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IV. List of Abbreviations

ABS Asset-backed Securities

AMF Autorité des Marchés Financiers

ASB American Savings Bank

BCBS Banking Committee on Banking Supervision

BIS Bank for International Settlements

bzw. beziehungsweise

CAD Capital Advise Directive

CBRS Canadian Bond Rating Services

CDO Collateralized Debt Obligation

CDS Credit Default Swap

CEBS Committee of European Banking Supervisors

CEO Chief Executive Officer

CEPS Centre of European Policy Studies

CF Corporate Finance

CFS Committee of Financial Services

COFACE Compagnie Française d'Assurance pour le Commerce Extérieur

cp. compare

CRA Credit Rating Agency
CRD Credit Rating Directive

DBRS Dominion Bond Rating Services

ECAI External Credit Assessment Institution

ECB European Central Bank

e.g. abbreviation of Latin 'exempli gratia'; for example

EU European Union

FCC Federal Communications Commission

Fitch Fitch, Inc.

FT Financial Times

IOSCO International Organization of Securities Commissions

IRB-approach Internal Ratings-based Approach

JBRI Japan Bond Research Institute

JCR Japanese Credit Rating Agency, Ltd.

KRA Kreditratingagentur

KRB Kreditratingbranche

Moody's Investors Services

MCM McCarthy, Crisanti & Maffei, Inc.

NIS Nippon Investors Service, Inc.

NRSRO Nationally Recognized Statistical Rating Organization

NYT New York Times

OCC Office of the Comptroller of the Currency

OTC over-the-counter

R&I Rating & Investment Information, Inc.

S&P Standard & Poor's Rating Services

SEC United States Securities Exchange Commission

SIMFA Securities Industry and Financial Market Association

SPE special-purpose entity

sog. sogenannte

UK United Kingdom U.S. United States

USA United States of America

USD United States Dollar

z.B. zum Beispiel

1. Introduction

The severe auditing and accounting debacles in the beginning of this century induced calls for regulatory improvement in many industries. The Enron default in December 2001 is the most discussed and publicized scandal, and induced to challenge the competence and value of credit ratings. Credit rating agencies (CRAs), in their role as "financial journalists", publish opinions about the creditworthiness of debt issues and issuers. In other words, ratings give information about the likeliness of a timely repayment and the probability of default of the issuer. In the case of Enron, the three principal CRAs (Moody's, Standard and Poor's [S&P] and Fitch) rated this company "investment grade" until four days before it declared bankruptcy. An investment grade rating is an indicator for a "secure" investment which is suitable to be held by a conservative investor. Obviously, Enron's debt was four days before it defaulted not an advisable investment opportunity, actually it was "junk".

Regulators around the world started to use CRAs as a tool in their "safety-and-soundness" regulation. The regulation of financial institutions had its onset after the Wall Street crash in 1929 (Black Thursday) and the following Great Depression. The aim is to protect the lenders from losses that would arise when huge financial institutions default and it should also retain stability in the bank framework. In the U.S. prohibits the regulatory regime many important institutions to hold financial instruments not rated "investment grade". These regulated institutional investors account for a majority of the overall investment volume. Such a favorable investment grade rating can only be certificated by a Nationally Recognized Statistical Rating Organization (NRSRO). The SEC approves the CRAs qualifying for that external regulation function. Until 2003 were entitled solely the principal three CRAs, Moody's, S&P and Fitch, for issuing such a favorable rating. The credit rating industry is dominated by Moody's and S&P, having a combined market share of about 80% – together with Fitch amounts their share approximately 95%.

"There are two superpowers in the world today in my opinion. There's the United States and there's Moody's Bond Rating Service. The United States can destroy you by dropping bombs, and Moody's can destroy you by downgrading your bonds. And believe me, it's not clear sometimes who's more powerful." 1

Although Enron with its extraordinary character, driven by fraud and chicanery of the management, caused a lot of attention, the aim for improvement should not be to prevent another Enron. But, the evoked attention can be used to concentrate on the several problems and conflicts in the industry, resulting from the main problem: the high market concentration. In a more competitive industry the prices may be lower and the quality may be higher. Potential entrants and competitors are arguably the most hurt in the current situation due to several entry barriers.

To find solutions for easing the current market domination by two CRAs, have to be investigated the following four issues:

Which tasks might fulfill the CRAs?

Beside the "traditional" informational value of CRAs, piercing the fog of information asymmetries between them and the issuers, qualifies the product of some CRAs also for transactional and regulatory use.

- Holds the domination for the complete industry or can be identified market sectors with a different picture?

The traditional information gathering is dominated by Moody's and S&P, and it seems that all parties – except new or small market players – are comfortable with the current situation. There is no competition between the market leaders because issuers pay both for being rated. In theory has a new entrant three possibilities to compete with the principal CRAs: to compete on price, to have lower standards (ease of dealing with issuers) or to specialize in a business niche.

- What are the reasons for the market structure?

Natural reasons like economies of scale, standardization in rating and mergers among the CRAs induced the current market structure. The development of the bond capital market explains the stronger demand for CRAs in the U.S. and why the regulatory use of few CRAs in the U.S. had that grave consequences on the whole

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¹ Interview with Thomas L. Friedman [1996], "The MacNeil/Lehrer Newsour".

industry. Especially the U.S. regulatory regime created a demand for ratings and limited the supply on a few CRAs (until 2003: Moody's, S&P, Fitch).

 Which conflicts and problems have to be considered when making proposals for improvement?

There can be identified several conflicts of interest, wherein a CRA has an economic interest in issuing a rating based on anything else than on creditworthiness of the issuer. Those strengthen basically the market position and profitability of the principal CRAs. The increased relevance of the principal CRAs makes it difficult to get the "right" rating and to rebut that the market is solely that concentrated because the sold product is actually not needed but the regulators generated a demand and restricted supply. Nevertheless, there is evidence that the principal CRAs do more than solely selling favorable regulatory treatment and that they provide information. Accordingly should be considered how regulators could ease the current market concentration and make a workable system better.

A less concentrated market would lower the prices and increases the quality. Regulators should expand the list of CRAs used for regulatory purposes by those CRAs that have proved for several years their informational valuable output. Additionally should be the criteria for CRAs for regulatory use less focused on input than on output and an ongoing oversight of the recognized CRAs has to be done by the regulators. The immediate cease of NRSRO-designation would strengthen the current market leaders due to the institutional context wherein the change would take place. Market-based measures like credit spreads are no appropriate alternative.

2. The Relevance of Credit Ratings²

A credit rating is the opinion of a credit rating agency (CRA) about the creditworthiness of an entity and/or the debt obligation issued by it.³ Most agencies, at least the large ones, as Moody's, S&P and Fitch, rank the issuers and instruments based on a relative probability of default.⁴ The credit rating is measured on the long-run, therefore "through the cycle", and is driven by the business risk and the financials of the entity.⁵ Credit ratings are discrete letter ratings and may have a commentary. The letter rating is the rating category which, generally distinguished, is "investment-grade" or "non-investment-grade".

<u> S&P</u>	Moody's	<u>Meaning</u>			
AAA	Aaa	highest quality			
AA+	Aa1				
AA	Aa2	high quality	gge		
AA-	Aa3		gra		
A+	A1	strong	investment grade		
Α	A2	payment	me		
A-	A3	capacity	est		
BBB+	Baa1	adequate	<u>ڇ</u>		
BBB	Baa2	payment			
BBB-	Baa3	capacity			
BB+	Ba1	likely to repay,			
BB	Ba2	ongoing			
BB-	Ba3	uncertainty	a)		
B+	B1	high righ	non-investment grade "junk"		
В	B2	high risk	g		
B-	B3	obligation	ent L		
CCC+		vulnerable	ĚŽ		
CCC	Caa	to default, or	es "j		
CCC-		in default	.⊊		
С	Ca		Ġ		
	Moody's	in bancrupcy	_		
D	has no "D"-	or default			

Table 1: Long-term debt rating scales

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² My discussion of the 'what are credit ratings' owes essentially to Frost [2006], Hill [2004] and Partnoy [1999]; my discussion of the rating industry history owes essentially to Cantor & Paker [1994] and Sylla [2001].

³ For definitions of a CRA see, for instance, Cantor and Packer [1994], Frost [2006] and SEC [2005a].

⁴ Moody's Investor Service (Moody's), Standard & Poor's Credit Market Services (S&P) and Fitch, Inc. (Fitch) have a combined market share of about 95%. (See Economist 06/2007). For convenience, I will refer to these three CRAs collectively as "principal or large CRAs".

⁵ See Amato and Forfine [2003] and Cantor and Mann [2003] for discussion on rating through the business cycle. See AMF [2005], BIS [2000] and SEC [2003a] for approaches and procedures used by CRAs.

AAA to BBB- are the four highest ratings and are termed "investment-grade". BB+ and lower ratings are called "non-investment-grade". Fitch uses the same scale as S&P. All further rating class specifications in this paper refer due to simplification to S&P's scale. The descriptive meaning of the different classes has been taken over by Partnoy [1999]. Short-term debt has to be paid off at a date less than one year in the future and has a different rating scale. S&P [2005] stated that the credit rating's commentary can include a "credit watch" and/or a "credit outlook" which give a prospect and further information about the underlying's perspective.

The principal CRAs build up their evaluation on quantitative models and a qualitative analysis done by analysts. Smaller CRAs base their assessments merely on a quantitative evaluation due to a staff limitation. Seven out of 30 agencies investigated in the Bank for International Settlements [BIS 2000] had twelve or fewer employees.

At least, after the series of scandals the question occurred, how and why issuers are incentivized to buy a rating from a CRA (or even multiple ratings from different CRAs). The following parties in the industry rely on the value (product) marketed by CRAs: investors, issuers and regulators. First I describe these parties and how they use credit ratings. Afterwards, I distinguish three different roles of CRAs and differentiate by informational value, transactional and regulatory relevance of credit ratings.

2.1. The Parties⁶

<u>Issuers</u> benefit from purchasing credit ratings through various reasons. Their main intention is to improve the marketability and the pricing of the issue. A further reason may be the satisfaction of investors or counterparties who seek for more management responsibility. Not uncommon seek issuers for more than one rating from different CRAs. For instance, the customs in the U.S. long-term security market require issuers to at least a second rating to affirm the first one. A single-rated issue would be priced below an issue which is affirmed by another similar one.

<u>Buy-side firms</u> are pension funds, mutual funds and insurance companies. They are among the largest investors in the U.S. securities market. Indeed, buy-side firms

⁶ My discussion of the parties owes essentially to SEC [2003a].

receive information from CRAs, but nevertheless, they make their own evaluation of credit risk. They use their own results for both risk management and trading purposes. Credit ratings are one of several parameters in the assessment process to determine credit risk and investment analysis. Buy-side analysts, reviewing and analyzing credit ratings, try to conclude from one rating to another one and try to predict further rating actions. Buy-side firms may use credit ratings in in-house investment rules (e.g. an investment policy requires a certain level of credit rating), or to guarantee the compliance with several regulatory requirements.

<u>Sell-side firms</u>, like broker-dealers (selling securities to clients), also make their own analysis for both risk management and trading purposes. In most instances use sell-side firms credit ratings in a similar way as buy-side firms. A difference between them is that many broker-dealers assist clients (issuers) in selecting adequate CRAs and guide them through the rating process. Further they act as dealer in markets, in which credit ratings have a large standing and importance (e.g. the OTC-derivative market). Often, large broker-dealers issue for funding reasons debt and receive for it themselves credit ratings.

Regulators around the world use credit ratings for financial regulatory purposes. Beyond doubt, the U.S. has a long history in financial regulation and makes use of CRAs as a tool in it, but by now, comparing the situation globally, the profoundly difference becomes always less visible. The increased use of credit ratings all over the world enhanced the importance of them for certain market participants (directly for banks, pension funds, money market funds, insurance companies, et al., and indirectly for issuers). The dependence of these participants on ratings bears on the reliance on credit ratings by the regulators in their "safety-and-soundness" regulation. During the 1930's started the U.S. regulators using CRAs with the expected character of a market based indicator for the riskiness of issues. White [2006] sees this reliance on CRAs as a regulatory delegation to specific out-side parties. Obviously see regulators credit ratings still as a good and workable tool to prevent defaults of large institutional investors through restricting there portfolio mixes.

2.2. The Informational Value

The informational value of CRAs is understood as the provision of information by CRAs, which helps to deal with the uncertainties concerning the creditworthiness of borrowers. In this situation of asymmetric information between lenders (investors) and borrowers (issuers) help CRAs the lender-side to distinct more creditworthy borrowers from shoddy borrowers, and help the borrower-side to disclose their better creditworthiness to potential lenders. The moral hazard problem of transferring such information directly by the borrower is reduced through using a third party (a CRA) for signaling. The moral hazard problem refers to the risk that the borrower gains an advantage by exaggerating his creditworthiness and the lender doesn't receive accurate information from the borrower.⁷ The prediction of default is the core of the CRA-business and is the output, to which the capital market cares most.

Frost [2006] stated that this valuation role is affected by two qualities: ratings timeliness and information usefulness. Information usefulness is understood as the rating accuracy and the additional information provided in form of commentary (any form of prospects like watches and/or outlooks).

2.3. The Transactional Relevance

2.3.1. Contingency clauses

Large CRAs facilitate contracting due to the fact that discrete letter ratings are seen as efficient benchmarks for the creditworthiness quality. Ratings-based constraints are used in private contracting (like bond covenants and credit agreements) and are found in in-house investment rules of institutional investors.⁸

A closer look on rating triggers: A rating trigger admits the lender a contractual right when the rating of the borrower falls below a certain category. Such a rating trigger constitutes a certain level of protection of credit risk and lowers monitoring costs for the lender, simplifies agreement negotiations and reduces transaction costs.

⁷ See Partnoy [1999] and Paul Hsueh and Kidwell [1988] for more information about the asymmetric information between investors and issuers and the moral hazard problem.

⁸ See Frost [2006].

Although there is a comprehensible demand-side, there is also a clear supply-side. The European Central Bank [ECB 2004a] points out that borrowers include triggers in agreements since otherwise lenders would ask for higher credit spreads.

Moody's survey [2001] indicates that out of 771 US corporations, rated Ba1 (BB+) or higher, 87.5% do have rating triggers. By contrast, Moody's survey [2002] in Europe shows that 59% of 243 responded issuers reported rating triggers. Common features and their frequency are depicted in the table below:

Trigger	Frequency
Collateral, letter of credit,	24 60/
bonding provisions	21,6%
Pricing grid	21,1%
Acceleration	29,1%
of which	
Termination	8,5%
Material adverse change	5,4%
Default	5,3%
Acceleration	4,0%
Put	3,0%
Early amortization	2,9%
Other	28,2%

Table 2: Types of rating triggers and its frequency 10

<u>Collateral, letter of credit, bonding provisions</u> were basically found in bank loans contracts, wherein the feature does not affect the initially appointed credit spread but requires to pledge assets to guarantee the financing. Therefore it mainly influences the opportunity costs of capital.

<u>Pricing grids</u> are used in both bank loans and bond covenants. These features increase the credit spread in the event of degradation of the rating class or specified financial ratios. Therefore it influences the costs of capital.

<u>Acceleration clauses</u> are found in both bank loans and bond agreements. They can include severe and critical features (e.g. acceleration on repayment or even premature termination of an initially long-term raised debt). Accordingly, such clauses provoke not only an increase in cost of capital, also an instantaneous need for new capital. The rating triggers with the gravest consequences are most commonly used.

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⁹ Although, there are reasons to assume that the picture may has changed and the use has declined, unfortunately, to my knowledge, there is no comprehensive survey available which approves that.

¹⁰ See Moody's [2001].

In this context, the value of the credit rating as contingency clause stems not only from the informational aspect (reducing asymmetric information and transaction costs), also from the character of being simplified, standardized and from an independent party. A downgrade, as external event, is published broadly and is therefore easy to identify and date. Although a credit rating is "just" the CRA's "opinion" about the creditworthiness of a borrower, it creates legal rights due to rating triggers and is used as if it constitutes an objective measure for creditworthiness. Accordingly, credit ratings are valuable also by reason of creating and enforcing legal rights.¹¹

2.3.2. Structured Finance Transactions

In structured finance transactions got CRAs an interesting and substantial role, essentially in Collateralized Debt Obligations (CDOs). A credit derivative is a private contract, wherein one party pays another party to overtake the credit risk of one or more issues and therefore has to cover the second party possible losses or defaults of the issues. A credit derivative enables to transfer credit risk, primarily used to reduce balance sheet requirements. The simplest form is a Credit Default Swap (CDS). Herein sells one party credit default protection for a premium and pays in the event of default. The other party pays a premium for transferring the credit risk and is paid in the event of default. Credit derivatives came up in the mid-1990s, but notice, in a CDS-transaction is a CRA not yet directly involved.¹²

Another established credit derivative is the Collateralized Debt Obligation (CDO). A CDO is a structured, leveraged transaction invested in different asset classes. In such a transaction transfer companies, so-called originators, rights to payment from income producing assets (accounts receivable, loans and lease rentals; generally "receivables") to the special-purpose entity (SPE). A "true-sale" comprises a continuation of repayment to the SPE's investors, even in the event of default of the originator. At the core of such a CDO is a "bankruptcy-remote" SPE that issues differently rated securities to investors. If some of the SPE's assets (receivables) default, the most junior securities (investors) take the first loss; therefore, the most

¹¹ See ECB [2004a] for a detailed discussion of the consequences from the use of rating triggers.

¹² See Partnoy [2006] for more detail, especially concerning the role of CRAs in structured finance transactions.

senior securities are rated higher than the average of the collateral pool's ratings would be.¹³

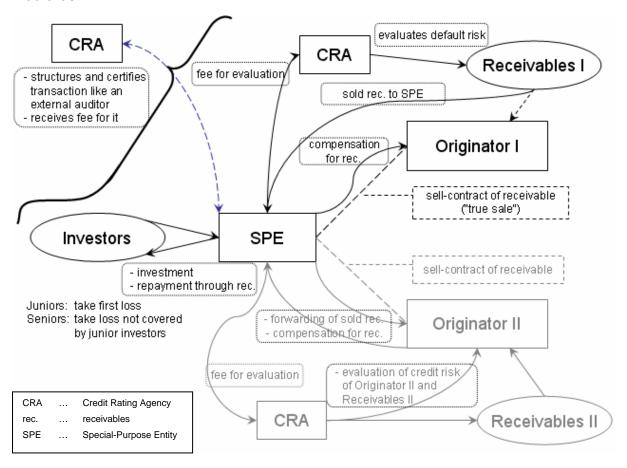


Figure 1: Depiction of a CDO

An important fact has to be noted: CRAs are herein involved directly and the risk of underlying a conflict of interest rises. Consider, a CRA rates a SPE "AAA" and is in the position of creating legal rights. The CRA certifies the transfer of right on payment (receivable) from the originator to the SPE even in the event of default, hence, constituting a "true-sale". Further, the CRA helps and sells structuring this transaction. Accordingly, if the CRA defines how the CDO looks like and afterwards rates the SPE, the risk rises not being independent and not being perceived reputable in rating the SPE "AAA". In other words. the involved parties care about the "bankruptcy-remoteness" most and that's the core the structure is build up and also the main point sold. Accordingly, the CRA rates and certifies its own work in structuring a high rated CDO-transaction.

¹³ See S&P [2002] and Schwarcz [2001] for a closer description of CDOs.

In this context, the value of the credit rating stems not only from the informational aspect, more from the certification and guaranteeing aspect for the validity of the transaction (the asset sale). Hence, the CRA acts more like an external auditor and is therefore more difficult to replace compared to its role as information gatherer. For instance, in the "traditional business" of CRAs make buy-side and sell-side firms there own analysis and assessment of credit risk.

2.4. The Regulatory Relevance

Financial regulators established numerous restrictions and rules wherein CRAs are used as easy manageable, simplified, datable, broadly publicized external tool to measure credit risk. For instance, Rule 15c3-1 (SEC 1975) applies favorable net capital requirements concerning investment-graded securities for broker dealers. Rule 2a-7 (Investment Company Act 1940) restricts money market fund investments to high quality short-term securities. The Standardized Approach (Basel II, in general, in BIS 2004; European implementation in CRD 2006a,b) allows banks to determine credit risk, therefore the net capital requirements and risk-based credit spreads through an external rating.

Ratings from CRAs designated as NRSRO ("Nationally Recognized Statistical Rating Organization"; U.S.-regulation) or ECAI ("External Credit Assessment Institution"; Basel II) are used to evaluate whether securities fulfill the minimum quality standards and therefore, whether large and economical important investors (because of their investment volume) are allowed to hold those securities and to which conditions.

2.4.1. The Regulatory License Theory 14

Based on that picture and dependency on the recognized, large CRAs established Frank Partnoy the Regulatory License Theory. This theory comprises that those CRAs (in particular Moody's and S&P) have a fixed demand (accordingly are highly profitable), produce no informational value and just sell favorable regulatory treatment. This means that those CRAs merely profit from enabling issuers to sell their issuances of debt to regulated investors, which are restricted to buy or hold solely investment-grade rated instruments.

¹⁴ See Partnoy [1999, 2001, 2006] for his Regulatory Licence Theory.

2.4.2. The Reputational Capital View 15

The Reputational Capital View, supported by many scholars, assumes that the credit rating industry is competitive and reputation-driven. Based on their accurate and reliable ratings acquire agencies reputation over the time. If a CRA's reputation increases and other parties hold her in higher esteem, she gains reputational capital, a reverse of good will, on which other members rely on in transacting with that CRA. The gathered reputational capital leads other parties to include "trust" in their decision-making process and enables them to decrease transaction costs.

Accordingly, a CRA which issues more accurate and valuable ratings gains more reputational capital. This helps in the following decision process: An investor either relies on the rating from a CRA or makes an independent evaluation of credit risk. Absent other facts, the investor will "buy" (or rely on) the rating if the expected benefit of the rating minus the actual cost of the rating is both positive and higher than the expected benefit of an independent evaluation minus the actual cost of such an evaluation. It can be concluded that CRAs will exist in those markets where economies of scale in rating activities can be achieved. This has the consequence that the investigation costs for the CRA are lower than the investigation costs for the investor. The difference between those two can be seen as "surplus" which is shared between them. The apportionment depends on the competitive dynamics. The net marginal benefit from doing an additional investigation to the CRA equals the net marginal benefit to the investor in a competitive market. It has to be noted that due to the business model used by the principal CRAs (charging the issuers) the investors receive the information for free. This model is possible because the institutional investors rely directly on the CRAs' output (regulative portfolio restriction) and the issuers rely indirectly on their output due to liquidity needs (need to attract the regulated investors). Accordingly buy-side and sell-side firms have to compare the benefit of a for free obtained evaluation by the principal CRAs with the benefit of an independent evaluation minus the actual cost of such an evaluation.

CRAs will suffer a loss in reputation if their ratings are noted as inaccurate and unreliable. This enables the entry for new agencies.

¹⁵ My discussion of the reputation view owes essentially to Partnoy [1999, 2001].

3. The Current Market Structure

3.1. The Agencies¹⁶

Nowadays are about 130 to 150 CRAs operating worldwide [BIS 2000]. The first rating agency was founded by John Moody in 1909. The predecessor of Moody's Investors Service rated railroad bonds, the first bonds sold on a widely spread. Owing to the increase of capital needs in the industry, not satisfied by traditional means, additional investors were needed. The ratings helped those investors to estimate the benefits and costs of investing in projects where they don't know the people operating in the business. The predecessor of Standard & Poor's (S&P) was founded by Henry Poor in 1916. In 1941 merged the Poor's Company with Standard Statistics, another information and rating company starting business in 1922, and formed S&P which was taken over by McGraw Hill (a publishing giant) in 1960s. Fitch started business in 1924 and is presently owned by FIMALAC, a French conglomerate. Its history is a bit more complex and it is an amalgamation of several smaller agencies: Fitch, IBCA, Duff & Phelps and Thompson Bank Watch.

These three CRAs received NRSRO-status from the beginning of this category. By now are seven CRAs designated, however, the domination of the principal agencies did not forfeit due to this fact. The industry is dominated by two big global players, Moody's and S&P, having a combined market share of about 80%. Until 2003, there were just three NRSROs, whereat Fitch had (and still has) a market share of approximately 15%.¹⁷

The SEC adopted, until today, eleven rating agencies into NRSRO-category:

1982	Duff & Phelps;
------	----------------

1983 McCarthy, Crisanti & Maffei (MCM);

1991 IBCA (British rating agency; received NRSRO-status for banks and financial institutions);

1993 Thompson Bank Watch (specialized for obligations of banks and financial institutions).

¹⁶ My discussion of the agencies' history owes essentially to Cantor & Paker [1994] and White [2006].

¹⁷ See Economist [06/08/2007] p. 67 and Hill [2004] p. 60 for the various market shares.

Due to mergers among each other and with Fitch remained in the end of 2000 the initial three principal CRAs. Thereafter were designated:

2003 Dominion Bond Rating Services (DBRS; a Canadian rating agency);

A.M. Best (specialized on insurance companies);

May 2007 Rating & Investment Information, Inc. (R&I; a Japanese rating agency); R&I was established in 1998 by a merger of Nippon Investors Service (NIS; founded 1975) and Japan Bond Research Institute (JBRI; founded 1985).

June 2007 Japanese Credit Rating, Ltd. (JCR); JCR was established in 1985.

The profitability of CRAs, in particular of Moody's and S&P, has been discussed and criticized by several scholars. For instance, Smith and Walter [2001] pointed out that Moody's launched the market in 2000 and its shares showed a total return of almost 52% in that year. In February 2001 was its P/E-ratio 21.57 and its return on assets exceeded 40%. Moody's profit margins of about 50% induced an analyst to describe Moody's as "the best franchise [he has] ever covered in [his] 20 years on Wall Street." Furthermore, the same analyst appraised S&P's margins on 30%. Although profit estimations about Fitch are similarly difficult as for S&P (their earnings are not publicly available because Fitch is privately held and S&P is part of McGraw Hill), it can be supposed that Fitch is less profitable compared to the big two CRAs due to charging lower fees and having a by far smaller market share and a weaker market position.

Moody's had revenues of \$2,037 million. 63% of its revenues arise from U.S., 26% from Europe and 11% from other international activities [annual report of Moody's 2006]. Data from S&P is largely unknown due to its corporate structure, but it can be supposed a similar picture. Fitch has a relatively larger presence in Europe than in the United States (Fitch is owned by FIMALAC, a French conglomerate, and IBCA, part of Fitch, was a British rating firm). Nonetheless, Fitch is also in Europe far behind the two large CRAs. The BIS-report [2000] states that Fitch had a corporate coverage of 18% whereas Moody's and S&P had 70% each. It has to be annotated that Fitch merged in 2000 (after the BIS-report was publicized) with Duff & Phelps, having coverage of 27%.

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¹⁸ See NYT-article by Wayne [2002] citing Bear Stearns analyst K. R. Gruneich.

3.2. Usage of Moody's and S&P – The two-rating Norm¹⁹

Issuers typically purchase a rating from both Moody's and S&P. Some use Fitch as additional rater, for instance, if the ratings of Moody's and S&P differ. Fitch is rarely adopted as second and even rarer as unique rating.²⁰ In the market has developed a two-rating norm, where the two ratings bought by the issuers are those of Moody's and S&P.

The development of this norm might be explained through a knock-on effect among the issuers. One issuer started to use two ratings for signaling purposes (that she has nothing to hide) and the others followed suit. Even though the information content of a second rating is supposed to be very low, the issuer expects that the market will reward the signal and hedging (a second agency might find what the first has overseen). Unclear is the reason why the equilibrium is at two ratings. A possible explanation for that purpose could be that the issuers obtain the highest net value with two ratings – benefit of the lower spread net of the cost (fee) of the additional rating. The third rating might constitute no extra value, because no additional information is expected from it. Thus, the two-rating norm might has established. The reasons for the election of Moody's and S&P may be rooted in there long history, size and prominence.

By now the norm is established and several reasons lead to an easy persistence. Consider a money management firm, investing in rated bonds on behalf of its clients. Therein, the single employee – doing the day-to-day business – has his from the firm predetermined guidelines, practices and standard forms, which are designed for investing in Moody's- and S&P-rated bonds. Given that, the employee has no motive to deviate from that. Nor the company which set up those guidelines and standard forms has any motivation to adjust or change them. Rather, the structure of incentives for the individual within the company leads to reduce efforts for changing forms. The reason for such incentive structures is justified in the aim of holding transaction costs low.

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¹⁹ My discussion of the development of the two-rating norm and its easy persistence due to existing incentive structures owes essentially to Hill [1997, 2002, 2004].

²⁰ See Cantor and Packer [1996] and Jewell and Livingston [1998] for multiple ratings and their effect on the credit spread.

Furthermore, such guidelines, practices and standard forms constitute a process-based standard and quality management which produces an accepted measure of safety for investment decisions. This "safety" becomes an important matter in lawsuits by clients, on whose behalf the money management firm made unprofitable decisions. Courts have incorporated with favor if ratings of Moody's and S&P are used in the investment decision process.²¹

Furthermore, money management firms and their individual managers are benchmarked, how well they are doing their business relative to certain indices. These indices consist of ratings by Moody's and S&P and reflect their performance. As much as the firm and also the single manager might desire to outperform these indices, they cannot reliable do that. In fact, they are better off in trying to do no worse. In consideration of that fact is the best procedure to accomplish that to mimic the index. If the manager decides to try to outperform the relevant index she has to take risks out of the norm. Furthermore, if she fails in performing better, she runs the risk of getting fired. By contrast, if the manager mimics and not takes risks, even if the level of her performance is low, there is no distinction form the relevant benchmark (this benchmark can be a bond-index or an average in-house performance of several managers) and therefore she runs no risk of getting fired. The problem holds for both the single manager and the money management firm. Chevalier and Ellison [1998] showed that young managers lose more likely their job if their fund's beta deviates from their pear group. Compared to older managers they take on lower unsystematic risk and deviate less from the typical behavior.

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The court stated in George T. Glennie v. Abitibi-Price Corp., 912 F. Supp. 993, (W.D. Mich. 1996): "[E]ven though the ratings of Standard & Poor's and Moody's are not per se determinative of prudence, they are significant factors in deciding whether an investment is prudent. That is, the ratings are important information that a fiduciary should consider in deciding whether a particular GIC [guaranteed investment contract, a type of investment vehicle] should be purchased for plan participants. This would be especially true of low ratings; a fiduciary of a plan would almost certainly violate the fiduciary duty if the fiduciary caused the plan to purchase a GIC in an insurance company with ratings below "investment grade." Consistently high ratings from the ratings agencies are also important. In the instant case, even though there were two downgrades of MBL [the life insurance company from which the GIC was purchased] in the months preceding February 14, 1991, and even though these downgrades and other reports pointed out MBL's exposure to non-performing mortgages and real estate, the downgrades and reports are balanced with favorable comments about MBL. Even considering the exposure, the ratings remained "investment grade." Further, as previously noted, even after the 1990 downgrades, MBL fit into the Plan's ratings guidelines."

Not only the buyer of rated debt securities has an incentive, but also, the buyer of the ratings has an incentive to maintain the two-rating norm. A CEO will be definitely second-quested if he purchases not two ratings – namely from Moody's and S&P – for his company and respectively for an issue. The contempt of the norm implies an unnecessary-to-take, high downside risk. The very fact that the second rating pays for itself (cheaper financing due to lower spread accepted by the investors), brings forth both parties (issuers and investors) to perpetuate the two-rating norm.

3.3. Competition among the Credit Rating Agencies

Standard economic theory assumes a less intense competition for industries with severe entry barriers and few market players than for industries with more players and less entry barriers. In the traditional market of the rating industry, the two big players do not need to compete due to the issuers are purchasing ratings of both Moody's and S&P. Hill [2004] highlights that both know that neither of them can squeeze out the other of the market and their high profit margins give reason to suppose that they do not compete on price too.

However, in new markets, especially in non-US-markets, it seems that Moody's and S&P do compete with each other and that one rating agency can capture a market share at the expense of the other. Two circumstances may lead to a stronger competition between them both. First, the two-rating norm may not has established in such markets in that way as in the U.S. Second, as an additional (second) rating can be used a local, specialized rating agency. Globalization got an interesting driver in the credit rating industry. Although Moody's and S&P are also globally, the dominant players, they differ in prominence and their market share outside the U.S. [BIS 2000]. For instance, Moody's is more prominent in Asia, whereas S&P more in Latin America. For Europe, in the aggregate, can be made no distinction, although, there are little differences on national basis (e.g. S&P is in France and Moody's is in the Netherlands more prominent). The survey detected several smaller rating agencies, specialized geographically or on a certain sector. Hill [2004] notes that at least in one part of structured finance (private label mortgage securities) has arisen real competition between Moody's and S&P. They competed in a reduction of required credit enhancement levels and made a strategic use of unsolicited ratings. Fitch and at that time also Duff & Phelps got important market players. Fitch accomplished to

be the second agency used (with Moody's) when it entered the market, requiring credit enhancement levels lower than those that where required by S&P.

Fitch, the third and considerably smaller market player, operates in both the traditional and new market sectors much more competition-focused than the two big players. In the later worked Fitch hard and aggressive to establish itself in structured finance. Its market share is by far higher compared with its market share in traditional corporate bond issue rating [Cantor & Packer 1994]. Even though the statistics are not the newest, the survey points out that in a – at that time – new market, Fitch was very well able to carve out a new niche for itself and was able to persist in competition against the big two. Furthermore, another strategy may be to compete in price and in not-price related conditions. There exists anecdotal evidence that Fitch is easier to deal with and also cheaper than Moody's and S&P.²²

A further strategy may be the issuance of more "favorable" ratings. Indeed, there are empirical studies underpinning the allegation, that Fitch did that for some instances. Cantor & Packer [1996] found that third rating agencies, such as Fitch and Duff & Phelps, issue higher ratings compared to Moody's and S&P. Reason for it may be a more lenient rating process or their policy of rating on request inducing a selection-bias. According to anecdotal evidence confirms that also the market perception by thinking that Fitch gives higher ratings. The possibility for a new or small agency to compete with that strategy and the out of it resulting threat by the market constitutes an entry barrier. It makes it difficult to start business and it takes a long time to build up reputational capital in form of proving not to use such a strategy to increase the market share.

In-between Moody's and S&P there is no competition in the issuance of favorable ratings. Empirical studies proved that. If both differ in their rating there is no evidence that one agency rates higher than the other. Ratings by Moody's and S&P are both conservative; by contrast, Fitch's are not. Cantor & Packer [1994] found some smaller agencies whose ratings were lower than those of Moody's and S&P (MCM).

²² Hill [2004] cites anecdotal evidence that Fitch is cheaper and issues higher ratings compared to Moody's and S&P. The market perception sees them both more conservative and comparable in their assessment.

and DBRS). Market perception reflects that and sees both big agencies as conservative and comparable in their evaluation methods. Empirical work indicates that both became more conservative over the time [Blume, Lim and Mackinlay 1996].

3.4. Regulatory Usage and Size of Agencies

Comparing the size of the CRAs, used for regulatory purposes or not, with the relevance of their ratings, the following interesting differentiation can be made.

Size, in terms of analysts employed, shows that most non-NRSROs employ less than 30 people, one exception is Dun & Bradstreet, with about 11.000 people. It offers ratings on millions of firms but does not issue specific bond ratings. Dun & Bradstreet was the former parent of Moody's. Moody's, S&P and Fitch have more than 1.000, A.M. Best about 400 and the for a short time designated JCR and R&I had 74 and 140 employees in the year 2000. JCR's has by now 90 employees.²³

Size, in terms of the geographic distribution of ratings, shows that most non-NRSROs only operate and distribute their ratings in their home country.

Size, in terms of coverage and ratings assigned, does not offer to differentiate between designated or not as NRSRO. This can be explained by the fact that a solely quantitative rating model enables an agency to rate issuers globally without operating in the issuers country and without talking to the issuer's management for making a qualitative analysis too.²⁴

Accordingly, it can be followed that the largest rating agencies are recognized as NRSRO or ECAI and regarding the "whose rating"-problem is that application comprehensible. The "whose rating"-issue, discussed by White [2006], covers the problem to prevent a bogus rating agency to rate any issue "AAA" for a certain amount of money. However, the question which rises up is, if the largest CRAs are recognized (ex-post) or if the recognized CRAs became the largest ones due to the favorable regulatory treatment and further, how strong is the "traditional" informational value argument for the designated and for the not-designated CRAs?

²³ Data from their website; (http://www.jcr.co.jp/english; last visit September 2007).

²⁴ Data of size from BIS [2000] p. 21.

A transactional and regulatory relevance can be found only in the ratings of the principal CRAs. The regulatory use (NRSRO- or ECAI-designation) builds up solely on them because of the "whose rating"-problem. Also in contracts are just the ratings of the principal CRAs used for contingency clauses, simplifying and accelerating agreements, and thus decreasing contract and negotiation costs. The reason for that limited use might be the same as for the regulatory use. Additionally relies the trust in the principal CRAs on the reputational capital obtained by them, which is definitive higher compared to smaller, not-designated CRAs.

Except of the few principal NRSROs, CRAs finance themselves by charging investors through subscription fees. Hence, the information value argument is for a CRA, which is not designated, even stronger because of the fact of being paid by the party who is able to substitute the agencies output and nevertheless uses the rating for investment decisions and therefore, is not operating in an indirect fixed-demand market due to the favorable regulatory treatment. Investors paying fees to such CRAs believe that the informational value exceeds the actual cost of the rating and is greater than the expected value of an independent evaluation minus the costs of such an evaluation.

Indeed, it can be expected that the favorable regulatory treatment, especially in the U.S., helped Moody's and S&P to grow up in their protected home market and gave them an extra leverage in their activities worldwide. This leverage has its seeds in the financial strength achieved in the U.S. market and in the fact that the global financial market is geared to the U.S.

However, it has to be noted, Moody's, S&P and Fitch are operating since the beginning of the last century. They had a lot of time to build up reputational capital and financial strength to conquer foreign markets. Furthermore, already in the market and directly admitted into the NRSRO-category in 1975 gave them an extra advantage to its competitors.

Nonetheless, "young" CRAs like JRC²⁵ and R&I²⁶ have been designated as NRSRO quite recently this year. This shows that by now regulators are up to recognize

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²⁵ JRC was founded 1985 and designated as NRSRO in June 2007 and as ECAI (in France) in 2007.

²⁶ JBRI (founded 1975) merged with NIS (founded 1985) to R&I in 1998 and designated as NRSRO in May 2007.

agencies that proved for several years their informational valuable output. In other words, if the informational value is warranted, the agency's rating qualifies for regulatory and contractual use. This is an important step in the right direction, having in mind that few years ago an Egan-Jones-principal (U.S. rating agency) said that a SEC-official told him: "We won't tell you the criteria [for obtaining NRSRO designation], otherwise you might qualify."²⁷

4. Reasons for the Market Structure

Historically had the credit rating industry at no time a large number of general purpose rating agencies, neither before NRSRO-designation took effect nor thereafter. There are natural, historical and regulatory forces (entry barriers) limiting the competition in the credit rating industry.

4.1. Natural Reasons

Mergers and acquisitions limited market participants in the credit rating industry. U.S. regulators designated Duff & Phelps (1982) and MCM (1983) as NRSROs, and IBCA (1991) and Thomson BankWatch (1992) as "limited"-NRSROs for banks and financial institutions. MCM was integrated in Duff & Phelps in 1991. IBCA acquired Fitch in 1997, whereat the main reason for that purpose was doubtless the "frustration with its inability to expand its NRSRO designation beyond bank ratings." Thompson BankWatch achieved in 1999 an up-grade on general purpose NRSRO-status and finally, in December 2000 it became integrated into Fitch. Duff & Phelps was integrated into Fitch in April of 2000. Accordingly, in the end of 2000 remained the primarily three principal CRAs. Fitch merged with all upcoming CRAs that had a "serviceable" corporate coverage.

The fewness might be explained to a certain extent by economies of scale and scope. In addition is standardization a driver which should not be underestimated. The credibility of an agency's rating and the exposure to it is build up on reputation. This grows with the far-reaching extent and coverage of bond issues and the herewith

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²⁷ Cp. Economist [8/02/2003] p. 65; also see for more detail about that incident Hill [2004] p. 55.

²⁸ Cp. White [2001] p. 11.

achieved experience. Investors tend to prefer some few standardized ratings, whereat they know the publishers and are able to easily compare them with each other. The mapping in-between the various agencies' output is important for them. White [2001] compares the equity evaluation market with the credit rating market, where fixed-income investors are less open to varied opinions due to the comparative plain-vanilla probability-of-default evaluation done by the CRAs. For equity instruments are gain and loss expectations much more fundamental and the prediction is more complex and judgmental.

4.2. Development of the Bond Capital Market (U.S. v. Europe)

The fewness of market participants outside the U.S. may be best explained by the former less developed bond capital market in other countries. The international outstanding bond market debt is estimated to approximately \$50 trillion of which about \$28 trillion are issued in the U.S.²⁹

Domestic Debt securities 2003 1999 2006 others others others 5,4% 5,3% UK 6,9% UK UK euro area euro area euro area 2,7% 3,4% 3,2% 22,3% 20,2% 22,3% Japan Japan Japan 18,6% 22,0% 21,5% U.S. U.S. U.S. 49,5% 49,3% 47,4%

Figure 2: Domestic debt securities (percentage of the outstanding volume in developed countries)³⁰

The European bond market is smaller in terms of outstanding volume compared to the U.S. market. Domestic debt securities (in developed countries) have an overall outstanding volume at the end of 2006 of USD 45,066 billion. The Euro-area countries overtook Japan and the U.S. proportion remained almost constant.

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²⁹ Data derived from research reports published by the Securities Industry and Financial Market Association SIFMA [2007] on its website.

³⁰ Data derived from BIS [2004b, 2007] and ECB [2004b].

International Bonds and Notes

Interestingly, on the international bond market (outstanding volume USD 17,574 billion at the end of 2006) gained the Euro huge importance. Regarding internationally raised debt, is the share of Yen-denominated bonds shrinking and the Euro got ahead of the USD in 2003. The ECB identified two issues associated with this development: First, there is more competition between the market segments and second, there are more different issuer types in the Euro-area.

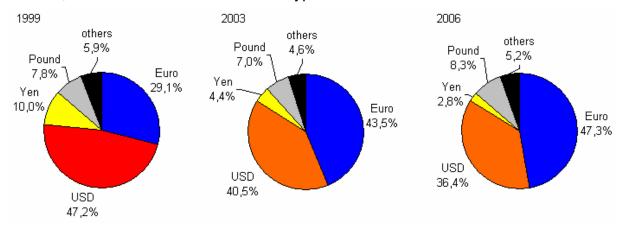


Figure 3: Currency of international bonds and notes (percentage of outstanding volume)³¹

Indeed, Europe measured up to the U.S. in recent years, not just due to the unified currency, but the historical fact that investors paid fewer attention on the bond than on the equity market, may had induced a fewer need for CRAs to pierce the fog of information asymmetries between the issuers and the investors. The report of the ECB [2004b] sees as chief cause for the historical under-development in coverage of credit ratings the greater reliance on bank intermediation. Nevertheless, the report highlights a catching-up effect in Europe and a rapidly growing Euro bond market since the advent of the Euro, coming along with an increase in coverage and use of credit ratings. The Euro launch eliminated the currency risk and enabled investors to concentrate on credit risk in an enlarged investment environment. This diversification in investors' portfolios increased the need for credit ratings since they knew the issuers from those new countries less than the issuers from their home countries. This driver broadened on one hand the investor base and on the other hand increased the competition and the need for companies to publish their creditworthiness. However, the less pronounced use of credit ratings may be

³¹ Data derived from BIS [2004b, 2007] and ECB [2004b].

³² See for the development of the European bond market, for instance, CEPS [2005] or ECB [2004b].

explained with the slow financial disintermediation process. In 2004 represented in Europe bank loans about 50 to 70% of banks' financial assets, while in U.S. about 25%. Given that banks (theoretically) monitor and rate their debtors internally, there is a smaller need for external rating. Accordingly, corporations start to be rated not until when they step in the bond market. The reason for this entry is either a financing lack through "traditional means" or the ability to obtain it on the bond market on better terms. Furthermore, with the growth of the structured finance market (ABSs, CDOs), which is inherently a rated market, increased the use of credit rating agencies. The ECB-report identified many unrated issuers from the industrial sector in Europe and highlighted that unlike to the U.S. these companies can raise bonded capital solely on "domestic name recognition". Within the EU is the credit rating coverage quite inhomogeneous. This may be the result of the different financial structures with differently geared financial disintermediation in the various countries. In addition, it is a striking fact that in London and the UK respectively, a worldwide financial stronghold, is not one rating agency headquartered. Although, IBCA, now part of Fitch, was originally headquartered there.

4.3. The Regulatory Regime – An Entry Barrier

The goal of the safety-and-soundness regulation this regulation is to protect the lenders from losses that would arise if financial institutions like banks, pension funds or insurance companies default and it should also retain stability in the bank framework.

"[I]f there is a lack of competition, the SEC is largely to blame." 33

The regulatory use of CRAs seems to be one of the main reasons for the highly concentrated market structure, due to limiting entry (supply) and inducing institutional investors to pay direct and issuers indirect attention on credit ratings (demand). I investigate in detail the regulatory regime in the United States, in Europe and in some other countries. The development of the U.S. and the European regulation is consistent with the development of the bond market. Owing to the long history of issuing broadly distributed bonds and the coming along with it need to regulate investors, have started the U.S. regulators by contrast very early to use CRAs as a

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³³ Cp. Economist [02/08/2003].

tool in their "safety-and-soundness" regulation. With the globalization and the development of the other nations they tied up to the U.S. The bond market is still dominated by the U.S. and the later on established regulatory regimes in other countries are to some extent geared to the U.S. solution. The long history of the principal CRAs in the U.S. in conjunction with the obtained market power – with a guaranteed demand – and the establishment of regulation regimes abroad on the basis of the U.S.-solution gave the principal U.S.-CRAs an extra leverage in obtaining market power outside of their home country.

4.3.1. The U.S. Regulatory Framework³⁴

The Credit Rating Industry gained in two critical periods, the 1930s and 1970s, agency power and profitability. In 1936 tied up the Office of the Comptroller of Currency (OCC) to the fractional write-off rule for non-investment-grade rated bonds (see Wall Street Journal [1931]) with a much stronger and far-reaching restriction which persists until today: Banks are prohibited to hold any instruments rated non-investment-grade in their portfolios. This rule was extended for pension funds, insurance companies and other financial institutions. Those regulated institutional investors account for a majority of overall investment volume.

"Bond issuers were forced to look to the rating agencies as sources of authority concerning their bond issues, regardless of what information the rating agencies generated." ³⁵

The credit raters hold the key to the capital and liquidity, the lifeblood of corporate America and of our capitalist economy. The rating affects a company's ability to borrow money; it affects whether a pension fund or a money market fund can invest in a company's bonds; and it affects stock price. ³⁶

In conjunction with establishing Rule 15c3-1 (net capital requirements for broker dealers) the SEC noticed and solved the "whose rating"-problem: It existed no rule preventing a bogus rating agency to rate any issue "AAA" for a certain amount of money. The SEC solved that by establishing the term "Nationally Recognized

³⁴ My discussion of the regulatory history owes essentially to Partnoy [1999, 2001], and White [2001, 2002-2003, 2006].

³⁵ Critical statement of Frank Partnoy [2001], p.10.

³⁶ Statement by Josef Lieberman [2002] ("Hearings before the Senate Commission on Governmental Affairs"); For deeper discussion concerning stock returns and stock liquidity see, for instance, Dichev and Piotroski [1998], Linciano [2004], and Odders-White and Ready [2003]; concerning the matter how credit ratings influence capital structure see Kisgen [2006].

Statistical Rating Organizations" (NRSROs) and restricted that only a rating by a CRA designated as NRSRO is allowed to be taken into account for fulfilling regulatory minimum quality standards. The SEC did not state any specific criteria for the admission into this category and designated immediately as NRSROs the preexisting principal CRAs (Moody's, S&P and Fitch). The SEC adopted until today eight further rating agencies into this category. Owing to mergers are nowadays 7 CRAs designated as NRSRO.

In 1997 proposed the SEC requirements potential new rating agencies have to fulfill for admission into the NRSRO-category. ³⁷ The considered attributes were an alignment of "catch 22" conflicts, concentrating mainly on inputs.³⁸ As a consequence of the Enron debacle in 2001 proposed the SEC a new set of criteria for admitting into the NRSRO-category in April 2005. 39 The proposed set of criteria has slightly the character of mirroring and freezing the present circumstances of providing information about the creditworthiness of borrowers. First, the proposal reflects the current used business model by the main CRAs ("be disseminated on a widespread basis at no cost"; "average number of issues covered by analysts"; cp. SEC [2005b]). There are of course other business models already used by particularly smaller rating agencies. They finance themselves through subscription fees from investors and run by small staffs. The matter of how many issues are covered by one analyst gives standing alone no valuable information: An increase might be a signal for stretching resources too thinly or might be a signal for an improvement in effectiveness and innovation. White [2001] highlights that this question can only be answered through measuring the core CRAs should do and as which tool they are used in the regulatory framework: the quality of their output (effectiveness in forecasting default rates in certain rating categories). In addition, the proposal comprises pretty the same "catch-22" conflict as the proposal form 1997 ("generally accepted in the financial markets" and linked "to the views of the predominant users of securities ratings"; "contacts with the managements of issuers"; cp. SEC [2005b]). Naturally, this creates

³⁷ See SEC [1997] for the criteria.

³⁸ The term "catch-22" is based on the novel of the same title publicized by Joseph Heller in 1961. He describes that a pilot in the second world war could become unfit to fly only if he is insane. That he's insane he demonstrates in continuing to make those perilous flights. The ask for attesting that he's unfit to fly shows that he's not insane because the worry about his life demonstrates that he's still sane. The term "catch 22" became common for such dilemmas.

³⁹ See SEC [2005b] for the new set of criteria.

a barrier to new entrants. How should their ratings become generally accepted and how should they build up contacts to the management of issuers without being a NRSRO. Which corporate manager wastes time in talking to a CRA (explaining his story of the issue and/or company) or even pays for a rating when he can not use the rating for obtaining additional investors?

Besides, the proposal allows presuming that an admission into the NRSRO category is of permanent character. Therefore, it is possible to fulfill the requirements before designation but afterwards performing very shoddy. Even after debacles like Enron, which provoked large attention, the matter of defrocking a CRA from NRSRO-status was never discussed. In addition makes it the entry barrier, which constitutes the NRSRO-designation criteria, difficult to enter the market through an innovative way of determining credit risk and probability of default. White [2006] stated that such methods, technologies or institutions – being better or more suitable for risk evaluation – could falter if the principal NRSROs fail to embrace them.

4.3.2. The European Regulatory Framework

Basel I, 1988, required a regulatory capital of 8% for banks. The guideline was prepared for stabilizing the banking sector worldwide, and had been translated into national law, according to Credit Suisse [2004], in over 100 countries.

The use of CRAs as a tool in the European regulation is young compared to the United States and additionally can be seen that the developed regime is to some extent geared towards the U.S.-framework. Under auspices of the Bank for International Settlements (BIS) guides the Basel Committee of Banking Supervision in the New Capital Adequacy framework how internationally operating banks should be forced to calculate regulatory capital. The banks can calculate the risk-weighted regulatory capital either with the "Standardized Approach" or with the "Internal Ratings-based Approach" (IRB-Approach). With the Standardized Approach is the

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⁴⁰ Although, the criticism of the CRAs in this scandals has to be made carefully, because, for instance, in the case of Enron there was a lot of fraud done by the management and CRAs do not substitute external auditors. They generally have to rely on the information provided by the companies and have to trust in its truth.

⁴¹ Cp. Frost [2006]; For discussion of the role of credit ratings in the New Capital Adequacy Framework see, for example, Altman and Saunders [2001], Altman, Bharath, and Saunders [2002], Cantor [2001], and Linnell [2001].

credit risk measured by External Credit Assessment Institutions (ECAIs); which are nationally recognized rating agencies. The IRB-approach allows the banks to calculate the credit risk by using their internal rating systems.

The Committee of European Banking Supervisors (CEBS) coordinates the translation of BASEL II into national law in Europe and proposed that the recognition of ECAIs can be done by two ways: direct or indirect. A direct recognition requires the national supervisor to make his own evaluation whether the CRA complies with the recognition criteria for an "eligible ECAI". An indirect recognition allows the national supervisor to recognize a CRA in his country without doing an evaluation, if this CRA is already recognized in another Member State (ruled in CEBS 2006 and CRD 2006a).

The BIS-guideline [2004a] states the following six criteria for an "eligible ECAI": Objectivity, Independence, International Access and Transparency, Disclosure, Resources and Credibility. ⁴² Regarding the criteria for admitting into ECAI-category holds almost the same criticism done above for the NRSRO-category. It creates the same "catch 22" conflict constituting an entry barrier (evaluation of credibility and market acceptance through the "market share of the ECAI"; "extent of its contact with the senior management of the entities which it rates"; CEBS [2006] at 22) and continues to focus on inputs (eg. "staffing and expertise of the ECAI"; CEBS [2006] at 20). Furthermore it limits the business models used for assessing creditworthiness ("credit assessments are accessible at equivalent terms ... to all [domestic and non-domestic] credit institutions"; "Credit assessments that are made available only to a limited number of entities shall not be considered to be publicly available."; CEBS [2006] at 25).

Until now, 30 European States started implementing the guideline into national law.⁴³ That the criticism of the admission-criteria is justified and the consequence is pictured

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⁴² See BIS [2004a]. The CEBS [2006] specifies the criteria (referring to CRD [2006a] Annex VI, Part 2.1 "Methodology").

⁴³ The existing Member States (June 2007) are: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lichtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovakia, Slovenia, Spain and UK.

in Table 3. It shows which CRAs are admitted to ECAI-category in CEBS-Member States.

	Moody's	S&P	Fitch	DBRS	JCR	COFACE ⁴⁴	Banque de France
Austria	i	i	i	i			
Belgium	d	d	d				
Bulgaria	i	i	i				
Cyprus	i	i	i				
Estonia	d	d	d				
Finland	d	d	d	d			
France	d	d	d	d	d	d	d
Germany	d	d	d	d			
Greece	d	d	d				
Ireland	i	i	i	i			
Latvia	d	d	d				
Lithuania	i	i	i				
Luxembourg	d	d	d				
Malta	i	i	i				
Netherlands	d	d	d	d			
Norway	i	i	i				
Poland	i	i	i				
Portugal	d	d	d				
Slovenia	d		d				
Spain	d	d	d	d			
UK	d	d	d				
coverage	100%	95,2%	100%	33,3%	4,8%	4,8%	4,8%
coverage (d)	61,9 %	57,1%	61,9 %	23,8%	4,8%	4,8%	4,8%
	38,1%	38,1%	38,1%	9,5%	0	0	0
coverage (i)	30,1%	30,1%	30,1%	9,3%	U	0	U

Table 3: direct (d) or indirect (i) recognized ECAIs in CEBS-Member-States⁴⁵

The principal NRSROs have coverage of almost 100% (only S&P is not "yet" recognized in Slovenia). DBRS, recognized as NRSRO in 2003, covers one third. It has to be annotated that not even all current NRSROs received ECAI-status, not to mention any local European CRAs. Interestingly, France breaks ranks and admitted additionally JCR, recognized as NRSRO in June 2007, COFACE and the Banque de France. On grounds of indirect recognition the recognition in France of JCR might facilitate for the agency to become accepted also in the other Member States. The comparatively cheap indirect recognition was used especially by smaller countries. Beside the "catch 22" conflict in the admission criteria similar to the U.S. solution

⁴⁴ COFACE, headquartered in France, is a global active credit insurance company, making 87% of its revenues in Europe. Selling company information is its second largest business segment, amounting 9.3%; Insurance amounts 79.7%. See financial report COFACE [2006].

⁴⁵ Used data, published until July 2007, either by the CEBS or by the national authorities responsible for the supervisory disclosure. Until June 2007, nine Member States haven't published and/or done the recognition of ECAIs.

might be the fewness in nationally recognized ECAIs (on average 3,4) explained by the following: Basel II includes an ongoing oversight of the recognized ECAIs, which means that it is comparatively the more expensive solution. The more ECAIs are recognized, the more ongoing oversight is necessary and the more costs arise. Assuming that the national supervisors tend to hold ongoing costs low, they solely recognize the big players. Those generate presumable fewer ongoing costs and fulfill easier the admission criteria. By all means have to be recognized at least the principal CRAs for not harming the national industry. Owing to the globalization would constitute a solely admission of the local CRAs a competitive disadvantage. Possibly eases the indirect recognition that conflict. That remains to be seen.

4.3.3. Differences in European and U.S. Regulatory Framework

The Basel II accord expands the role of CRAs in the "safety-and-soundness" regulation and of supervisors in limiting the entry into the international credit rating industry. Nevertheless, the regulatory reliance on CRAs and degree of transferring power to them is far less pronounced in Europe than in the U.S. National regulators may recognize as "eligible ECAIs" not only CRAs, but also credit insurance companies as well as entities publicly owned that carry out credit risk. France made use of that possibility and recognized COFACE (credit insurer) and the Banque de France. This may help to emerge a less concentrated market structure. Although both regulatory regimes strengthen the demand for assessments of creditworthiness is the limitation in supply in the European regime less pronounced.

The national authorities for regulation are required to implement a "Mapping"-process. This mapping should guarantee a valid correlation between the issued credit ratings by ECAIs and the risk weightings of debt. Consequently, the consulted credit risk (quality) builds up not that directly on the credit ratings issued by ECAIs. ⁴⁶ Furthermore, European regulators are forced to do much more ongoing oversight and regulatory work. At least an annually review on each ECAI and its compliance with the criteria is needed. By comparing the reliance of European and the U.S. regulators on CRAs is the regulatory value for the U.S. regulators is by far higher. A benefit/cost-analysis of reliance on CRAs compared to other substitutes (for instance,

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 $^{^{\}rm 46}\,\mbox{See}$ CRD [2006b] Annex VI, Part 2.3 "Mapping".

alternative regulatory schemes or IRB-approach) shows that the delegation of power and competence is lower in Europe. National authorities for regulation have to face much more ongoing costs and regulatory work. In other words, the efficiency by the U.S. regulators with a complete delegation is very high due to the lack of supervise and performance evaluation of once recognized rating agencies. This will change immediately when U.S. regulators adopt in there NRSRO-based framework an ongoing oversight, depending to whatever extent that will be done.

4.3.4. Global Facets of Regulation⁴⁷

The BIS-report [2000] surveyed the use of CRAs in financial regulation, especially in banking supervision, across 18 countries. The report highlighted that in eleven out of twelve member countries were used CRAs in financial regulation (Germany constituted the exception). Out of the non-members just Mexico did not used ratings in regulation. The majority of countries used ratings in their supervision of banks solely for determining market risk. Market risk amendment ("qualify debt security", "interest rate related instrument for the calculation of the capital requirement for specific interest rate risk"; BIS [2000] at 41) was encapsulated in Europe in the Capital Advise Directive (CAD). Beyond market risk purposes used Belgium, Switzerland, UK, USA, Argentina, Australia and Hong Kong ratings in their prudential regulation of banks. That varied from publication obligations of portfolios split by ratings to restrictions in portfolio mixes or tightened risk weights for credit risk determination based on ratings. In sum, in the surveyed countries was the use of CRAs as tool not that pronounced as in the U.S., but nevertheless still embedded in their regulation framework.

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⁴⁷ My discussion of global facets of regulation owes essentially to the BIS report [2000] pp. 40-54. Given that the survey's motivation behind was the Basel I Accord and it's at that time upcoming reformation, some facts do no more reflect nowadays situation. Therefore, particularly for the European countries with an advanced Basel II implementation, the surveyed facts might be seen merely as a historical examination, highlighting the development of CRA-use in these countries. The 18 investigated countries were Belgium, Canada France, Germany, Italy Japan, Luxembourg, Netherlands, Sweden, Switzerland, UK, and USA (Banking Committee on Banking Supervision [BCBS] member states), and Argentina, Australia, Chile, Hong Kong, Mexico and New Zealand (non-members of the BCBS).

	CBRS	DBRS	o B B Duff & Phelps Credit	Fitch IBCA	Ital Rating DCR SPA	JCR	R&I	Mikuni & Co	Moody's	S&P	Thompson Bank Watch	Total number of rating agencies
Belgium	ember	3 UI III	y Dase	X	minue	OII D	anning	Jupe	X	Х	х	5
Canada	х	Х	^_	X		Х			X	X	^	6
France	Х	X	Х	X		Х	Х		Х	Х	Х	9
Italy			Х	Х	S				Х	Х	Х	6
Japan			Х	Х		Х	Х		Х	Х	Х	7
Luxembourg				Х					Х	Х		3
Netherlands	Х	Х	Х	Х		Х	Х		Х	Х	Х	9
Sweden				Х					Х	Х		3
Switzerland		Х		Х				Х	Х	Х	Х	6
UK	S	S	S	Х		S	S	S	Х	Х	s	10
U.S.			Х	Χ					Х	Х	Х	5
Total BCBS	4	5	7	11	1	5	4	2	11	11	8	
coverage (%)	36,4	45,5	63,6	100	9,1	45,5	36,4	18,2	100	100	72,7	
	-Memb	ers of	the Ba	sel C	omm	ittee or	n Bank	ing Su	pervisi	on	ı ı	
Argentina			Х	Х						Х	Х	4
Australia	S	S	S	Χ		S	S	S	Х	Х	S	10
Chile		Х		Х					Х	Х	Х	5
Hong Kong				Х			Х		Х	Х	Х	5
Total non-BCBS	1	2	2	4	0	1	2	1	3	4	4	
coverage (%)	25	50	50	100	0	25	50	25	75	100	100	
Total	5	7	9	15	1	6	6	3	14	15	12	
coverage (%)	33,3	46,7	60	100	6,7	40	40	20	93,3	100	80	
abs. recogn. (%)	20	33,3	46,7	100	0	26,7	26,7	6,7	93,3	100	66,7	
res. recogn. (%)	13,3	13,3	13,3	0	6,7	13,3	13,3	13,3	0	0	13,3	

Table 4: CRAs absolute (x) or restricted (special-purpose) (s) recognized in various countries 48

Table 4, showing the recognized CRAs in the different countries, highlights two facts. First, it confirms the high market penetration of the principal three CRAs and that there were just few "local" CRAs recognized. Second, it shows a considerable

 $^{^{48}}$ Cp. BIS [2000] p. 46. Mikuni & Co is a Japanese rating agency. Note that, though it was recognized in three other countries, it was not in Japan.

disparity in recognized CRAs by the regulating authorities. Furthermore has to be noted that Duff & Phelps and Thompson Bank Watch – with the highest market penetration after the three principal CRAs – do no more exist due to mergers with Fitch. In addition received solely the principal CRAs absolute status, whereas a noteworthy percentage in coverage of the other investigated CRAs stems from special-purpose status. On one hand includes a special-purpose recognition the thread to brand them second class and hampers them to gain market penetration. On the other hand means an increased special-purpose recognition a reduction in market concentration. This seems to outweigh that threat.

The found lack in changing the list of eligible agencies might be rebutted by the fact that the implementation of either the market risk amendment or the CAD happened recently at that time (in most 1996 or 1997). There was no case reported whereat an agency was removed from the list due to a reason like incompetence. This throws up the question, whether the rating quality of the recognized agencies is that high or whether there is a lack in ongoing monitoring of once recognized agencies. The report found ongoing monitoring just by the authorities of France, Italy and Japan. The other regulators stated that they do such a monitoring or investigation on a listed agency solely when the need becomes quite obvious (for instance, very bad performance, increased number of rating errors).

Comparing the criteria for becoming an eligible agency in those countries with the criteria set-up in the Basel II accord can be pointed out the following:

The <u>objectivity</u> criterion was found in virtually all BCBS-members (except Luxembourg and UK, using market usage). For Australia and Hong Kong was found the objectivity criterion too. <u>Independence</u> and <u>credibility</u> was found solely in four countries (Belgium, Japan, Switzerland, and U.S.). Credibility is also a criterion in Australia and Hong Kong. <u>Transparency</u> is cited just in Italy. <u>International access</u> is nowhere a criterion and the above criticized <u>resource</u> criterion exists, of course, in the U.S. and in similar way also Belgium, Japan and Hong Kong. <u>International recognition</u> is used in Canada and Luxembourg, though it is unclear whether market usage or regulatory usage is meant. The former is a criterion in Switzerland too. In sum, the criteria qualify for the same criticism done for NRSRO- and ECAI-designation criteria. Additionally revealed the investigation that the regulators

do not distinguish in their use of credit ratings whether they were solicited or unsolicited. The exception in the report made the U.S. because their supervisors considered at that time to make a distinction.

5. Problems in the Industry

5.1. Conflicts of Interest

A situation wherein a CRA has an economic interest in issuing a credit rating based on anything else than on the creditworthiness of an issuer is called a conflict of interest [Frost 2006]. In particular the increased relevance of ratings of some CRAs created those conflicts. Some conflicts have helped (and still help) the principal CRAs to strengthen their market position. Furthermore, it is interesting how the courts in the United States have dealt with those conflicts and the allegation that the CRAs' output is no more reliable.

5.1.1. Issuers, not Investors, are Charged by CRAs

In the 1970s changed the large CRAs their business model and they started charging the issuers instead of the investors. Initially, the agencies collected fees from subscribers (investors) for gathering and analyzing information about the financial health of an entity. Afterwards, the agencies started selling to rated entities the privilege of providing information to the agency. Three facts may have lead to that change: First, the technological phenomenon of low-cost photocopying made it difficult to collect subscription fees from investors, due to the unmanageable "free-rider"-problem. Second, the increased demand for credible ratings required the CRAs to hire more expensive well-trained analysts, which could not be paid solely through subscription fees. And third, financial historians also allege the Penn Central bankruptcy in 1970. The default on \$82 million of commercial paper increased the demand for a sophisticated level of research from the investors-side and provoked the willingness to pay for the certification of quality by the issuers.⁴⁹

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⁴⁹ See Cantor and Packer [1994], Frost [2006] and White [2006] for the reasons of the business model change.

Arguably the increased regulatory relevance and the therewith coming along direct dependence of institutional investors and indirect dependence of issuers on credit ratings made this business model change possible.

The fact of being paid by the party which is evaluated provoked some discussion about the conflict of interest. The SEC [2003a] argues that CRAs possibly issue favorable ratings and may be less diligent in probing for negative information due to their dependence on revenues. The vast majority of large CRAs' revenues stem from fees. The fees depend on size and complexity of the issue. In a SEC Hearing [2002] declared Mr. McDaniel (President of Moody's) that about 90% of their revenues stem from issuer-fees for ratings and about 10% stem from research and data services. In the same hearing predicated Mr. Joynt (president and CEO of Fitch) that about 90 percent of the revenues stem from issuer-fees and about 10 percent stem from subscription services.

It is important to state that the CRAs don't depend on any single issuer. Partnoy [2006] concludes that the conflict is more systemic than individualized. S&P has stated that the fees of no single issuer or issuer group amount more than 2% of their total annual revenues.⁵⁰ Therefore, it is unlikely that issuers can pressure on CRAs for receiving a desired rating.

Furthermore, Hill [2004] assumes that the care about the CRA's reputation in accuracy and reliance exceed the susceptibility in issuing a favorable rating. In the case of issuing paid favorable ratings, markets realizing that, would immediately debase the value of the CRA's ratings. Hence, issuers would have no more reason to pay for being rated and the rating business becomes less profitable.

In addition stated the principal CRAs that there is no link between the analyst's compensation and the relationship between the CRA and the issuer. There is also no conjunction between the analyzing staff and the business development staff.

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⁵⁰ See SEC [2003a] p. 41.

5.1.2. **Ancillary Consultant Services**

Ancillary services are contracts in which CRAs act as corporate or bank consultants and profit from their reputations and expertise in analyzing risk. For example, large CRAs sell for additional fees prospects about rating affects through hypothetical transactions. Thereby presents an issuer a possible scenario (like a merger) to the CRA to understand the rating impacts of it. Another example, the large CRAs sell customized credit risk management services and quantitative tools (eg. for calculation of probability of default).

The critic done by Frost [2006] and Partnoy [2006] is that if a CRA is paid for advice and predicted for a merger or stocks repurchase no impact on a company's rating, it would be more difficult for the CRA to change the rating after the transaction is accomplished. The same kind of criticism also holds for risk management systems. A Financial Times article stated critically that CRAs are "unlikely to downgrade a bank's risk capabilities if the bank has bought one of its risk systems."51

Worth noting, there exist neither regulations nor restrictions for the consulting services of CRAs. Partney [2006] brings up that accounting companies or analysts in investment banks have to face new rules concerning conflict-of-interest-matters and have to accept restrictions on their activities.

5.1.3. Unsolicited Ratings

Borrowers Say".

"Unsolicited" is a rating when a CRA bases the evaluation solely on publicly available information, which means, without including the firm in the rating process and getting paid by it. Moody's stated that about 1% of their ratings are unsolicited.⁵² S&P and Fitch haven't stated the amount of use, but indisputable, they make use of it. Such an unsolicited rating constitutes the threat for the issuer, that without her participation in the evaluation process, she cannot avoid negative inferences from the publicly available information and cannot rectify as she could do in a qualitative evaluation process. Hill [2004] sees limited possibility to use unsolicited ratings strategically for pressuring tactics. On the one hand the CRA has to face reputational costs for stating

⁵² See Klein [2004], Washington Post-article "Credit Raters' Power Leads to Some Abuses, Some

⁵¹ Cp. Radley and Marrison [2003], FT-article "A Risky New Role for the Rating Agencies".

a "false" (to low) assessment. On the other hand the market may correct an unsolicited rating which is assumed by the investors to be too low and the issuer will receive better financial terms for her product as the rating would induce. Furthermore, it might become common that when the market knows that a rating is unsolicited, i.e. that it is marked as such, investors automatically presume that it is too slow. Nevertheless is an unjustified "non-investment-grade" rating problematic because the issuer has to face undeservedly bad marketability for his product and will be hurt due to the regulatory investment restriction.

In the U.S., all large, taxable, publicly issued corporate bonds are rated either solicited or unsolicited by Moody's and S&P. Frost [2006] sees as idea behind that if all issuers are rated, no self-selection process can develop. Such a self-selection would imply, that just issuers with high creditworthiness would let them rate. Smaller CRAs may gather reputation with unsolicited ratings. Larger CRAs may use unsolicited ratings for market entry purposes in new sectors or to assure a comprehensive coverage of rated issuers.

Some alleged CRAs to use unsolicited ratings as unfair practice (termed "strong-arm" tactics) to assure issuer's payment for a rating she did not requested [Nazareth 2003]. Regarding this allegation was one lawsuit against Moody's, but it was dismissed without going to trial. The Justice Department did a three year investigation, which resulted in no prosecution. The aim of the inquiry commission was to examine whether Moody's used the threat of unsolicited ratings to assure that the rating agency is hired and paid for rating purposes. ⁵³

Accordingly, unsolicited ratings should be lower, but, due to two different reasons: First, when the allegation is valid and second, because of a self-selection process. Frost [2006] argues that this makes an empirical survey in some respects difficult. Regarding the self-selection, a survey should reveal that the creditworthiness and financial health of issuers with unsolicited ratings is below issuers with solicited ratings. Regarding the allegation of pressuring issuers with unsolicited ratings, a survey should reveal that these are systematically lower than solicited ratings after controlling and comparing all other relevant factors such as CRA, issuer's

 $^{^{\}rm 53}$ See Gilpin [1999] and Woolley [1996] for more detail.

characteristics (creditworthiness and financial health) and time. Maybe due to the difficulty in differentiation, I have found little empirical work on that. Poon [2003] investigated on this matter following the logic, explained above. She examined a sample of 256 credit ratings by S&P in 15 countries during 1998-2000. Although she found that unsolicited ratings where lower for the whole sample, it depicts a doubtful significance for the pressure-allegation, because, the issuers obtaining unsolicited ratings had relatively weak financials, what would indicate that the self-selection explains the difference.

5.1.4. Litigation in the Industry

CRAs were blamed for issuing "wrong" ratings in the several scandals and accordingly were failing in their role as credible information gatherer. Furthermore, they were alleged to use "strong-arm" tactics for pressuring issuers to pay for being rated. Liability for the issued ratings got an interesting matter in the credit rating industry, discussed periodically especially by Partnoy. He accuses them not to bear any litigation risk, as other financial intermediaries have to do regularly (for instance investment banks).

In the U.S. accomplished rating agencies to defend lawsuits successfully against them with two arguments: First, ratings are opinions (free speech) and are protected by the First Amendment. Second, ratings are extensively disclaimed and do not constitute any recommendation (to buy, sell or hold the rated security).⁵⁴

Rating agencies (NRSROs), as an expert under Section 11, are protected from liability for misinterpretations in the Securities Act of 1933, Rule 436. 17 C.F.R. § 230.436(g)(1). The Report of the U.S. Senate Committee of Governmental Affairs [2002] highlights that NRSROs are not even held to a negligence standard of care for

Moody's "Rating Definitions – Introduction – Limitation to Uses of Ratings" states (Abridgement in Moody's own language): "[C]redit ratings are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. [They] must be weighed solely as one factor in any investment decision and each .. user must accordingly make its own ... evaluation. [R]atings are [solely] grading obligations according to their credit quality, they should not be used alone as a basis for investment operations. [T]hey have no value in forecasting the direction of future trends of market price. Market price movements in bonds are influenced ... by the credit quality ... but also by changes in money rates and general economic trends, as well as by the length of maturity, etc. During its life even the highest rated bond may have wide price movements, while its high rating status remains unchanged."

their work. NRSROs argue that they would not be liable for a negligence standard in any event because of the free-speech protection by the First Amendment.

The case Quinn v. McGraw-Hill (parent of S&P) explains best the kind of allegation, especially done by Partnoy. 1999, Judge Wood dismissed a case against McGraw-Hill by Maurice Quinn, with the argument, that it was unreasonable for the investor to rely on the interpretation of S&P. The investor sued for negligence in interpretation. He invested \$1.29 million in collateralized mortgage obligations rated "A" by S&P. Later on, the obligations were downgraded to "CCC" and finally, they defaulted. The closing words by Judge Wood reflect the inexistent legal meaning of the creditworthiness interpretation done by rating agencies:

"While it is unfortunate that Quinn lost money, and we [Judge Wood, joined by the Judges Posner and Wood, Jr.] take him at his word that he would not have bought the bonds without the S&P "A" rating, any reliance he may have placed on that rating to reassure himself about the underlying soundness of the bonds was not reasonable." ⁵⁵

Partnoy highlights the following – not so easy to dismiss – paradox: While credit ratings become a common tool in the "safety-and-soundness" regulation and the financial regulators rely on the credibility of the CRAs' opinion, the court is saying that such a reliance by an investor is unreasonable.

However, rating agencies like Moody's and S&P accomplished that courts dismissed claims with the argument that ratings are protected opinions. Although, the reasons arranged for the judgment differed regarding whether the rating agencies solely acted as "financial journalists" or whether the agencies were deeper involved in the transaction. Accordingly reacted the courts on the increased relevance of CRAs and the arisen conflicts of interest. The evaluation of deepness of involvement by the credit rating agency depends mainly on two facts: First, is the rating solicited or unsolicited, and second, how complex is the structure of the transaction (purely information-gathering or more complex structures like ABSs or CDOs). For unsolicited ratings is the free speech argument stronger than for solicited ratings.⁵⁶

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⁵⁵ See Quinn v. McGraw-Hill, 168 F.3d 331 (7th Cir. 1999), found in Partnoy [2001].

⁵⁶ See for unsolicited ratings: Jefferson County School District No. R-1 v. Moody's Investor's Services, Inc., 175 F.3d 848, 856 (10th Cir. 1999). See for solicited ratings: Commercial Financial Services, Inc. v. Arthur Andersen LLP, 94 P.3d 106, 109 (Okla. Civ. App. 2004) (Accessed at http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=439633, September 2007).

For "traditional" information gathering holds the free-speech argument based upon that journalists are protected too, even though they are profit motivated. On the other hand, this argument holds not for transactions (like CDOs) wherein the CRA's active role is inconsistent with traditional journalism. Interestingly was Fitch criticized for issuing the vast majority of its ratings on client's request in a lawsuit covering a CDO-transaction.⁵⁷

Accordingly, for Moody's and S&P is due to their higher amount of unsolicited ratings a more favorable legal argumentation possible. Interestingly, from an economical view is the conflict of charging the issuers only systemic and not individualized. The reputation values more than the payment of one single issuer. An additional reason why Moody's and S&P do in general very well in defending charges might be a well filled "war chest" backed by their market position and high profitability.

Interestingly, Moody's stated as a precaution in the year 2004 in its Form 10-K (annual report)⁵⁸ that it faces litigation risks in the U.S. and due to its global business expansions increases such risk of litigation because of the missing free-speech protection in foreign jurisdiction [Moody's 2005]. Nevertheless, compared to other gatekeepers (for instance equity analysts) might be the success in defending charges in the more clarified forbearing from issuing investment decisions. Equity analysts make buy, sell or hold recommendations, although they are typically disclaimed nowadays. Partnoy [2006] mentions that those disclaimers had been weaker until 2001.

5.2. The "Right" Rating

Owing to the increased relevance of ratings were different characteristics needed. That makes it difficult to get the "right" rating and to rebut that the market is solely that concentrated because the sold product is actually not needed but the regulators generated a demand and restricted supply. Nevertheless, there is evidence that the

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⁵⁷ See for protected "financial journalism": In re Pan Am Corp., 161 B.R. 577 (S.D.N.Y. 1993), found in Partnoy [2006]. See for inconsistent, not protected, active role in a CDO-transaction: In re Fitch, 330 F.2d 104, 111 (2nd Circuit 2003); (Accessed at http://caselaw.findlaw.com/data2/circs/2nd/037062P.pdf, September 2007).

⁵⁸ The Form 10-K, also called annual report, is an audited document required at the end of each fiscal year by the SEC. It reports the financial results and is sent to the shareholders.

principal CRAs do more than solely selling favorable regulatory treatment and that they provide information. If that would not be the case, the immediate cease of regulatory use would be the most logical solution.

5.2.1. Characteristics of Ratings

Frost [2006] quoted two characteristics of ratings which advance them for contractual use and regulatory use: stability and conservatism.

With stability is meant, that a rating changes only due to fundamental modifications in credit risk. CRAs argue that this happens quite slowly. Accordingly, the approach of rating "through the business-cycle" by the principal CRAs complies this quality. This approach weights temporarily shocks relatively little. ⁵⁹ Unstable ratings can have profoundly adverse consequences. Rating changes, especially downgrades, don't merely change the cost of funding, they can entail costly agreement renegotiations and oblige managers to adjust there portfolio composition. Especially downgrades below investment-grade can have enormous economic consequences due to the increased transactional and regulatory relevance.

Conservatism is understood as the attribute that a larger verification is needed for achieving an upgrade than for a downgrade. This ensures a reduction of underestimating credit risk and of the probability that a corporation is classified financially stronger than it actually is.

The different roles of the large CRAs entail conflicting needs for the characteristics of credit ratings. Due to their role as information supplier is demanded a high timeliness, therefore a fast change in rating. Due to their role in facilitating contracting and use for regulatory purposes rating stability is needed, therefore CRAs should take rating changes quite carefully because of potentially grave consequences.

⁵⁹ See for further discussion on rating through the cycle Amato and Furfine [2003], Cantor and Mann [2003] and ECB [2004a].

5.2.2. Is the Product actually Needed?

The disclosure of a regulation-driven demand and a regulation-driven restriction on supply in the credit rating industry induced White [2006] to raise the question whether the generated value by the CRAs to the securities market meets a market test.

A <u>non-regulation-driven demand</u> constitutes the demand of the investors to pierce the fog of information asymmetry and the demand of issuers to distinct themselves from the bulk and to uncover their financial health and creditworthiness. <u>Regulation-driven demand</u> originates as follows: Issuers have to fulfill quality-standards expressed in ratings to be able to approach large investors, imposed by their regulative restriction on investments. The large investment volume of these investors and the liquidity need by investors provokes that the regulative caused interest in ratings by institutional investors generates a demand for ratings by issuers.

Non-regulation-driven supply constitute the approximately 140 CRAs operating worldwide, which are not designated as NRSRO (respectively neither as ECAI or any comparable status) and accordingly, have solely an informational value. By contrast to Moody's and S&P, in particular, they do not have a transactional or regulatory relevance. Regulation-driven supply constitute the NRSRO-designated CRAs (ECAIs respectively). Regulators use only a few CRAs for regulatory purposes.

Initially, one might ask why it is discussed whether CRAs meet a market test, considering that CRAs do on average quite well in rating corporations (and issues) among their default rates. The higher rated an issue, the less likely it is to default. But the fact that the information the CRAs issue is valid, is not enough to assume that their product is needed and new to the market. As well can reflect credit ratings solely market outcomes, as for instance credit spreads.

The difficulty in determining the value illustrates the following consideration [White 2006]: If the change of a CRA's rating of an issue indicates a reaction in price (credit spread) of this underlying, this reaction by the market might point out that this CRA provides extra and useful information to the bond market about default rates.

Regardless of warranted correlation, ⁶⁰ the price reaction not necessarily stems from the informational value (change in default probability). The regulative restriction for banks holding solely investment-graded debt securities illustrates that the bond price change not categorical reflects the decline of the market opinion in default probability. A downgrade, for instance, from "AA" to "A" and the therewith combined bond price decline (increase of credit spread) can be justified either with the change of the market opinion in default probability or with the recognition that the issue felt down near to the regulative investment restriction. The increase of the credit spread can be a consequence of the liquidity problem if banks are no longer allowed to hold this issue. Accordingly, even if the market sees no new or additional informational content regarding default probability, the bond price would still decline due to drawing near to the investment restriction and therefore liquidity constraint.

This argumentation also holds vice versa. That is the reason why, for instance, the BIS-report [2000] highlights that credit spreads are not adequate for measuring credit risk. Spreads are driven by issues such as market liquidity too. Accordingly, they include not only a premium for credit risk, but also one for liquidity risk.

Consequently, nowadays make it the prevalent circumstances impossible to say whether the ratings of the principal CRAs – dominating the industry – meet a market test. The demand and supply are regulatory-driven and the reaction of the market on rating changes by the principal CRAs stems not necessarily from the provision of new, valuable information about the default probabilities of issuers, it also might stem from the changed possibility to invest in those instruments and the change in marketability. This disqualification can be expanded for since 1975 (NRSRO-establishment) and arguably even since 1930s (banks were prohibited to hold any non-investment-grade rated bonds). The NRSRO establishment constitutes, directly, a regulative restriction in supply, and indirectly a regulation driven demand, due to its therewith combined investment restrictions. The 1936 established prohibition for banks to hold any non-investment-grade rated instruments constitutes indirectly a regulation driven demand. By contrast, in the initial stage of the industry it qualified for such a market test.

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 $^{^{60}}$ See Jewel and Livingston [1999]. A rating change by Moody's or S&P could affect the pricing of the underlying issue.

5.2.3. The Spiral-effect of Downgrades

Concerning their ongoing ratings (up- und downgrading) were criticized CRAs most and it seems they do worse. To underpin the problematic issue to get the "right" moment for a rating change cites Hill [2004] the spiral-effect of downgrades.

A company has a certain financial health and for it suitable investors who like to take that certain amount of credit risk. If a CRA publishes that this certain financial health changed for the worse, lets assume this reveals the truth and is new information to the market, those investors will be no more interested to be invested in this company or at least want to be compensated with a higher credit spread for the higher credit risk. Accordingly, the company has to face a higher cost of capital, loses investors and therefore has an instantaneous need for new capital. Consider now, even if a rating does not reveal new information about the financial health of an issuer, accordingly the market already knows the financial health, the investors will nevertheless react due to contracting relevance, particular rating triggers, and regulatory restrictions.

"Each downgrade causes deterioration, which may warrant a further downgrade, which may cause further deterioration, and so on. ... In other words, a downgrade doesn't just convey information - the fact that a downgrade has occurred is information." ⁶¹

How would the three parties like to deal with that problem? If the CRA believes in a recovery of the financial health and accordingly in the creditworthiness of an issuer, it should desist from a downgrade regarding to its "through-the-cycle" rating approach. Actually it can be argued that even when a recovery would be possible, if a downgrade (especially below investment-grade) takes place, the disclosure of a worsen financial situation may self-fulfill due to the effect explained above. The issuers will typically prefer a slow downgrading, but the investor's interests are less homogeneous. Investors who are required to sell lower rated issues due to any constraints may not like to do that when many others do that.

Particularly after scandals like Enron had the CRAs been criticized that their downgrading is to slow. Thereupon reacted the CRAs and forced the pace for downgrades. Thereafter were criticized the CRAs for downgrading too quickly. For

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⁶¹ Cp. Hill [2004] p. 69.

instance, the Houston Chronicle [Ivanovich 2002] criticized the S&P's downgrade of Williams' credit rating (global energy and communications company).

Those agencies "were burned by Enron," Malcolm [CEO of Williams] said. "They're trying to ensure something like that doesn't happen again – by imposing some very difficult standards for us." ... By taking such a hard line, the nation's three credit-rating agencies – S&P, Moody's and Fitch – are trying to salvage their credibility after the Enron black eye, industry experts say. 62

Accordingly, it is not that easy to get the right rating. Solely following the aim of timely publishing information to investors is not a highly targeted approach. The CRAs can not ignore how the market will react on the credit rating downgrade itself, and not on the information which the downgrade shall express.

The regulatory relevance of the principal CRAs makes it difficult to say whether their output is valuable information. The contractual relevance provokes the spiral-effect of downgrades. Both indicate that a downgrade not simply reveals information to the market, the fact that a downgrade occurs is information. Owing to the increased relevance is a rating change information, regardless whether it reveals new information about credit risk. The market pays maybe unjustified attention on the principal CRAs. Even though the market "has" to react on their output, is this maybe not new, valuable information. This strengthens the recognized CRAs compared to the not recognized CRAs due to constituting an unjustified demand.

5.2.4. More than Selling Favorable Regulatory Treatment

Large CRAs do generally very well in initial ratings and in the normal course of business they also do fairly well in ranking the relative creditworthiness of issues and issuers. "The higher rated an instrument, the less likely it is to default and the longer it is to take to default." S&P [2007] stated in their annual default study that an originally "BB"- or a "B"-rated issue takes 5.9 or 4.4 years to default, whereas an originally "CCC"-rated issue takes just 2.6 years. Furthermore, higher rated issues are more stable than lower ones. "AAA"-rated issues persist the following year in their

⁶² Cp. Ivanovich [2002], article in Houston Chronicle "Energy Traders Struggle to Meet Post-Enron Credit Rules" p. A1.

⁶³ Cp. Hill [2004] p. 68.

rating category with 88.34 percent, whereas "CCC" to "C" rated issues persist with 47.49 percent.

Though regulatory treatment is an important aspect, has been challenged the Regulatory License Theory by some scholars, for instance by Hill [2004]. She argues that issuers are used to buy two ratings, while regulators demand only one (just in some cases two)⁶⁴ and these two ratings are bought from the two agencies who are charging most for it, namely Moody's and S&P. At least one of the ratings can be bought from Fitch or for a short time from the four other NRSROs. That would satisfy regulatory proposes in same manner and their ratings are for sure cheaper charged.

Empirical studies showed that investors hold ratings by Moody's and S&P in higher esteem. Accordingly, if both agencies give the same rating the issue is priced lower than compared to a single-rated issue or if the second rating comes from Fitch. Ratings differ in about 17% out of all issues with two ratings. Studies found varying results: Some found that they are priced at the average rating. Others found that investment-graded issues are priced at the average rating and that non-investment graded issues are priced between the average and the lower one. ⁶⁵

Another reason to assume that principal CRAs do more than just selling favorable regulatory treatment is the fact that also non-investment grade rated issuers let rate single instruments with structural protections, which are better evaluated than the rest, but still non-investment grade. Hill [2004] argues that this indicates since they receive better financial terms for that single issuance that the ratings provide valuable information to the market and do not only have a regulative secured demand. Regulated investors are not within reach for such issuers and accordingly if the principal CRAs solely benefit from favorable regulatory treatment, it would be a waste of time and money by low rated issuers to achieve such a rating.

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⁶⁴ For instance, broker-dealers are allowed to keep lower capital reserves if the securities are rated by at least two NRSROs investment-grade. 17 C.F.R. § 15c3-1(c)(2)(vi)(E) (2003) (commercial paper); 17 C.F.R. § 15c3-1(c)(2)(vi)(F) (2003) (nonconvertible debt securities); and 17 C.F.R. § 15c3-1(c)(2)(vi)(H) (2003) (preferred stock).

⁶⁵ See Cantor and Packer [1996] and Jewel and Livingston [1998] for differences in ratings and their impact on the credit spread.

Hence, it can be assumed that Moody's and S&P receive the precedence to their competitors due to their reputational capital build up on that what they claim to do: to provide information.

6. Proposals for Improvement

6.1. The Need for Improvement⁶⁶

The present state of affairs in the credit rating industry had "hurt" investors (and markets), issuers as well as potential competitors.

<u>Investors</u> and markets, in general, were hurt in scandals. Such debacles indicate that investors might give more credence to credit ratings than it would be justified. This means that, the credit ratings did not come up to their expectations, in terms of lower information quality and, for instance, badly timed up- and down-grades.

Issuers might also be hurt in terms of paying too much. The enormous profitability of Moody's and S&P gives reason to assume, that issuers are too heavily charged for the individual rating and that they are buying too many ratings as a result of pressure. The persistence of the two-rating norm might arise more likely from the pressuring tactics by Moody's and S&P (through unsolicited and probable more critical ratings) than from the additional informational value of the second rating. The two-rating norm is either an efficient signaling to the market or a costly pattern of behavior. Anyhow, issuers might pay too much for both second and first rating in using Moody's and S&P instead of a cheaper CRA.

On <u>potential entrants</u> imposed the regulatory regime and the natural, historical and institutional forces severe entry barriers. These hurdles faced by new entrants give reason to assume that they are the most hurt party in the current situation.

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⁶⁶ My discussion of "who is being hurt" owes essentially to Hill [2004].

6.2. Conclusions Drawn from Scandals in the Industry

Enron, headquartered in Houston, Texas, was an energy company which defaulted in December 2001. It was one of the world's leading natural gas, electricity, pulp and paper, and communications companies. After the revelation that its reported financials were based on systematic and creatively planned accounting fraud it defaulted. Several investigations on that default disclosed that although Enron's operational business was no more that profitable, the company was able to cover and hide that with initially successful structured finance transactions. ⁶⁷ The case of Enron is probably the most famous scandal in the rating industry and indeed constitutes no triumph in performance of the principal agencies and furthermore, the industry certainly had to face a loss in reputation. In between mid-October and December 2nd, 2001, after the deterioration in the published financials of Enron became revealed, the agencies started to revisit and downgrade the company periodically. That constitutes an extraordinary short period to default. Although the agencies downgraded Enron periodically, all three principal CRAs rated the company four days before bankruptcy "investment-grade".

Enron was just one of several debacles. Others were: "Asian Flu", WorldCom, Global Crossing, Executive Life, Orange County, and Washington Power ("Woops"). 68

Regarding to the criticized bad performance has to be cited the following: All these debacles were of extraordinary character, either based on fraud and chicanery or on international financial crises. Indeed, to some extent is the criticism comprehensible, arguing that the agencies investigating in-depth on companies for determining default probability had to see the "red flags". Accordingly, they had to uncover the discrepancies with more vigilance and ask appropriate questions. However, what is the job of the CRAs? Indeed, they make in-depth research on issuers, but they do not assert to prove what issuers' officials tell them. The CRAs do a credit risk evaluation, based on trust that the publicized information is true. It has to be stated clearly, that CRAs can not substitute an external audit. The SEC prohibits selective disclosure of non-public information, mainly due to insider trading concerns [SEC

⁶⁷ For the chronology of the Enron case see, for instance, Hill [2003].

⁶⁸ "Asian Flu" is a nickname for the economic recession in several Asian countries in 1997, started with the fall of the Thai baht. See for more information about the several scandals Ackman [2002], Coffee [2003], Committee of Financial Services [2003] and Hill [2003, 2004].

2000; Reg FD], but grants issuers an exceptional right to provide information to CRAs, if the information helps to develop the credit rating and is disclosed solely for that purpose. The rating has to be publicly available. This exception should improve the value and quality of credit ratings. Nevertheless, both Frost [2006] and Hill [2004] point out that notwithstanding the exemption from the Reg FD and the right to gather and use confidential information, if the issuer's management provides misleading or false information, maybe even certified by its auditors and lawyers, the CRAs have little force to unhide that and little possibility not to rely on the information provided by the issuer.

The various scandals induced supervisors and regulators to deal with the matter of which information should be disclosed by the CRAs to make their assessment more transparent and therefore to increase the quality of it. The SEC and the International Organization of Securities Commissions [IOSCO 2003a] called on disclosure of procedures, analytical methodologies, underlying assumptions and used criteria, so that an interested outside party is able to understand how the CRA derived the rating. This call for transparency in the rating process guided the IOSCO [2003b] as follows: First, the meaning of each rating category has to be disclosed. Second, the definition of default has to be clarified. Third, the CRA has to reveal the time horizon it used when making a rating decision. Fourth, the CRA has to inform about historical default rates of its rating categories and whether the default rates of these categories have changed over time. Fifth, the CRA has to state if a rating is unsolicited. Interestingly, the Basel II accord [BIS 2004a] contents the first four disclosure recommendations too.

The CRAs will disclose information voluntarily for-free only as long as the marginal benefit exceeds the marginal cost. Frost [2006] argues that the benefits arise from a higher reputation and credibility. The market values the higher quality product and an increased disclosure includes a better chance to preempt regulatory requirements or oversight. Potential costs may result from the revelation of proprietary information to competitors and/or to investors who then no more need the CRA. Further, an increased disclosure makes a CRA more vulnerable to litigation.

6.3. Discussion of Proposals

Indeed, scandals like Enron constitute the impetus for attention and request for improvement, but what are the requirements? The aim should not be to prevent another debacle like Enron, moreover

"the main goal should be to neutralize the effects the regulatory regime and the natural, historical, and institutional forces may have had and be having on entry into the rating agency business and on day-to-day rating agency performance." ⁶⁹

The market concentration poses the presumption that the prices (fees) are not that low, as they would be in a less concentrated and more competitive market. The Regulatory License Theory cites that a few CRAs profit from selling favorable regulatory treatment, which they obtained for free. Issuers pay for being rated to be able to sell their issuances to regulated investors, which constitute a huge and economically important stake of overall investment volume.

First, the records have to be set straight. Indeed, the credit rating industry has a high market concentration with obvious entry barriers and altogether deviates from the ideal of a competitive market. I explained above that it is not possible to say whether the product of the principal CRAs meets a market test due to the reaction by the market on rating changes not necessarily stems from revealing new, valuable information to the market. The reaction could stem also from the increased relevance in contracts or from the regulatory use. Nonetheless, the credit rating industry includes actual and potential competition for the two market leaders. Notable competition constitutes Fitch and is evolving through DBRS, JCR and R&I. The for a short time NRSRO-designation of the later two agencies illustrates that the SEC reacted on the in recent years continuously made request by several scholars to extend the list of designated CRAs. Anyhow, there is space for improvement. A less concentrated market implies lower prices and higher quality. Potential entries profit from fewer barriers.

Regulators are part of the problem, and therefore, should be part of the solution. As the recent designation of JCR and R&I shows, it is the regulators role to reduce

⁶⁹ Cp. Hill [2004] p. 85

regulatory-caused entry barriers. An immediate elimination of the regulatory barrier on entry, as claimed by some scholars (for instance Partnoy and White), might initiate the contrary effect and strengthen the already dominant market players. Interestingly, Moody's supports the cease of NRSRO-designation. By contrast, Fitch and S&P favor with maintaining NRSRO-designation. The reinforcement of the currently dominating CRAs may happen due to that the market just got into the habit of using those two big players (two-rating norm) and no market participant in the position to deviate from this institutional norm has a motive to do that. As mentioned above, both sides, the one who purchases the ratings and the other one who invests in rated instruments, have no reason to deviate from the "tried and true". The manager buying the rating of Moody's or S&P has not to bear the costs directly from her own pocket and faces the risk of being punished for deviating from the "standard"-CRAs.

Hill [2004] proposes to retain on the short to moderate term the NRSRO-designation paired with continuously increasing the number of NRSROs. On the moderate to long term should be revisited the proposal of eliminating the NRSRO-designation. The point of time for doing that depends on how long new agencies (and the already designated ones) need to build up enough reputation and to win over some geographic or business-sector niches.

Regulators should force competition and less market concentration also by designating special-purpose agencies. Indeed, general purpose NRSROs were supported by economies of scale and scope, but for smaller agencies it is obviously easier to carve out business niches than to compete for the whole industry. Fitch's success in structured finance supports that argument. Although Fitch's weak position in general purpose, it successfully established itself in this market niche and is quite able to compete with the big two other players. This fact is consistent with the Reputational Capital Theory, in terms of, in a new sector all players have to build up new reputation. Furthermore, it conforms to the "sticky" market behavior patterns, for instance, the two-rating norm. Such patterns have not been established and therefore constituted no hurdle for Fitch to gain ground. Globalization may constitute

⁷⁰ S&P argues that "any effort to withdraw all regulatory uses of NRSRO credit ratings on a wholesale basis could prove to be disruptive to the U.S. securities markets." Cp. S&P Letter from I. C. O'Neil [2003] p. 6. See for the statement of Moody's the Letter from R. W. McDaniel [2003] and Fitch the Letter from C. D. Brown [2003]. These letters were sent to J. G. Katz, Secretary, SEC, in response to the request for comments of the SEC to the concept release "Rating Agencies and the Use of Credit Ratings under the Federal Securities Laws".

a helpful driver in this issue. Hill [2004] argues that up-growing agencies may find prospects in markets wherein the two-rating norm has not (jet) established. First, the selection of CRAs is not from the beginning clearly defined in these markets. Second, it is not assured that the norm establishes in those, and moreover, the opposite might be possible. When present markets become familiar with markets wherein such a norm is not common, it may erode. Certainly, limited designation – geographically or for certain business sectors – runs the risk to brand such agencies second class, hampering them even more to gain ground in the business and build up reputation. But, the potential reduction in market concentration seems to outweigh that risk. Besides, this risk could be contained by regulators, for instance, with credent stating the all CRAs designated for that purpose are all equal and qualified.

Furthermore, the – at least in the short to moderate term – maintenance in NRSRO-designation should be paired with a criteria-change, periodically proposed by White. White requests a stronger output-focused configuration of the NRSRO-criteria proposed by the SEC. Besides the "catch-22" conflict to fulfill the admission criteria, it is an incontrovertible fact that the proposed criteria by the SEC largely focus on inputs rather than on outputs. Changing that facilitates entry through innovation. Better methods, technologies or institutions for predicting creditworthiness may induce a less concentrated market structure. Additionally, there is no ongoing evaluation whether the criteria are still fulfilled. In other words, once you are designated, you keep always designated. It is the regulators' job to reorganize the admission criteria under consideration of not to strengthen already established agencies.

Nonetheless, even if all these proposals were implemented, challenging the market position of Moody's or S&P will be quite difficult. Establishing as a small-niche-CRA might be easy, but competing on the whole industry will be left pretty difficult. In theory, argues Hill [2004], has a new entrant three possibilities to gain market share: to compete on price; to have low standards (or ease of dealing with the customers/issuers); or to specialize in a business niche. Unfortunately drop out the former two. Worth noting, Fitch has reportable tried to compete with all three possibilities and succeeded constricted therewith. Regarding competition on standards, the failure is quite obvious. If the agency has low standards, it constitutes

the contrary, what the market is looking for: an accurate and credible predictor for default probabilities. Hence, reputational capital will not be built up. By contrast, if the agency has higher standards than Moody's and S&P, this neither will be rewarded with success, due to the compensation system used in the credit rating industry (at least by the global acting big players, with a regulatory secured demand). Competition on lower prices, compared to Moody's and S&P, neither opens a road to success. Financial better terms for instruments rated by Moody's and S&P and the threat of being second-guessed for this decision seem to outbalance the higher prices of the big two agencies. The incentive structure in the market preventing to abandon the two-rating norm is discussed at length above. Issuers and in particular their CEOs are better rewarded for successful offerings than for economizing costs of offerings.

Worth noting, two commentators suggested an evaluation and monitoring process in SEC Hearings [2002] analogous to the process used for renewing Broadcast licenses.⁷¹ The process should serve as basis for a comparable process of renewing NRSRO-designation. The Federal Communications Commission (FCC) grants or renews broadcast licenses periodically for several years. The FCC solicits public comment on the performance of the licensee and whether the license should be renewed. The motivation behind is to stimulate competition in the industry. The main question is whether the threat of non-renewal is credible, especially for Moody's and S&P. If the threat holds indeed for new and small agencies but not for established agencies, it would strengthen solely those and takes competition out of the market. It seems that this question can be denied in general. The FCC has never dismissed a renewal of permanent Broadcast license. 72 Furthermore, pressures by the market against non-renewals (in particular for Moody's and S&P) seem very likely. If such a renewal is threatened to be dismissed are going to be the market reactions in all probability quite strong. Accordingly, the reluctance not to renew would be quite considerable. Regardless whether the pressure of non-renewal is the output of public

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⁷¹ See SEC [2002]. The two commentators are Amy Lancellota, Senior Council of the Investment Company Institute, and Cynthia Strauss, Director of Taxable Bond Research, Fidelity Investments Money Management.

⁷² The great majority of Broadcast licenses are granted by the FCC. Solely one non-renewal of a temporary license took place. See Hill [2004] concerning the implementation in the credit rating industry and see Yoo [2003] concerning Broadcast licences.

hearings, they could be still valuable, due to constituting the threat to be shamed. The fear of negative publicity, in the form of one agency is criticized on its output and compared to the others, can be indeed valuable. This fear makes agencies being afraid of loosing reputation and might stimulate competition.

The litigation in the U.S., is discussed at length above. A proposed change might be an overruling of the decision in the Quinn-case or an elimination of the Rule 436(g) – both exempt NRSROs from litigation. When doing an improvement should be kept in mind that, especially in the U.S. where "suing all" is practiced, it becomes not possible and common that "after a downgrade, it is sued." Indeed, fraudulence is a different matter which clearly should be actionable. But, there is no evidence for fraud and CRAs' ratings are no security against change and economical dynamics. As initially desired, the goal is to reduce the market concentration and entry barriers. The litigation-issue seems not to be appropriate for connecting that goal with an improvement in rating agencies performance. The improvement in performance is better reached with opening the market and therefore achieving less concentration paired with any kind of ongoing evaluation of output.

The European regulatory solution is relatively young compared to the U.S. regime. Although it is visible that the European supervisors orientated on the U.S. solution, they have learned to some extent from the "failures" in the U.S. regulatory regime. The Basel II accord uses CRAs less direct. Even though the accord relies on credit ratings for net capital determination, it offers alternative mechanisms (IRB-approach) for doing that without incorporating credit ratings. Indeed, this argument seems to be weak at first glance, considering that, the ratings are paid by the issuers (accordingly receive the banks them for free) and installing such an internal rating process (needed for IRB-approach) constitutes huge costs for the bank. Nevertheless, hereby the same model of comparing the net value holds as it does for buy-side and sell-side firms. Those nevertheless do their own evaluation of credit risk for both risk management and trading purposes. In addition includes Basel II an ongoing oversight of the once recognized ECAIs.

Another interesting proposal is the replacement of the NRSRO-designation by a market-based measure. Credit spreads, CDSs or Equity prices had been cited as

more suitable measures for credit risk. Especially Partnoy is a strong supporter for NRSRO-replacement with market-based measures. Breger, Goldberg and Cheyette [2003] describe a model for market implied ratings and deal with the problem where to set the threshold from one rating class to the next based on credit spreads. They investigated significance for US-dollar and Euro-denoted bonds. Furthermore, they highlight that in the rating debacles, Enron, Xerox and Koninklikje (Dutch telecom company), their model would have better described the rating of that securities and would have earlier downgraded them.

The motivation behind is to use more market information. White [2006] highlights: To rely on market information, where the "market" is a well-defined but impersonal mechanism is one thing. But, credit ratings do not have the impersonality like, for instance, the market prices of treasury bills. Partnoy states:

"The great advantage to a market-based measure is that it incorporates all available information into a rating, including the ratings of other credit rating agencies." ⁷³

Partnoy, supporting NRSRO-replacement by market-based measures, tries to rebut three areas of criticism. First, the high and inappropriate volatility of credit spreads, including daily fluctuations, can be eliminated by taking the average of them into account. This seems plausible and gives the regulators the ability to define volatility in respect of the needed qualities, discussed above, regarding stability, timeliness and the spiral effect. Regarding the spiral effect, a more volatile measure might prevent the selling pressures activated by ad-hoc downgrades by rating agencies. However, a higher volatility might make ratings unsuitable for contractual use. Furthermore, a company near the threshold investment/non-investment grade measured by a volatile instrument would be hard to manage if it qualifies one month for regulated investors and the next month not. Second, he rebuts the critic that credit spreads are backward looking with the argument that credit ratings are even more backward looking. And third, market-based measures are criticized to be limited for liquid securities. In my view, Partnoy understates that problem by proposing to use

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⁷³ See Partnoy [2006] p. 91.

⁷⁴ Partnoy refers to the statement of Frank Fernandez: "Spreads are the reflection of the last trade in the marketplace, and that market may be wrong on any given day about the long-term fundamental value, the probability of default or ultimate recovery value of any security." See SEC [2002]. Partnoy argues: "The markets for bonds as well as the markets for CDSs and equities incorporate information about future expectations. To the extent that any measure is likely to be forward looking, it is a market measure, not an NRSRO rating." See Partnoy [2006] p. 93.

such a measure at the beginning solely for liquid securities and arguing that with the development of the CDS market arise market measures for illiquid bonds.

Well, the criticism regarding liquidity is much more far-reaching then market liquidity, and the problem of market price building for illiquid securities. The reason is the vice-versa argumentation done above in chapter 5.2.2. The point is, credit spreads incorporate indeed a premium for credit risk, but also a premium for market liquidity. Accordingly, credit spreads are inappropriate for determining credit risk. What should rating agencies do – from a regulatory perspective? They are a tool in the "safety-and-soundness" regulation to ensure, that institutional investors do not invest in "risky" securities, to prevent consequences of the defaults of them. When the securities default, the institutional investors default and that would disturb the markets and harm the population. Well, the tool – deciding on investment or non-investment grade – defines whether a huge stake of potential capital is allowed do invest or to maintain holding. This represents financing and liquidity for the underlying company. A market-based measure, like credit spreads, reflects and is driven by that issue. Therefore, a measure affected by the underlying's liquidity is inappropriate to define the underlying's liquidity.

In sum, it has to be stated clearly, whatever improvement is going to be done, without increasing competition in the industry even the best solution will "just" improve the quality of rating agencies' output. To achieve a decline in price will be by far more sophisticated and by all means needs a less concentrated industry.

7. Conclusion

The U.S. has a very long history in using credit rating agencies (CRAs) as an external tool in their "safety-and-soundness" regulation of the fixed income market. However, other countries around the world tied up. Especially, the Basel II directive and its conversion in European countries strengthened the credit rating industry on a global scale. The regulatory use and regime regarding CRAs has been reviewed by reason of scandals like Enron. The Enron debacle itself may not justify a regulatory improvement, but there is no reason not to use that adventitious evoked attention for making a workable system better. For taking full advantage of this opportunity, supervisors should revisit the regime. What are the forces limiting competition and how can they be weakened?

Nowadays is the Credit Rating Industry's product relevant in three different aspects. In the early stages of the industry constituted the credit ratings "merely" an informational value. CRAs helped solving the asymmetrical information problem between investors and issuers. In the last century developed two further tasks which principal CRAs undertake.

The first additional task stems from transactional relevance. This relevance arises from the contractual use in form of contingency clauses and from the large-scale integration in structured finance transactions. Although credit ratings are "solely" the CRA's "opinion", as contingency clauses they create legal rights and are used as if they constitute an objective measure for creditworthiness. In structured finance transactions are CRAs directly involved and a conflict of interest arises. The CRA certifies and guarantees the validity of the transaction and as a result acts more like an external auditor. This role is more difficult to replace compared to its role as information gatherer. In the "traditional business" of CRAs make buy-side and sell-side firms there own analysis and assessment of credit risk.

The second additional task is the regulatory use. This relevance evolves from the delegation of power and competence outwards to determine whether securities fulfill the minimum quality standards and therefore, if large and economical important investors are allowed to hold those securities. The quality is measured by CRAs and they state "investment" or "non-investment". This involves those regulated investors

to pay direct attention on credit ratings. Owing to liquidity needs also issuers have to pay indirect attention on credit ratings.

The credit rating industry is dominated by Moody's and S&P, having a market share of 80% – together with Fitch they have 95%. There has established a two-rating norm in the industry. Issuers pay both Moody's and S&P for being rated by them. This pattern of behavior persists easily due to several reasons. Is seems that all in the position to deviate from that pattern of behavior are comfortable with it. Solely new or small agencies are hurt. There is no competition between the market leaders in the traditional information gathering business. Small CRAs have solely one effective possibility to compete: to specialize in a (new) business niche. Fitch proved that in the structured finance sector and got the second used CRA with Moody's. In such new sectors is the two-rating norm not established and all CRAs have to build up new reputational capital. For regulatory purposes are used solely the huge CRAs. The rational behind might be the "whose-rating" problem – to prevent that a small, bogus CRA issues a "AAA" rating for a certain amount of money. Both the transactional and the regulatory use of ratings build up on the informational value. Accordingly has the later to be fulfilled first. An informational valuable output can be expected from small, profitable CRAs, which are not regulatory used and are charging investors. Accordingly should those be recognized by the regulators.

Natural reasons like economies of scale, standardization in ratings and an aggressive merger policy by Fitch reduced the number of market participants. The development of the bond capital market explains the stronger demand for ratings in the U.S. and why the regulatory use of few CRAs in the U.S. regulatory regime had that grave consequences on the whole industry. The under-development in coverage of credit ratings in Europe might be explained by the greater reliance on bank intermediation. The designation criteria for regulatory purposes are an enormous entry barrier. They focus on input instead of on output and include a "catch-22" conflict. The regulatory regime created a demand for ratings and restricted the supply on solely a few CRAs. Until 2003 were only Moody's, S&P and Fitch NRSRO-recognized.

The increased relevance of ratings evoked several conflicts of interest and other problems. Those strengthen the market position of solely a few CRAs. The direct

dependence by investors and the indirect dependence by issuers on ratings through the regulatory use allows the regulatory-used CRAs to charge the issuers instead of the investors. The conflict of being paid by the party which is evaluated seems from an economical perspective very low. More problematic might be the use of unsolicited ratings to pressure on issuers to pay for being rated. Interestingly, while financial regulators rely on the credibility of the CRAs' opinion the court is saying that such a reliance by an investor is unreasonable.

The transactional and regulatory use of ratings makes it difficult to say whether the market reacts on rating changes because they are new, valuable information. Investors may react due to the regulatory-caused liquidity constraint. Contingency clauses provoke a spiral-effect after downgrades. In sum, it is not necessary that ratings of the principal CRAs provide new information, they are information due to their nowadays expanded use and increased relevance. Furthermore, even if the rating downgrade is unjustified, there is a some kind of self-fulfilling process due to the spiral effect. Nevertheless, there is evidence that the principal CRAs do more than solely selling favorable regulatory treatment and that they provide accurate information. Accordingly should be considered how regulators could ease the current market concentration and make a workable system better.

A less concentrated market would lower the prices and increases the quality. Regulators should expand the list of CRAs used for regulatory purposes by those CRAs that have proved for several years their informational valuable output. Also special-purpose CRAs should complement the list of regulatory-used CRAs to increases the competition in the industry. Additionally should be the criteria for CRAs for regulatory use less focused on input than on output and an ongoing oversight of the recognized CRAs has to be done by the regulators. The immediate cease of NRSRO-designation would strengthen the current market leaders due to the institutional context wherein the change would take place. Market-based measures like credit spreads are no appropriate alternative. Every improvement in regulation on short or long-run has to take into account that both Moody's and S&P became heavily entrenched. It is the regulators' job to help to deal with these natural, historical and institutional forces being responsible for the high market concentration and as far as possible to weaken them, even if it will take a longer time period until the two-rating norm – usage of Moody's and S&P – will disappear.

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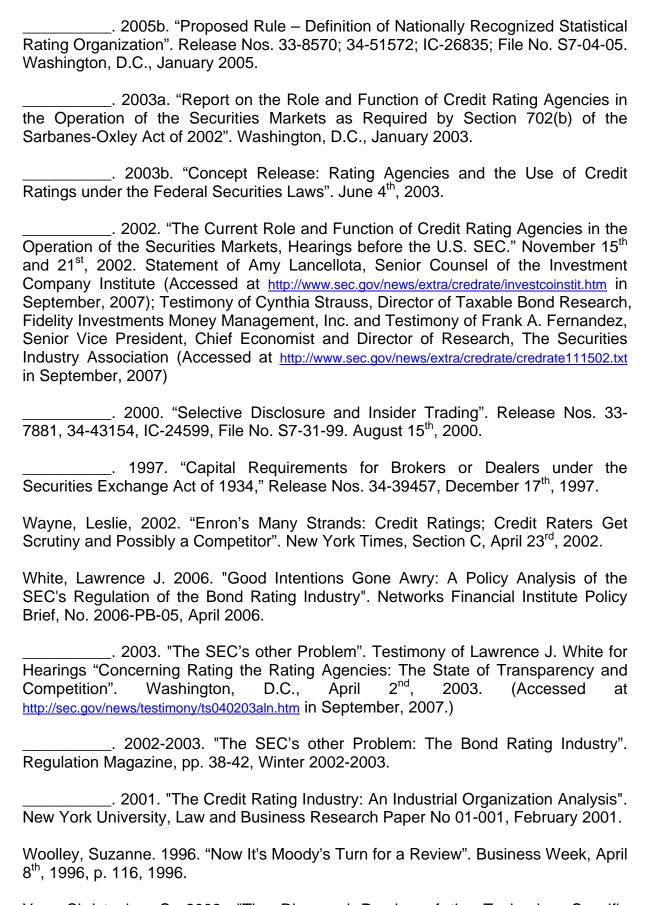
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VI. Summary in German

Die Kreditratingbranche (KRB) wird von zwei Kreditratingagenturen (KRA) dominiert, Moody's und Standard&Poors (S&P). Sie haben einen Marktanteil von ungefähr 80% und zusammen mit Fitch vereinen sie in etwa 95%. Obwohl das Scheitern in einer zuverlässigen Kreditrisikoabschätzung in Skandalen, wie z.B. Enron, von den KRA noch nicht Grund genug für eine Verbesserung der Regulierungssysteme ist, kann die dadurch entstandene Aufmerksamkeit genutzt werden, um ein funktionsfähiges System zu verbessern. Hierfür muss ergründet werden, welche Faktoren die Marktstruktur derart konzentriert haben und ob bzw. wie diese Einflussfaktoren geschwächt werden können.

Heutzutage ist das Produkt von KRA in dreierlei Hinsicht relevant: Bereits in den Anfängen der KRB hatten Kreditratings einen Informationswert und halfen bei der Entschärfung der Informationsasymmetrien zwischen Emittenten und Investoren. Die Transaktionsrelevanz entsteht durch die Verwendung von Eventualitätsklauseln und durch die erweiterte Integration in strukturierten Finanztransaktionen. Obwohl Kreditratings "lediglich" die Meinung von KRA sind, schaffen sie Recht und werden verwendet, als seien sie ein objektives Messinstrument für Kreditrisiko. Bei strukturierten Finanztransaktionen hilft und verkauft die KRA die Strukturierung so zu gestallten, dass sie sehr hoch bewertet wird. Die KRA tritt mehr als ein externer Auditor auf, womit sie nicht so leicht ersetzt werden kann, wie im "traditionellen" Geschäft der Kreditrisikoevaluierung. Außerdem werden Kreditratings zu Regulierungszwecken eingesetzt. Die Relevanz entsteht durch die Übertragung von Macht und Kompetenz an KRA zur Bestimmung ob Finanzinstrumente die Mindestanforderungen erfüllen und von wirtschaftlich wichtigen institutionellen Investoren gehalten werden dürfen.

Es hat sich eine zwei-Ratingnorm etabliert. Die Emittenten bezahlen sowohl Moody's als auch S&P um geratet zu werden. Dieses Verhaltensmuster wird durch mehrere Gründe leicht fortgesetzt. Niemand in der Position um davon abzuweichen besitzt ein Motive dies zu tun. Lediglich die kleinen bzw. neuen KRA werden benachteiligt. Zwischen den Marktführern existiert kein Konkurrenzkampf im traditionellen Geschäftszweig. Kleine KRA haben bloß eine effektive Möglichkeit zu konkurrieren: die Spezialisierung auf eine Marktnische. Fitch bewies dies im strukturierten Finanztransaktionsbereich. In solchen neuen Märkten existiert keine zwei-Ratingnorm und alle KRA müssen sich erst eine Reputation aufbauen. Zu Regulierungszwecken werden

nur die großen KRA genutzt. Gründ hierfür mag die sog. "whose-rating"-Problematik sein: Es ist zu verhindern, dass eine Schein-KRA einem Emittenten "AAA" beurteilt. Sowohl der Transaktions- als auch der Regulierungsgebrauch bauen auf dem Informationswert auf, womit dieser primär erfüllt werden muss. Von einem wertvollen Informationsoutput ist bei kleinen, profitablen KRA auszugehen, welche nicht regulativ genutzt werden und welche von Investoren anstatt von Emittenten bezahlt werden. Diese sind daher in die Liste der regulative genutzten KRA aufzunehmen.

Natürliche Gründe wie "economies of scale", Standardisierung im Rating und eine aggressive Mergerpolitik von Fitch reduzierten die Anzahl der Marktteilnehmer. Die Entwicklung des Fremdkapitalmarktes erklärt die stärkere Nachfrage nach Ratings in den USA und warum die Verwendung lediglich weniger KRA zu Regulierungszwecken in den USA solch gravierende Auswirkungen auf die gesamte Branche hatte. Die Aufnahmekriterien für KRA zu Regulierungszwecken stellen eine große Eintrittsbarriere dar. Sie sind Input- anstatt Output-orientiert und beinhalten ein "catch-22"-Dilemma. Das Regulierungssystem kreierte eine Nachfrage und limitierte das Angebot auf lediglich wenige KRA. Bis 2003 waren nur Moody's, S&P und Fitch zugelassen.

Die erhöhte Relevanz von Ratings brachte diverse Interessenskonflikte und andere Probleme hervor. Die großen KRA werden von den Emittenten bezahlt, die sie beurteilen. Dies ist möglich durch die direkte Abhängigkeit der Investoren und durch die indirekte Abhängigkeit der Emittenten durch den regulativen Gebrauch. KRA nutzen möglicherweise etwas schlechtere, unaufgeforderte ("unsolicited") Ratings um Druck auf die Emittenten auf Bezahlung auszuüben.

Ein weniger konzentrierter Markt würde niedrigere Preise und eine höhere Qualität hervorbringen. Die Regulierungsorgane sollten die Liste der genutzten KRA um jene erweitern, welche einige Zeit einen wertvollen Informationsoutput bewiesen haben. Die Ernennung zu Spezialzwecken von kleinen KRA sollte diese Liste ergänzen um den Konkurrenzkampf zu erhöhen. Zusätzlich sollten die Aufnahmekriterien weniger Input- und mehr Output-orientiert sein. Eine kontinuierliche Überprüfung der registrierten KRA sollte ebenfalls durchgeführt werden. Die unmittelbare Auflösung der Ernennung durch die Regulatoren würde die derzeitigen Marktführer stärken. Marktbasierte Messinstrumente wie "credit spreads" eignen sich nicht zur Regulierung. Jegliche Veränderung hat die starke Verankerung der Marktführer mit ins Kalkül zu ziehen.

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