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THE CREDIBILITY OF CREDIT RATINGS

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Abstract *Credit rating agencies (CRAs) are found to strongly influence the market participants' decisions. Therefore it is essential to make their assessments credible and accurate. The financial crisis proved that this condition was not met relating to the US financial market. The paper focuses on the case of Lehman Brothers Holding which may be treated as a kind of 'natural experiment' – the collapse of this bank is an absolute evidence of its poor condition. Thus, verifying the credibility of ratings requires only reviewing the rating agencies' assessments in the pre-bankruptcy period. The author finds that, firstly, the grades didn't reflect the bad situation sufficiently and secondly, the CRAs responded with a great delay to the detoriating market circumstances.*

Key words:
Credit ratings; Accuracy, Lehman Brothers, Risk assessment, Financial crisis, Corporate governance

JEL Codes:
G21, G23, G24, G28, G33, G34, G38

1. Introduction

A great role that credit rating agencies (CRAs) played in the financial crisis is found to be incontestable. The reasons for miscalculation of the level of risk relating to the mortgage securities seem to be not so obvious however and are explained with a few theories. Firstly, there occurred a conflict of interest as the agencies' main customers were the large banks issuing the assessed instruments. Such an arrangement between credit rating firms and banks acting in the role of their prominent clients implied many abuses that took the form of underestimation of credibility of both the instruments and entities that issued them.

Another reason for the unreliable estimates was extremely complicated structure of synthetic collateralized debt obligations (CDOs), which were often rated on the basis of the invalidly calculated low volume of bad loans, resulting from the optimistic market moods. That could explain the significant increase in the number of instruments with the highest rating of AAA. Paradoxically, at the same time, there was a boom on the risky subprime sector that in most cases was a basis of those AAA securities. It is worth noting that the AAA-rated CDOs in the United States are cataloged as the instruments admitted to trading by the pension funds, hence their buyers; apart from banks, investment funds and insurance companies were also the pension companies. Such a wide range of market players willing to buy the, in fact very risky, obligations inclined banks to their further issuance, and the rating agencies - to confer the highest ratings, guaranteeing a high level of demand among investors.

The aim of the paper is to analyze the integrity and credibility of the production and dissemination of the rating agencies' assessments regarding the Lehman Brothers Holding. Studying the case of this particular bank would be useful in terms of examining the ratings' solidarity as its bankruptcy evidences that the condition of the bank was unarguably bad. Therefore it is enough to check if ratings had reflected the danger and properly played the role of early warning system institutions.

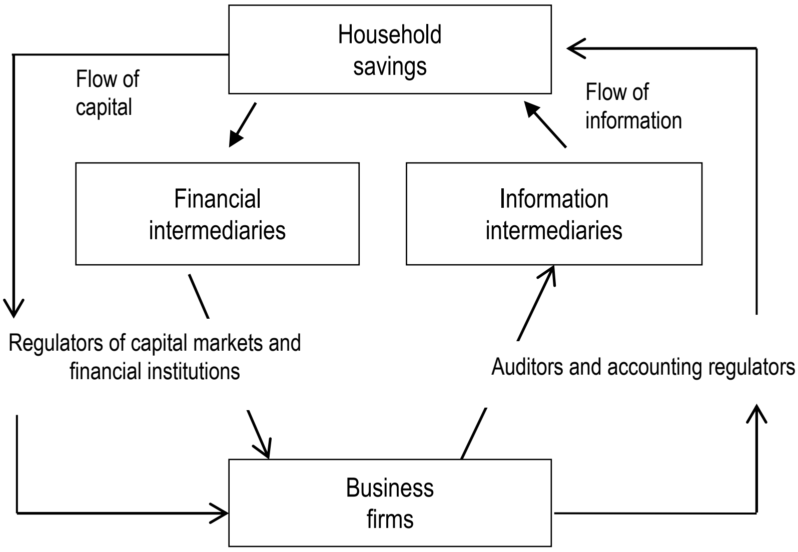
2. Rating agency as the important element of corporate governance system

2.1. The role of credit rating agencies in the financial markets

Credit rating agencies, as the professional capital market participants, should ensure information transparency and competitiveness of entities operating on it. Together with the auditors and another accounting regulator they act as the information intermediaries mitigating the asymmetry information on the financial markets (see: Figure 1).

The analyses and assessments of the agencies should support the effective functioning of corporate governance by giving both the management and the investors a tool to make the right business decisions. OECD indicates explicitly that "the corporate governance framework should be complemented by an effective approach that addresses and promotes the provision of analysis or advice by analysts, brokers, rating agencies and others, that is relevant to decisions by investors, free from material conflicts of interest that might compromise the integrity of their analysis or advice" (OECD, 2004: 23).

Figure 1. Financial and capital flow in the capital markets



(Source: Healy, Palepu, 2011)

The case of Lehman Brothers proves that the rating agencies have not lived up fully the tasks imposed on them. It is believed that they even made the situation worse by:

- wrongly estimating the risks associated with the structured instruments,
- negligent reaction to the deteriorating condition of the bank,
- paying attention only to the level of financial indicators neglecting the review of the methodology of their calculation and ignoring other relevant information included in the financial statements.

It should be noted that, although the regulatory changes introduced in the US after the Enron scandal led to an increase in the number of accredited rating agencies, the market is in fact concentrated in the hands of the so-called "Big Three" - Moody's, Standard & Poor's and Fitch (Golec, 2012: 438). Their ratings were crucial for the external stakeholders and bank executives. One could even argue that the bank's market position depends on the level of the ratings, although the rating is assumed only to reflect this position. It should be noted, however, that when the case of investment bank is concerned the decrease of rating results in a dramatic drop of demand for the company's shares and the increase in the cost of capital. That is why some contracts, especially those associated with derivative instruments, contain a direct record about the requirement of additional cash collateral in case of downgrading one of the parties.

2.2. The credibility of CRAs – literature review

The problem of credit ratings' accuracy has been often discussed after the 2007 Financial Crisis. The research focused mainly on the reasons of the poor quality of ratings. Bolton et al. (2012) paid attention to the three sources of conflict of interests in CRAs. These are: misunderstanding risk to attract business, purchasing only the most favorable ratings by the issuers and the trusting nature of the investors.

Skreta and Veldkamp (2009) pointed out the phenomena of „shop for ratings" meaning observing by the issuers the rating agencies' methodologies of giving the ratings and buying and disclosing only the most favorable ones, especially before auctioning the assets. White (2010) emphasizes that the agencies shifted their business model from "investor pays" to "issuer pays" mainly because of their interaction with regulatory authorities. Heski and Shapiro (2011) argue that the fluctuations of CRAs accuracy are the result of the labour market for ratings analysts and their incentives to provide accurate ratings.

Carvahlo *et al.* (2014) found that intensity of rating changes depends on the economic situation. The larger intensity occurs in bad times and moreover, these stronger rating changes are not associated with their higher accuracy. Cantor and Mann (2006) confirm that there is a kind of trade-off between the rating accuracy and stability.

As it is shown above the literature suggests existing several theories regarding the CRAs motivation of providing the particular level of grades. Apart from those just cited there is also a 'coordination hypothesis', suggested by Boot et al. (2006) who convince that rating agencies coordinate the actions and beliefs of issuers and investors. Holden et al. (2014) and Manso

(2013) agree with it pointing out that the threat of rating decrease may influence the issuer's decision as it changes the likelihood of future funding. Nonetheless, the case of Lehman Brothers proves that this coordination is not in the way it should be. The issuer's decisions seem to focus not on better management but rather on using the "accounting gimmick" or not disclosing the full information about the company condition due to reaching the better grades from the CRAs.

3. Credit ratings as the risk assessment instruments – The Lehman Brothers case study

3.1. Lehman Brothers' ratings in comparison to other investment banks in US

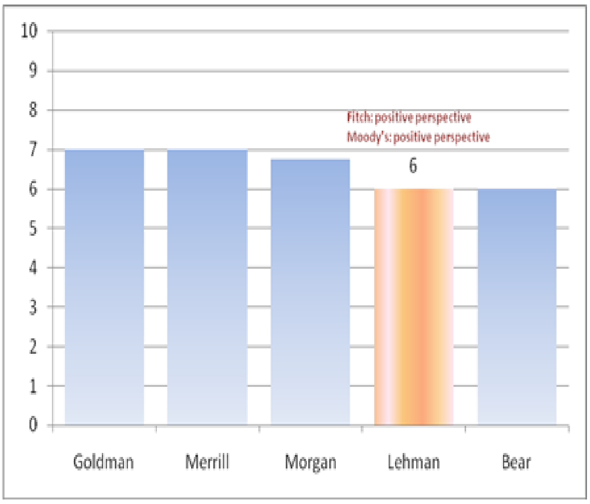
In case of Lehman Brothers the importance of credit ratings was so great that, as it was later admitted by Richard Fuld (CEO), the quest for their increase was the main cause of conducting some transactions belonging to the so-called 'creative accounting' or 'accounting gimmick'[i]. Lowering the leverage ratio, which is one of the most important measures compared by the credit rating agencies, has become a priority for the management and carrying out of these transactions was the least expensive, but very risky method of reducing leverage and increasing the competitiveness of the bank. Despite conducting these operations and temporarily reducing the leverage ratio by Lehman Brothers, at the end of 2006 its main competitors were mostly better rated by rating agencies (see Table 1 and Graph 1). However, these differences were not very significant and in the sector analysis report released by Moody's in December 2006, Lehman Brothers was rated highest among the five leaders of investment banking at that time (Table 2).

Table 1. Ratings assigned by the "Big Three" and LEH assessment at the end of 2006

Grade	S&P	Fitch	Moody's	
10	AAA	AAA	Aaa	Highest IG
9	AA+	AA+	Aa1	
8	AA	AA	Aa2	
7	AA-	AA-	Aa3	
6	A+	A+	A1	LEH Current Rating
5	A	A	A2	
4	A-	A-	A3	
3	BBB+	BBB+	Baa1	
2	BBB	BBB	Baa2	
1	BBB-	BBB-	Baa3	Lowest IG

(*Source:* Confidential Presentation to Lehman Brothers, Credit Ratings Strategy, 2007: 5)

Graph 1. Average credit rating grade across agencies, February 2007



(*Source:* Confidential Presentation to Lehman Brothers, Credit Ratings Strategy, 2007: 5)

Table 2. Moody's quantitative assessment of securities industry (December 2006)

Factor	Factorweight	Goldman		Merrill		Morgan		Lehman		Bear	
		Rating	Grade	Rating	Grade	Rating	Grade	Rating	Grade	Rating	Grade
Earningsstrength&stability	25%	Aa3	21	Aa2	24	Aa3	21	Aa2	24	A1	21
Management quality&culture	20%	Aa2	8	A1	6	A1	6	Aa2	8	A1	6
Franchisestrength&diversification	17%	A1	6	A2	5	A2	5	A1	6	A3	4
Risk management	12%	Aaa	10	Aa2	8	Aa2	8	Aaa	10	Aa2	8
Operating environment	10%	Baa1	3	Baa1	3	Baa1	3	Baa1		Baa1	3
Liquidity	8%	A	5	Aa	8	A	5	A	5	A	5
Capital adequacy	8%	Baa	2	Baa	2	A	5	A	5	A	5
Total score	100%	6,5		6,1		6,0		6,9		5,5	
Scorecard rating		Aa3		A1		A1		Aa3		A1	
Current Moody's rating		Aa3		Aa3		Aa3		A1		A1	

- Scorecard rating higher than actual Moody's rating
- Scorecard rating lower than actual Moody's rating

(*Source:* Confidential Presentation to Lehman Brothers, Credit Ratings Strategy, 2007: 12)

The three best-rated by Moody's areas of activity of Lehman Brothers may raise far-reaching concerns. According to the rating agency Lehman received the highest grades for risk management, earnings strength and stability and management quality and culture. The serious problems experienced by the bank in 2007 followed by its collapse in 2008, proved irrefutably inadequate managerial competencies as well as bad construction of the payment systems awarding short-term goals and a lack of transparency in the financial statements. These observations show significant weaknesses at all assessed by Moody's areas and largely discredit the reliability of ratings.

3.2. The CRA's response time to changing market conditions

Another important criticism to credit rating agencies is their slow response to the first symptoms of problems of the rated entities. Agencies explain this allegation by using the so-called 'through-the cycle methodology', which is meant to indicate the likelihood of bankruptcy in the long term horizon, without taking into account the temporary turmoil resulting from the economic cycles (Golec, 2012: 446). The details of this methodology are confidential and have not been made public. It is only known that, according to it, the ratings should be updated only when the agency analysts conclude that the observed changes in the risk of an entity are long-term and sustainable. However, technically it is very difficult to judge if the changes in the condition of the assessed company are permanent. No straightforward method exists to forecast whether the nature of a current credit-quality change is permanent or transitory. A combination of thorough analysis and expert judgement is needed to separate the permanent and transitory components (Altman, Rijnken, 2003: 4). Thus, the through-the-cycle methodology could be found as stabilizing the system of ratings, but reducing the accuracy and reliability of the grades estimation (Löffler, 2004: 697).

The outstanding payments regarding the subprime could already have been observed in 2006. Financial turmoil deepened considerably a year later as a result of disclosure of troubles of Bearn Stearns, IKB Deutsche Industriebank, Sachsen LB and West LB. Surprisingly, Lehman Brothers having the exposure to derivatives market reaching nearly 7 million USD in November 2006 maintained high ratings (US SEC, 2007: 105). It is worth noting that although the exact actual value of the derivatives in the pre-bankruptcy period has not been notified, the Lehman Brothers' global portfolio of derivatives was estimated at 35 trillion, which is about 5% of all world derivative transactions (Summe, 2011: 2). Moody's, Standard & Poor's and Fitch responded to this highly risky portfolio in March 2008. Then they lowered gradually the Lehman Brothers' perspective and ratings (see Figure 2).

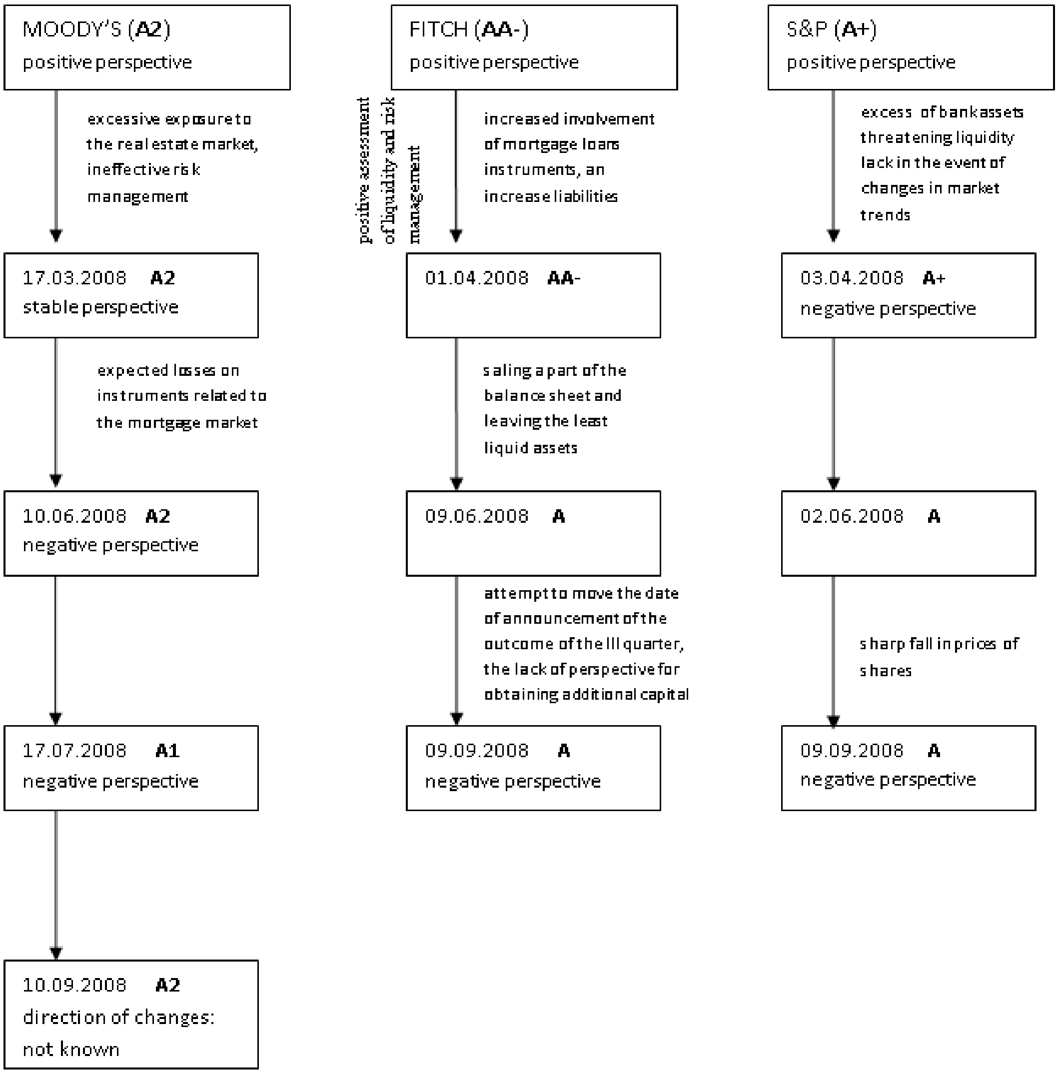
Apart from significantly delayed reaction of the credit rating agencies one should also put the attention to the fact that a few days before the bankruptcy Lehman Brothers was still relatively highly rated (grades A2, A, A). In this situation an excessive optimism and the tendency for risky decisions of management could not be surprising. The credit rating agencies, designed as the one of the important mechanisms of early warning system definitely failed in case of Lehman Brothers, becoming at the same time one of the issues that contributed to the collapse of the company.

4. Conclusions

An analysis of the rating agencies activity draws attention to one additional problem, which is a kind of reciprocal action between the grade and the condition of the rated entity. The calculation submitted by management in July 2008 at a meeting of the board of directors, showed that the further rating downgrades by up to two degrees would cost the bank from 1,1 to 3,9 billion of additional collateral (Valukas, 2010: 10). It may be then considered if the decisions of the board of directors and managers of Lehman Brothers were sovereign or were undertaken under the pressure of rating agencies. One can also look at this issue from a broader perspective and consider how strong is the position of the agencies in creating the company's image among market participants. The above analysis evidences the great importance of ratings, which in the case of Lehman Brothers seems to even surpass the importance of bank's prudential policy. Managers took care mostly about agencies' grades with completely ignoring the long-term safety issues, which de facto should be used as the basis of the provided ratings.

Summarizing, a number of irregularities in the functioning of credit rating agencies may be pointed up when the Lehman Brothers case is being concerned. Above all else, these are the incredibility of the assessment of particular evaluated areas and the delayed response for the bank's financial problems. That is why ratings cannot be treated as the corporate governance instruments supporting the information transparency. It even may be argued that the credit rating agencies interfere with the functioning of the internal mechanisms of corporate governance by generating the excessive optimism, signalling irregularities with a great delay and forcing the management to focus only on the indicators instead of long-term sustainability of the institution.

Figure 2. Credit ratings agencies' response for the detoriareting condition of Lehman Brothers



(*Source:* Self study based on the Lehman Brothers Bankruptcy Court Records)

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[i] It is mainly about the Repo 105/108 transactions - repurchase agreementsintended to temporarily remove liabilities from the balance sheet, thereby reducing leverage (the relative percentage of financial liabilities) and increasing the relative percentage of capital (or stockholders equity).