greater transparency norms and call for a competitive environment for the rating agencies to operate in.

Rating process is internal to the rating agency and the rating being assigned is done in the rating committee meeting, where minutes are not available to the issuer or the investor for the protection of whose interest the rating is being assigned. It is debatable if the accessibility to the process of rating being assigned be made. The Committee Report has suggested that a half-yearly internal audit be mandatory for all CRAs and a standing committee of representatives from various regulators be constituted for matters relating to CRAs.

In order to minimize the conflict of interest that CRAs are faced with, and which was one of the pitfalls in the role of the CRAs during the financial crisis, it is suggested that hiving off the consulting (advisory) division to a separate company with separate governance structure and independent management would be a step in this direction.

Transparency and disclosure

After reviewing the issuer pays payment model, it is suggested that the system be continued, though it be

made more transparent by mandating disclosure of the compensation arrangements with the rated entities. Analysts should not be part of any fee discussion with the issuer. Additionally, internal audit is to be made mandatory coupled with greater disclosure of information on rating methodology.

The rating rationale gives only summarized information of the rating being assigned, and that, too, is not freely available. In addition, if the rating is not accepted by the issuer, there is no obligation on the rating agency to make the rating public. The rating rationale should include reference to the quality of the said pool and strengthening of cash flows, originator profile, payment structure, risks and concern for investors. Thus, there is certainly a case for greater accountability to the investors for furnishing information on the rating being assigned. The publication of any debt rating should be accompanied by a prominent disclosure statement indicating how the entity which provided the rating has been compensated. It is also debatable, if rating should be made mandatory from at least two rating agencies, and unaccepted ratings may also be disclosed. This would provide for greater transparency to the investor domain.

Who should be paying for the ratings, the issuer or the investor?

The ratings are conducted at the behest of the issuers who pay the fees though the end-users of the rated products are the investors. It remains to be seen if the rating mandate should be by the investors and not the issuers for the ratings to be less subjective and less biased towards the issuers. There is a conflict of interest between the interest of the investors and the issuers which needs to be managed for the rating agencies to be functioning in the interest of both sets.

Should the rating agencies be competitive or government-mandated?

As of now, there is some kind of a partnered monopoly (cartel) among the three leading CRAs globally, namely Standard and Poor, Moody and Fitch for the rating business. While the rating industry is dominated by these three agencies operating in the US and the EU, either through their parent company or the subsidiaries, this warrants for some kind of standardized set of procedures to eliminate formation of any cartel among the three CRAs (ECB, 2008).

Innovation can be brought about in the sector by creating opportunities for peer review and by eliminating possible competitive disadvantages that stem from the lack of access to underlying collateral information. What needs to be decided is that should the rating agency be regulated fully or would that violate the investor

confidence in the ability of rating agency to furnish quality ratings, and at the same time also prove detrimental to the interest of the issuer at the behest of whom the rating is undertaken. SEBI has been made the lead regulator for the governance of CRAs, and the Rating Agencies to be registered with SEBI are required to further get accreditation from other regulators such as RBI, IRDA and PFRDA for rating products that come in the regulatory domain of the latter.

Rating performance being indicator of default

Reliability of ratings can be established on the basis of the actual default rates over a reasonably long period of time. Lately the CRAs have been the subject of criticism in their failure to warn investors of the defaults in advance. Investors in long-term instruments are usually risk-averse and the variability in investment grade default rate is critical since it plays a major role in their investment plan. Going by the historical trends of downgrades by rating agencies, it is imperative to establish a correlation between the rating downgrade and macro/micro factors to which the rating is dependent. While the rating agencies are already churning out data on default, it would be the role of regulatory bodies to have a uniform basis of determining the default statistics which can be consistently followed by all the rating agencies.

A flourishing Credit Information Bureau (CIB) would go a long way towards this end. Moreover, In India, complex structures like synthetic securitizations have not been permitted so far. As and when such products are to be introduced, the Reserve Bank would put in place the necessary enabling regulatory framework, including calibrating the role and capacity building of the rating agencies.

Conclusion

The paper has examined how the financial market crisis was different from crisis in the past and the role played by the credit rating agencies during the crisis. Credit Rating Agencies play a very vital role in assessing the creditworthiness of the issuer with respect to the instrument being rated. The CRAs were playing a dual role in not only structuring the CDOs and MBS but also assigning their ratings. The ratings, so assigned failed to accurately estimate the creditworthiness of the underlying collateral assets and this led to downgrades of the rating. Events during the financial crisis have revealed that the gaps in rating quality and rating standards have eroded market confidence.

While the credit rating industry has primarily been a self-regulated industry, the recent crisis has brought to light the strengthening of the regulatory framework within

which these CRAs operate. It is debatable if the measures taken to fill the lacunas in the functions of the credit rating agencies are done under a regulated regime, or the measures be implemented under self-regulation of the industry. While there may be a case for the industry to continue to be self-regulated one, the role of the regulatory bodies should be pre-emptive and not functioning with the objective of undertaking corrective action. It is important to strike a right balance between self-regulation and legislation. Some of the key focal areas where regulation is needed have been discussed in the previous section. Going forward, the role of the CRAs needs to be proactive rather than reactive.

A similar scenario of the mortgage market crisis is unlikely to unfold in India simply due to the relatively smaller size of the domestic mortgage market, in spite of its impressive growth in recent years. Indian regulators, specially the RBI, have kept a lid on the housing bubble by controlling credit supply from banks to this sector (on the supply side) and also by not easing monetary conditions unduly (on the demand side). The financial crisis has been followed by some corrective action from the regulators and policy makers.

The regulatory framework should also facilitate the conduct of stress tests by users on key model parameters, and provide for the disclosure by credit rating agencies of the economic assumptions underlying their rating of structured products. The procedures adopted by the CRAs should be based on objectivity such as requiring ratings decisions to be made by a ratings committee, imposing investment restrictions, and adhering to a fixed fee schedules. In addition to these, the following should be reflected:

- (i) Rating performance as being indicators of default.
- (ii) Enhancing investors' understanding of the attributes and limitations of credit ratings.
- (iii) Ratings are forward looking assessments, based on current information, of the ability and willingness of the debtor to fulfill the payment obligations. It is not a forecast of future performance.
- (iv) Ratings are mere opinions, and not judgements on the borrowers or issuers of debt. The rating symbols are indicative of the ability of the issuer to service the debt obligation with respect to the debt instrument being rated.

Though the Indian economy has been affected to a relatively lower degree, however, this is not to deny that India can gain from strengthening of the process of assessment of credit worthiness of prospective borrowers; an effective Credit Information Bureau (CIB) would go a long way towards this end.

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