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# RATING AGENCIES AND FINANCIAL CRISIS: A CONSIDERATION

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#### **Abstract**

Credit rating agencies (CRAs) bear some responsibility for the financial crisis that started in 2007 and remains ongoing. Failures of credit rating agencies have strengthened the negative effects of global financial crisis, generating additional systemic risk. In particular, this work wants to emphasize as the CRAs have been criticized for misconstruing the risks associated with complex financial instruments that fueled the United States housing bubble, such as mortgage-backed securities (MBSs) and collateralized debt obligations (CDOs). After a critical introduction on the role of credit rating agencies, will be analyzed Literature on economic phenomenon; then the relationship between the credit crunch and credit rating agencies; then we will describe how they create the rating evaluation, and finally we will analyze the case of Lehman Brothers.

Keywords: credit rating, rating agencies, financial crisis, regulation

## INTRODUCTION

The occurrence of extraordinary events such as financial crises create instability in the governments of the countries concerned but also in the architecture of the international financial system. In particular, the behavior of rating agencies is at the center of a heated debate due to the increasing diffusion of the rating market international finance. In addition it is also important to consider the roles that they have had in the various financial crises after the change in the rating of sovereigns, banks and businesses affected by the crisis of 2007.

A first introductory question could be about how reliable are the ratings agencies. Since 2008 the international financial crisis broke out, the whole world began to depend on the choices and judgments of these seemingly infallible agencies.



However, today, thanks to a growing market instability of the old and the new world, we begin to doubt their ability to assess the health status of the individual markets.

It should be recognized that the financial news agency Bloomberg has long had expressed some doubts about the infallibility and power to influence the markets of the rating agencies, which follows regular reports since 1974. Nowadays, however, the opinion of Bloomberg has gained greater authority through the creation of a new service which has shown to have been committed errors in 53% of cases analyzed. Interestingly, in fact, as in most cases, promotions, cuts rating, downgrades were not a direct result of what happened in the markets, and even more recently it has happened that the trends of the sovereign debt have moved in the opposite direction than anticipated by Moody' or S & P. According to Bloomberg calculations, the first was ignored in 56% of cases, the second in 50%. Basically, it's like saying that the markets have learned to neglect the opinions. In addition, since the ratings of credit rating agencies have the power to bring down very quickly institutions and markets considered solid until a few minutes before regarding official, he cannot seem strange the desire to better understand how these societies, who the controls, and on what grounds they make their decisions. Take the case of 15 September 2008. Soon as the rating agencies began to express their doubts about the ability of some financial institutions to honor their debts, lenders considered until a short time before they found themselves very solid, less than 24 hours from the official declassification, without liquidity. In fact it can be said that from that day due to its Fitch, Moody's and S & P financial sector professionals from around the world were gradually dragged into a crisis from which it has not yet managed to get out. In addition, for analysts Bloomberg and not only that, ever since that day the rules of the game have not changed: the judge agencies, institutions wobble and operators were afraid: the market therefore do not record recovery.

We could then add the big fear for a second collapse of the financial markets generated by the announcement of S & P, in mid-2011, a further downgrade for the U.S. economy. However, then as now, the fact that S & P has not been legally penalized based on a miscalculation would have lead us not to breathe a sigh relief and doubt ensure the stability of financial markets, without fearing the sudden collapse, how to ask us to at that point it was right that the global economy depended almost exclusively from ads peremptory three agencies. The errors of the rating agencies has led economists, especially in Europe, to question the authority and independence of these institutions for evaluation.

Basically, it disputes the independence of agencies that are part of the system, are linked to major financial investors and thus can receive great benefits from fluctuations caused by their judgments. In the assessment of national economies indirect conflicts can arise because the agencies are funded by companies whose earnings depend on these evaluations. However, without the rating agencies is virtually impossible to raise money on the market. But the fact that their judgment is paid by the judged, exposes the agencies, even assuming the correctness, in a conflict of interest. It will be a chance, but despite the financial crisis, the financial statements of the rating agencies are quite prosperous, with the benefit of large investors who control them.

#### LITERATURE REVIEW

Soldofsky and Pogue (1969) evaluated the role and importance of the decisions of "rating" made by Moody's in the period 1961-1966. They analyzed the case of bonds and how the decision of rating were based on incomplete information. The authors estimated that the probability of obtaining higher valuation was directly related to the profitability of the company and was inversely proportional to the leverage.

Pinches and Mingo (1975) attempted to analyze the impact of credit ratings on the debt market and investors in the United States. They claimed that the bond ratings have a direct impact on the market cost of debt associated with the company. The study showed that there were some difficulties in correctly evaluating corporate bonds, including qualitative factors that are important for evaluation.

Joehnk and Reilly (1976), in their work, they tried to estimate the bond market and established some measure of risk for the same. In addition, they made a comparative analysis of market risk for the bond and the bond rating of the rating on a sample of 73 bonds that were rated by Moody's in period 1967-1972. The authors found that grades were assigned on the basis of the probability of default, while the market risk was based on the ratio of bond yield or price changes and changes in the market. Therefore, the authors suggested that the limited association between risk measures and market-related bond ratings was very important for portfolio managers.

Urwitz and Kaplan (1979) has sought to highlight the importance of techniques used by financial analysts to explain and predict bond ratings. For the purposes of their study, they selected

120 bonds outstanding assessed by Moody's in the period 1971-1972. The analysis showed that in the long run on the total value of the assets and shares of common stock systematic risk we can better predict the actual risk of a bond rating agencies have done.

Danos et al. (1984) in their study, tried to evaluate whether the bond rating judgments were more affected by the management's forecast of accounting data as compared to the historical financial statements. Further, they tested if the bond rater's training and experience was helpful for them (or not) in using forecasts while performing rating tasks. They revealed that forecasts often provided an insight into the management's planning process, financing strategies, assumptions and expectations about the future, so the forecasted accounting

information influenced bond raters' judgments and aided the rating process in a number of ways. Further, the bond raters' training and review process coupled with their experience helped in enhancing their judgmental abilities.

Duggal (1992) sought to discover the importance of credit ratings in context of the Indian economy and the impact of credit rating agencies. The author suggests that credit rating agencies should assign the assessment seriously and give publicity to their operations. In addition, there is a need of more credit rating agencies in India and some of them should come from the private sector. The author also suggested that the high fees charged by rating agencies should be reduced in order to make their services more efficient.

Shankar et al. (1992) tried to evaluate the operations of CRISIL which include the methodology of rating, rating process, rating symbols, etc. The authors found that there were certain shortcomings in the working of CRISIL. First of all, ratings were not frequently revised by the agency has done in other countries. The companies not scoring well did not reveal their ratings because neither it was mandatory on them to reveal their ratings nor CRISIL had any arrangements to let know the public the credit status of the companies rated by it. It was also found that the agency was not engaged in rating of equity instruments, which form the major share in public borrowing of the companies. Further, the agency had almost similar parameters to evaluate the business of the clients in different lines of economic activities, whereas in foreign countries different parameters were used for the purpose. Thus, the authors suggested that all these flaws in the working of CRISIL should be overpowered to make credit rating more powerful tool which would have greater effect on the capital market in India.

Patnaik and Narayan (1993) explained the mechanism of credit rating in India and the procedure adopted by credit rating agencies, viz. CRISIL and ICRA to rate the instruments. The authors compared the rating procedure adopted by international rating agency Standard & Poor's with that of CRISIL and ICRA, and explained that the approach adopted by ICRA and S&P was the same as both gave more importance to historical rates and past performance whereas CRISIL attached more importance to the market position, operating efficiency, professional management and future projections of the organization. So, the authors suggested that each company should get itself rated by both CRISIL and ICRA to make their rating really meaningful. Further, these agencies should work independently, and should give professional and impartial assessment of instruments without any fear or favor.

In their seminal paper, Cantor and Packer (1996) model the determinants of sovereign ratings and ask the question of whether ratings add to public information. Their study, based on sovereign bond spreads for advanced and emerging economies, finds that the single rating variable explains 92 percent of the variation in spreads. While most of the correlation appears to reflect similar interpretations of publicly available information by the rating agencies and by market participants, their event study finds evidence that the rating agencies' opinions

independently affect market spreads, especially in the case of non-investment grade sovereigns. In addition, the impact of one agency's announcement is greater if the announcement confirms the other agency's rating or a previous rating announcement.

Blume et al. (1998) made an attempt to find out if the declining credit quality of US corporate was a myth or a reality. Thus, the authors tried to analyze whether the company that maintains the same values for its accounting and equity risk measures overtime received the lower rating during the period under study as compared to the past. For the purpose of the study, the authors examined eighteen years of ratings from 1978 to 1995 of different firms and the variables examined for the same were a subset of those accounting variables that Standard & Poor's utilized. It was revealed in the study that decline in the level of actual bond ratings was due to the use of more stringent rating standards by the rating agencies. The authors also found out in the study that the firm variables used in the study had changed overtime. The authors further predicted that though there might be many reasons for the increasing number of downgrades than the upgrades but the main reason for this was that the rating agencies were using more strict standards in assigning ratings.

Kaminsky and Schmuckler (2002) examined data from 16 emerging markets covering the period January 1990-June 2000 to assess spillover effects. Specifically they assess whether ratings of assets from one country trigger contagious fluctuations in other countries and whether changes in ratings of one type of security affect other asset markets. They conclude that changes in sovereign debt ratings and outlooks affect financial markets in emerging economies. They affect not only the instrument being rated (bonds) but also stocks. As well, they directly affect the markets of the countries rated and generate cross-country contagion. The effects of rating and outlook changes are stronger during crises in nontransparent economies and in neighboring countries. They also conclude that upgrades tend to take place during equity market rallies, whereas downgrades occur during economic downturns, providing support to the idea that CRAs contribute to the instability in emerging financial markets.

Convitz and Harrison (2003) in their paper, described that the bond rating agencies had a dual objective of getting the financial incentives on the one hand and the stated goal of supplying independent and objective credit risk analysis to the investors on the other hand. So, they had a conflict of interest between profitability and reputation. Thus, the authors tried to evaluate whether the actions of rating agencies were influenced by this conflict of interest or not. For this purpose, a data set of about 2000 corporate bond rating changes by Mood's and Standard & Poor's from 1997 to 2002 was observed. They found that rating changes were not as such influenced by rating agencies' financial incentives but rather the rating agencies were more concerned towards their reputation related incentives. It means that the rating agencies

appeared to be relatively responsive to their reputation concerns and thus ultimately protected the interest of investors.

Ismailescu and Kazemi (2010) use an event study methodology to examine the effects of sovereign credit rating change announcements on the CDS spreads of the event countries and their spillover effects on other emerging economies' CDS premiums. They report that ratings announcements appear to reveal new information that affects CDS spreads, with stronger reaction to positive events. Positive events display some spillover effects, but negative credit rating announcements have no impact on CDS spreads of other emerging economies. The spillover effect of positive events is however only marginally significant. The transmission channels of these spillover effects are a common lending center and competition in trade markets.

# THE MECHANISM FOR DETERMINING RATING

The assessment of merit expressed by the rating takes place according to a timetable and phases that are apparently homogeneous within the major agencies. The biggest differences are in fact only pure formal expression of judgment. So, to better understand the data is necessary to examine the key elements that lead to the formation of the rating. We begin by describing the process of formulation of the rating. The activation of a rating process may result from: a person who requests the assignment of a credit rating for its own issuance of a liability or about their overall reliability; investors asking for a grade for liabilities that are deemed interesting; the rating agency that is activated spontaneously to assign credit ratings to certain liabilities or to some economic entity. The credit rating issued has different meanings depending on the assumptions of activation. Except that if it is an economic entity to seek a credit rating, the judgment can be an advantage competitive. In fact, it allows the subject to be evaluated more credible in the market and to allow easy placement of debt in unfamiliar markets. If the assessment is required by investors (potential buyers of debt), the rating information plays a role aimed at reducing or quantify the risks of these. Very particular is the case in which the agents are acting spontaneously for evaluate a subject or issue, we speak in this case of unsolicited ratings. This practice is pursued only by Moody's and Standard & Poor's, which justify this policy corporate as a fulfillment of information needs of investors. The smaller agencies, however, oppose this practice, considering it's just a way to increase market share, through a virtually tax assessment.

However, we can say that, in most cases, the rating assignment is done at the instigation of the issuer. Each applicant company is followed by a special working group (the socalled analytical team), required to carry out research and analysis; the results are then examined by the rating committee that assigns a preliminary rating, which serves as a starting point for subsequent processing. Before the final allocation, the team held a series of meetings

with the management of the issuer, which are designed to assess the operational and financial plans and strategies of top management, but also allow to analysts to live in contact with the actual operations of the company, so as to perceive the culture, the business climate, the value of the management and other variables quality, which are very important to arrive at the final rating. The judgment is disseminated through the main channels of financial information, along with a statement that sets out the reasons; before publication, however, the issuer may request a review, but must it provide new information. The duration of the process varies between 4 and 6 weeks. The rating may also be withdrawn when the agency considers inadequate the amount of information available, or when the issue expires or is repaid by the company. The assessment is based on information concerning both the economic and institutional context in which the issuer operates, that the same issuer. In particular, the information on the companies are quantitative (economic performance, financial condition, size) and qualitative (industry characteristics, firm's position in the industry, ownership structure, management quality, quality of the accounting system and information) and include both historical data and prospective data; they are acquired either from public documents, both from material provided by the private management. The agencies undertake to respect the confidentiality requirements of issuers: in this regard, the reports issued by them are previously subjected to the scrutiny of the client company. The last phase of the complex procedural process, characterized by the mode of review of the trial (the so-called monitoring), it is much easier and more streamlined than the first assignment, since the relations established with the issuer allows a constant exchange of information. The monitoring results in a massive organizational effort on the part of the rating agencies, which put in place, within the frames of reference, specific sections. Next to the judgment on the title, then, are affixed to the following guidelines: a) negative, if there is a possibility of lowering the rating; b) positive, if the rating could improve; c) developing, if the situation is not clear and does not leave predict the direction of the change. The modification of the judgment inevitably affects the marketability of title and reputation of the issuer, and therefore also the monitoring is a critical step in the process of rating assignment.

# **CREDIT CRUNCH AND RATING AGENCIES**

The recent crisis that began in 2007 on the subprime mortgage market, and then extended to the different areas of the world economy, has encouraged the development of studies to understand how and why the rating agencies have compromised their role and functions not warning customers of the critical situation that was presenting to the international economy. Moody's, Standard & Poor's and Fitch, in fact, were among the main protagonists of the events that have occurred since 2007. Before getting to the heart of the problem, however, it is important to highlight the key elements that have characterized the crisis in question.

First, chronologically the crisis developed in three distinct phases: a) phase of early warning: the first signs of difficulty of the U.S. financial system from 2001 to 2006; b) phase turbulence but contagion content: from March 2007 to September 2008 several financial institutions in the U.S. and UK are struggling, but are taken ad hoc policies rescue, until the collapse of Lehman Brothers in September 2008; c) phase of collapse of trust and global contagion: from September 2008 to February 2009 many banks are nationalized or recapitalized. Disappear banks investment in the United States. It enhances the liquidity crisis with the collapse of the markets bonds, interbank and equity. In particular, the crisis has led to the collapse of market confidence and in the banking system; banks, in fact, no longer trust the guarantees of their "colleagues", no one pays more than anyone else and mechanisms at the basis of the financial system are jammed. This has naturally had an impact on the real economy, with an actual freezing of markets corporate bonds, which led businesses in a difficult situation, especially for raising capital for their operation and the consequent inevitable decline in consumption. This has led necessarily to an escape of market participants to avoid risks, the subsequent sale of financial assets and also to a decline in lending that contributes most to cripple the economic environment, getting to undermine the foundations of the so-called pyramid finance, which should be based on a solid and real economy as the top financial assets, but which now seems completely overturned. Financial assets affecting, in fact, volumes monetary hundreds, sometimes thousands of times higher than those of the corresponding real economic activities. A "pyramid inverted" definitely unstable, and that caused the collapse of the entire system when there is a problem in itself limited, such as a decline in the U.S. housing market. There was also an increase in spreads on Corporate Bonds, ie the premiums that investors require to invest in corporate bonds. A spread indicates that investors consider less risky to invest a little in some corporate bond, the opposite is true, however, in a situation of increased spreads. As you can imagine, after the events described, investors have become increasingly wary and uncertain about the prices of various securities, for which the spreads have risen considerably. Within such a context, the credit ratings were initially favorable, and were expressed by the three major agencies, have been crucial to the sale of the bonds, created through the securitization process by subprime mortgages from which then resulted in the speculative bubble that you talked about earlier. Such judgments have proved to be important for two reasons: first, credit ratings have had a real "force of law" regarding the ability and incentives of regulated financial institutions to invest in securities; Second, the generally positive reputation of rating agencies, has meant that many investors, regulated and unregulated, they trusted blindly ratings on subprime mortgages, even if the returns of the securities markets related to these loans were clearly superior to the assessments corporate bonds. At the base of all this there was the model of so-called "loan packages", the securitization of which allows you to receive higher profits, given the lower rates associated with higher tranches. So those who wish to implement a securitization transaction

will not make any problem to press the agencies, sometimes with threats to rely on another company to obtain a favorable rating. For this risk securities were offered to the market with an overall positive feedback. In reference to this, there is no doubt that the financial crisis has led to the discovered weaknesses in the methods and models used by credit rating agencies; shortcomings due in large measure to the oligopolistic nature of the market within which these agencies operate and the consequent lack of incentives to compete on the quality of the ratings produced.

In general, the rating agencies have been under attack, not only because the securitization of subprime mortgages were made with too high a percentage of favorable ratings, but also for the delay which has occurred with the revision of the ratings assigned.

## THE CASE OF LEHMAN BROTHERS

The history of Lehman Brothers traces its roots back to 1844, when the 23-year old Henry Lehman, a young emigrant from Bavaria, Germany, settled in Montgomery, Alabama to open a dry goods store. In 1850, The Lehman Brothers was founded with the arrival of two other brothers Emanuel and Mayer Lehman. It started as a merchandise business, but soon capitalizing on cotton's high market value, the brothers focused on commodities trading and brokerage operations. In 1858, a first branch office was opened in New York, creating the opportunity to have a larger presence in the commodities trading business and in the financial community.

In 1925, the company experienced the Great Depression guided Robert Lehman, grandson of the founders. The Group managed to go unscathed the Great Depression by focusing its action on venture capital and in 1928 the company went into its historic headquarters of One William Street. Immediately before the crisis, in 1924, John M. Hancock became the first member of the board of the Bank outside the Lehman family. In 1927 it fell to Monroe C. Gutman and Paul Mazur. In 1930, Lehman led the stock market debut in the Dumont, the leading producer of televisions and helped financially Radio Corporation of America. In 1950, the group went into stock market and last family member to lead the company, Robert Lehman, Jr., died in 1969. With his death opened a power vacuum in the company, which coincided with a difficult economic phase, for which he was called at the Pete Peterson, from the Bell & Howell, who managed to straighten the fortunes of the company. In fact, Peterson was able to bring into balance the accounts of the company and then to achieve five consecutive years of record profits, transforming it into a major investment bank. In the '80 clashes between investment bankers and traders institute, which guaranteed the bulk of the profits of Lehman, forced Peterson to promote co-CEO Lewis Gluckman. Between the two there was no lack tensions that led to the dismissal of Peterson and the rise of Gluckman as the sole

director. In 1984 the company, in great difficulties, had to merge with American Express becoming the Shearson Lehman Hutton. In 1993, under the guidance of the ad Harvey Golub American Express launches the sale of its banking divisions and in 1994 spun off Lehman Brothers Kuhn Loeb is the name of Lehman Brothers Holdings. In 2003 the company re-entered the asset management sector, left in 1989 and was one of ten companies that, on the recommendation of the Securities and Exchange Commission, had to pay a fine (\$ 80 million) for an undue influence against analysts involved in the research in investment banking. After in August 2007, following the subprime mortgage crisis, the company closed its bank dedicated precisely to the sub-prime loans, the BNC Mortgage, destroying about 1,200 jobs in 23 locations and recording a loss of \$ 25 million and a reduction in goodwill of approximately of \$ 27 million. Despite this, in 2008 vast losses have accumulated on mortgage-backed securities to lowerrated, so as to record the total losses to \$ 2.8 billion in the second quarter, this event that has forced it to sell off \$ 6 billion of assets. In only the first half of 2008, the shares of Lehman lost 73% of their value, while the credit market continued to decelerate. In August 2008, Lehman announced its intention to reduce the 6% of its workforce (or 1,500 people) by the date of presentation of the results of the third quarter in September. Already in July 2008, however, suggested the insolvency of the institution. After on 10 September 2008, Lehman announced a loss of \$ 3.9 billion and plans to liquidate a majority stake in the business of investment management. The action of the slipped 7% that day. Lehman, after initially rejecting any questions regarding the sale of company, announced it was looking for a buyer and the share price fell by a further 40% on 11 September 2008. In September 13/2008 Timothy F. Geithner, president of the Federal Reserve Bank of New York, convened a meeting on the future of Lehman, including the possibility of an emergency liquidation of its activities. At this meeting, Lehman reported that they were in negotiations with Bank of America and Barclays for the possible sale of the company. After, on 14 September 2008 The New York Times was published that Barclays had ended its offer to purchase all or part of Lehman and that the operation to rescue the bank from liquidation was wrecked. On September 15/2008, the Company announced its intention to make use of the so-called "Chapter 11" the procedure of controlled bankruptcy under U.S. law, Lehman declared debts banks for \$ 613 billion, debt securities and \$ 155 billion in assets for an amount of \$ 639 billion. In the context of this failure there was talk of a real total failure, not just Lehman Brothers, but also careless supervisors, rating agencies. Therefore of great interest is the behavior of negligence that has occurred by the rating agencies. Up to 18 July 2008, in fact, Moody's applied to the company a rating of "A2", Standard & Poor's "A" and Fitch "A", and then arrive, in September 15/2008 to an inevitable downgrading of their votes.

#### CONCLUSION

There is no doubt that as a result of the severe crisis that hit the world economy, the rating agencies have passed away "from the altars to dust", implicated as the major responsible for the situation. That is why, by the various international bodies of government has been urged several times a consistent regulation and supervision of these companies, which, especially in recent times, have produced judgments sometimes too generous. Many market participants are wondering today if the role of these agencies is really so essential for anyone who invests in bonds issued by listed companies. Some economists have examined the issue coming to the conclusion that it is actually possible to highlight the implicit expectations of the probability of default of the issuer, then figure out how much you risk buying a bond that actually on the card was promoted to full marks starting from market prices of derivative instruments such as Credit Default Swaps (CDS), and a mathematical model of price formation. The sensational case of the bankruptcy of Lehman Brothers showed, in this regard, which, if properly evaluated and communicated, the so-called "probability of default" would have been, months in advance, only effective indicator of the riskiness of the security. So this case has proved a further argument in favor of the theory that some market instruments (including CDS fact) would be able to replace efficiently the ratings.

A final consideration concerns the fact that Rating Agencies are distinguished by several actual or apparent conflicts of interest. In particular, it is well established that Moody's, S&P and Fitch are often paid the companies which are by same to be valued. This prompts us to ask questions about professional decision-making: indeed, it is the belief that rating agencies are to have granted false values to the mortgages in order to make money for themselves during sub-prime crises. However, the biggest conflict is about stock companies. Major shareholders of Moody's and S&P are for the most part companies themselves claiming a rating assessment and therefore a vote to issue bonds. This point was also raised by SEC but, however, the problem has not been solved.

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