

Regulation of Rating Agencies: Status and Critical Assessment

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Abstract: Global acting rating agencies were held responsible for the latest financial market crisis. False estimations in rating, non-transparent methods, processes and systems as well as a lack of qualification of rating analysts have been points of criticism. The level of the tightened regulation of the agencies in the USA and in Europe is pointed out in this article. All relevant institutions and norms as well as the international and national standards from the German point of view are presented and exhaustively analyzed. In doing so it is illustrated, that in this oligo-political market one can definitely speak about protection with regard to the admission and accreditation of the agencies.

Key words: bank; regulation; rating agency; Basel III

JEL code: G280

1. Introduction

Ratings, scoring and credit checking are elements in the human search for finding comparable and assessable judgments based on presumably measurable facts.

This increasing desire for quantification, which can be observed in all professional fields and finds expression not only in establishing rankings among universities but also in an increase in performance measurement concerning all aspects of life could be considered a departure from the phenomenology and the hermeneutics of the 20th century towards a renewed metaphysical dogmatism of a pure doctrine of reason. What isn't measurable doesn't appear to exist.

These judgments are then often used as a seal of quality in the sales process of financial products and lead to significant misallocation of capital, as seen in the case of the bank Lehman Brothers in the U.S., which was evaluated with top marks only one day before filing for bankruptcy.

Through the neutral application of mathematical analysis and forecasting models, even if they were regularly calibrated and checked, the user of the models or respectively his experience become ever less important. This may possibly be the reason why even theologians or physicists at major rating agencies can generate a rating without having undergone any business training. To be able to create and read financial statements, seems less and less important compared to the correct and mechanical application of a rating model.

Exactly this apparent objectification and the replacement of empirical knowledge through test models based on relevant regulatory requirements such as Basel III needs to be strongly criticized. Before any benefit analysis it should be emphasized that rating, scoring or credit rating models are never able to operate error-free in terms of

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forecasting models. Objectivity in judgment is never possible if such models get ultimately filled with data, serviced, and their results interpreted by people. That leads to all these judgments being subjective after all. However, while the regulation of banks as well as credit rating agencies in terms of institutions is being steadily strengthened and reinforced by applying methods, a regulation in the sense of specialized demands on the people who work in the regulated institutions with said regulated models is not intended thus far. Following you will find an overview of the regulatory condition and a critical perspective will be presented concerning it.

2. Definition of Rating, Scoring and Testing

It is often confused with the term credit rating of the rankings. Ranking is an Anglo-Saxon term meaning to rank something, giving it sequence. This can also be referred to as ordinal scaling, with a focus on simply organizing something according to size. First, second and third place are not equidistant from one another, but only sorted on the basis of the underlying ranking criterion. Thus the distances between the classes play no role initially.

In addition to rating, which in original English simply translates into “to assess” and “evaluate”, you also define the distance between the ranks. This is known as a cardinal or interval scale, i.e., considering the result of a credit rating the probability of default between an AAA- and AA- is defined or disclosed by the rating agency. In a narrower sense and in relation to financial transactions, the term “rating” in connection with credit and solvency judgments as conditional task has been reserved for ESMA-registered credit rating agencies since September 16th, 2009. However, so-called private credit without publication are excluded thereof. ESMA stands for European Securities and Markets Authority and hence for the regulatory body with headquarters in Paris established for the supervision of securities and, since January 1st, 2011 also for the rating by regulation (EU) 1095/2010 (ESMA Regulation).

A simple credit check can result in granting a loan or not granting it, i.e., in the simplest case dictates a nominal scale, analogous to religious affiliation, which does not allow any comparison between classes, yet allows an unambiguous assignment. Accordingly, tests follow, analogously the trustee standards of accountants, rather the logic of comprehensibility and plausibility than the interpretation of results. The verification of accuracy and completeness of loan documents may already constitute a credit check.

Scoring is a point evaluation model in terms of a cost-benefit analysis (see Zangenmeister, 1976), which may be based on different scaling types, but leads to a weighted quantified result in any case. Degrees of feature fulfillment concerning a situation are quantified here through scales and aggregated to form a total point valuation.

Ultimately, all the above-mentioned scales, ordinal, cardinal, or nominal, are being used in the focus of this manual to evaluate the solvency of borrowers or respectively their creditworthiness. Solvency as opposed to insolvency is according to bankruptcy law (EuInsVO-EG-Nr. 1356/2000 and InsVO from July 1st, 2014 for Germany) the capacity of a debtor to satisfy his payment obligations towards the creditor. This solvency combined with the willingness to pay can be typically referred to as credit rating. Creditworthiness is thus more than solvency, as the willingness to pay is added to the ability.

Whether the creditworthiness and solvency of a debtor in the end can be “guessed” when using one or more of the above scales (nominal, cardinal, ordinal) and the rating, scoring and test models derived thereof, shall be scrutinized in the following sections.

3. Financial Crises as Cause for Regulations under “Basel”

It is striking that there have always been financial crises or bank failures for each step leading to further regulation (Basel I, II and III).

E.g., in the 70's all Swiss and European banks expanded their credit transactions drastically, without also increasing the liable equity that was meant to be available for defaulting credits. The first bank failures, such as the Herstattbank in Germany in 1974 then also led to a rethinking among the central bank governors of the G10 countries and the establishment of the Basel Committee on Banking Supervision in 1979. This committee is named after the principal office of the Bank for International Settlements (BIS) that happens to have its headquarters in Basel. The focus of the discussions in the 70's, the lack of adequate liable equity within banks, resulted in the adoption of Basel I.

In 1988, the rules and standards of Basel I were adopted by the Basel Committee, which for the first time led to a so-called credit crunch in consequence of national implementations and changes in bank lending practices. According to this standard banks were only able to extend loans up to 12.5 times their liable equity. This factual definition of a minimum liability mass for credit risk was initially successful with respect to the bankruptcy protection for banks, because banks considered thoroughly whom to give credits to not further endanger their low and still liable equity. Financial market destabilizing banking crises were thus avoided, however, particularly small and medium-sized companies complained about the very restrictive lending practices. During the ongoing development and a positively evolving economy due to the credit brake induced by Basel I banks now started to consider alternative and supposedly higher yielding financial models and brokered money through investment banking for their clients.

Ever riskier interest rate, exchange rate and currency risks were engaged in and numerous derivative products developed. The defined liable equity now supposedly safeguarded against credit risks, this liable equity, however, in cases of risk relating to derivative instruments also served as risk buffer for the new business models and resulted again in bank crashes. As a consequence, the Basel Committee proposed in 1996 to also include the trading risks in the liable equity hedged risk exposures and imposed on banks to develop their own risk models to gauge these exposures. At this time, Basel I was already implemented nationally in over 100 countries and the financial sector should have been stabilized.

Because in the 80's as well as the 90's there were time and again and in some cases country-specific economic and financial crisis that shook respective banks leading to further bank failures and thus a loss of confidence among investors, first proposals for Basel II were submitted already in 1999. The final version was adopted in 2004 and took effect with an EU directive on January 1, 2007 in the Member States of the EU (EU Directive 2006/48/EC and 2006/49/EC).

Even though the United States initially were the main drivers of Basel II, the announced implementation from 2008 never took place there. The Basel II rules also obviously weren't able to prevent the next financial crises, triggered by the U.S. real estate bubble and, symptomatic of the crisis, the bankruptcy of Lehmann Brothers. After the leaders of the G20 countries met in September 2009 in Pittsburgh and mutually assured one another in the so-called Pittsburgh statements (cf. http://ec.europa.eu/commission/statement_20090826.pdf) that there should never again be such a financial crisis endangering the economies of the world, the new rules of Basel III were adopted in 2013 after numerous consultation papers, and took effect in the EU on January 1st, 2014. The implementation of Basel III in the EU took place using a new version of the so-called Capital Requirements

Directive (CRD), which took effect on January 1st, 2014. In this case they limited predominantly the potential to assign contingent liabilities to liable equity and thus defined a so-called tier-1 capital. This had a particularly negative effect with public-law credit institutions featuring the no longer eligible guarantor's liability as well as with the cooperative banks, because their off-balance sheet liability commitments could not be allocated to equity any more. Furthermore, so-called liquidity and leverage ratios have been introduced, which are to be reported to the regulatory authorities with the intent to function as an early warning system to monitor the readily available liquidity of a bank. For example, in future a bank will have to withstand a run, which means a run on the bank of customers who request a return of their individual deposits, for up to 30 days and hold liquidity accordingly. Other indicators are designed to gauge the so-called counterparty risk, i.e., the pendency of the default of a borrower in case of default of a related other borrower. Correlations of risks are thus measured, and all risks are to be examined even more regularly. In addition to this mentoring of risks by the Bank are regular future stress tests of the regulatory authorities, which is expected to support early warning of further crises.

The essential elements of the development of Basel I to Basel III are summarized in the figure below. The development of Basel I to III can therefore be summarized as follows: Basel I introduced the credit multiplier with the definition of 8% liable equity of the hitherto unrated credit volume. Basel II tightened lending practices due to the necessity of ratings, and Basel III increased the obligation to report to the supervisory authorities and hampered the possibility to attribute acceptance of liability to liable equity in banks. Whether or not these regulations will prevent future financial crises, may reasonably be doubted. The objectives of Basel, to promote the security and stability of the financial system, certainly continue to be desirable.

4. Relevant Institutions and Standards

Before discussing national and international rating standards in the next section, let's first name all relevant institutions that are generally important in rating, scoring and examination of creditworthiness or solvency. In Europe these the regulatory authorities include the European Banking Authority (EBA), European Insurance and Occupational Pensions Authority (EIOPA), ESMA and the Financial Market Supervisory Authority (FINMA) for Switzerland.

After the great financial crisis of 2008, the countries of the EU at first agreed to build a stronger and more centralized control of banks and financial institutions as well as external rating agencies respectively. EU committees already existing since 2004, such as the Committee of European Banking Supervisors (CEBS), Committee of European Insurance and Occupational Pensions Supervisors (CEIPOS) and Committee of European Securities Regulators (CESR) were then grouped together to the so-called European System of Financial Supervisors (ESFS) by the EU resolution from 23.1.2009 and taken effect from 1.1.2011 (EU 1095/2010 VO). This ESFS consistent of the EBA based in London as the successor of CEBS, ESMA based in Paris as the successor of CESR and EIOPA in place of EIPOS based in Frankfurt A. M. currently form the European financial supervisory board and thus represent the institutions responsible for all credit and solvency rating standards.

Furthermore, the European Systemic Risk Board (ESRB), based at the European Central Bank (ECB) in Frankfurt was established to monitor the stability of the entire financial system exchanging information with the three above-mentioned financial regulatory authorities to achieve that. With that authority the ECB has been asked to coordinate all aforementioned and in themselves independently operating regulatory bodies. Why it wasn't possible in this context to establish a unified financial supervisory board in one location with the power to

concentrate all expertise and to pass uniform standards, is owed to EU policy, wanting to be present at different financial centers and locations within the EU. The central task of the EBA is the development of regulatory standards for European banks, whereas the supervision of compliance lies with the national supervisory authorities, such as the FINMA in Switzerland. In contrast to Germany, where national supervision is still divided up between the Bundesbank and the German Federal Financial Supervisory Authority (BaFin), the FINMA, headquartered in Bern, oversees all Swiss banks, stock exchanges, insurance companies, securities dealers and mutual funds. She has extensive monitoring and auditing powers to enforce national and international standards.

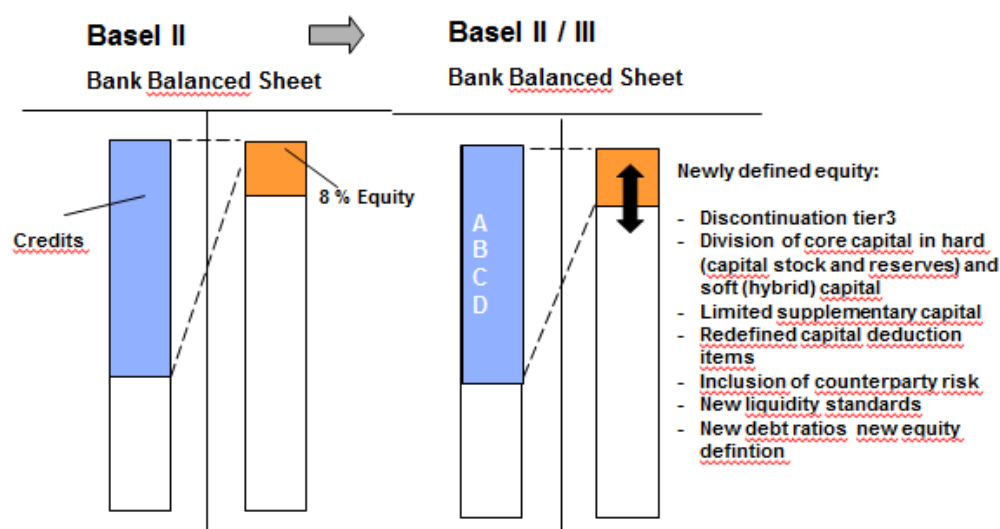


Figure 1 Basel I to Basel III

ESMA develops proposals for regulations for the European Commission, such as the proves of registering as a credit rating agency or rules, how a valid rating model has to be structured. Ultimately, the ESMA is the most important standard-setting institution for the subject of credit and solvency rating. The annual report, which can be reviewed on ESMA's website, names all credit rating agencies certified by ESMA in Europe (disclosure to the market on credit rating activities) as well as the rules of validation of rating methodologies, to ensure that a credit rating assessment is a comprehensive risk assessment leading to high quality ratings. This accreditation by ESMA is precondition for a bank or credit rating agency to autonomously conduct ratings and reviews on creditworthiness. In addition, so-called Governance Rules are continuously being developed to uncover potential conflicts of interest. Moreover, so-called rules are being set up, under which conditions one can call something a robust IT creditworthiness and solvency assessment system.

Aside of these politically motivated and publicly introduced regulatory authorities, there still remains an institution essential for credit and solvency ratings, which was established by securities regulatory authorities in essence to create a working group to exchange experiences on their national tests. It is the International Organization of Securities Commissions (IOSCO), based in Madrid, which was founded in 1983 as an international association and as successor of a hitherto all-American organization established in 1973 with the same name. Many banks and especially unregulated external rating agencies have now joined their proposals for governance rules, good ratings and good creditworthiness and solvency ratings in terms of commitment. In doing so an agency usually complies with the rules, or amends them, or curtails them to their individual needs (explain). The relevant regulations are presented in the following section in the overview of the national and international

regulations. By now membership at IOSCO is also permissible for numerous other norm creating bodies and institutions of the financial world, so that analogous to the IFRS process for the creation of international accounting standards one can speak of an association whose standards and rules will probably be discussed the most comprehensively and is thus possibly accepted. In this sense IOSCO rules are also increasingly used in legal disputes over liability issues in creditworthiness and solvency judgments, even though they don't answer any national legal framework being voluntary commitments.

5. National UND International Rating Standards

The mentioned Basel Accord represents the starting point for the international standards. In addition to the requirements of the liable equity capital of banks, Basel also establishes quality requirements towards the rating itself. This is supposed to be objectively comprehensible, transparent and understandable. These requirements apply to all.

Other quality expectations may be derived from the following text portions of Basel II: Uniform definition of default (TZ 452), consistent portfolio demarcation (TZ 395), reliable data base (TZ 414), extensive documentation (TC 418).

After Basel there are other demands to be placed on a bank rating and thus the IRB approach (internal rating), such as (1) Appropriate differentiation of credit risk by rating classes (at least seven risk classes); (2) Completeness and credulity of the rating assignment (i.e., assignment of rating categories to probabilities of default PD), (3) Regular monitoring and validating of the rating systems and rating processes (i.e., surveillance systems in the sense of back tests and stress tests), (4) Distinctive criteria (e.g., criteria derived from discriminant analysis, which selectively recognize solvent and insolvent debtors) that were derived or rather validated based on a perennial data history. If the bank wants to use the so-called advanced approach of the IRB approach, which, as we know, uses its own forecasts and estimates, further minimum requirements are referred to in the Basel II paper: (1) Meaningful LGD estimates (Loss Given Default), (2) Meaningful EAD estimates (Exposure at Default), (3) Meaningful classification of guarantees and credit derivatives (i.e., statements about haircuts, in other words security considerations as well as the granularity of the credit exposures).

LGD (Loss Given Default) is the abbreviation for expected economic loss or the loss rate, respectively. PD (Probability of Default) is the probability of default. EAD (exposure at default) describes the outstanding loss risk. The term haircut in relation to Basel II describes the rating's alteration due to the inclusion of collateral such as real estate or loan guarantees. Granularity is the division of loans into small increments and thus an expression of risk diversification.

For external ratings these minimum requirements are not defined, which means that rating agencies and credit agencies can set their own standards. The Basel Paper also explicitly declares a so-called "freedom of methods" in TZ 389, i.e., the rating system is merely meant to provide meaningful assessments of the borrowers. A mathematical-statistical necessity is not requested. Thus, expert systems, systems based on neural nets or Monte Carlo simulations are as possible as the usual mathematical IRB process based on logistic regression and discriminant analysis. Finally, the distinction and thus the proof of a high gini coefficient has to be sufficient for the software, even if this only arrives at a result based on subjective assessments of qualitative and quantitative criteria. Even the much quoted gini coefficient as a gauge of the discriminatory power of rating systems is not without controversy among mathematicians and stochastics. Rating models should therefore be standardized,

objective, timely and understandable and not necessarily mathematical and statistically justified. It's common knowledge that misjudgments can occur in statistics as well as the so-called self-fulfilling effect. It should be therefore noted, that regardless of the underlying rating system methodology (discriminant analysis, logistic regression, expert system, mapping methodology, z-score, etc.) the objectivity, reliability (precision) and validity (reliability, distinction of the criteria) of the system are important for the acceptance of credit ratings and are checked by regulators during operations in banks.

In addition to the standards directly derived from the Basel papers many criteria have been adopted by the new European supervisory authority ESMA stipulating when a company may call itself rating agency at all. These ESMA test criteria used to register as European rating agency CRA (Credit Rating Agency) or alternatively ECAI (External Credit Assessment Institution) are explained in article 2 para. 3 of the VO EG/1060/2009 or in the EU Directive 2006/48/EC, respectively. European credit institutions, investment firms, insurance companies and corporate pension funds are eligible to then conduct approved creditworthiness and solvency ratings. These institutions have to prove in an elaborate report and during visits of ESMA on location that they comply with the principles of objectivity and independence, their methodology is subject to an ongoing review process (calibration and validation) and ensures the transparency and disclosure of the ratings or creditworthiness results, respectively. Furthermore, according to Article 6, paragraph 2 of Regulation EG/1060/2009 each rating agency to be accredited has to ensure all necessary steps that issuing a credit rating is not afflicted by existing or potential conflicts of interest or business relations of the agency itself, its management, its rating analysts, employees or any other natural person whose services the credit rating agency uses or controls, or any other affiliated persons potentially under its direct or indirect control. To this end, an annual transparency report is to be submitted by the agency or institution respectively acc. VO EG/1060/2009. ESMA may above and beyond also ask for and publish additional so-called performance reports. Beside ESMA, EBA also publishes the most current list of ECAI and CRA. The American Standard NRSRO of 2004 was already well ahead of the European supervision and examination of rating agencies. The U.S. Securities and Exchange Commission created these NRSRO (Nationally Recognized Statistical Rating Organizations) principles and determined that all issuers and securities that are traded at the New York Stock Exchange must meet this standard. The SEC was established in 1934 as U.S. Securities and Exchange Commission for the control of securities trading in the United States and headquartered in Washington in response to the stock market crash of 1929 and issues rules against securities transactions that happen without supervision. The NRSRO was introduced in the U.S. in 1975 by the Securities and Exchange Commission, and issued after receiving heavy criticism from European credit rating agencies, which were denied recognition, the Credit Rating Reform Act of 2006, in 2006, which was meant to achieve transparency in the recognition process. Nonetheless, so far no European agencies have been accredited by the SEC pursuant to the NRSRO standards. Numerous provisions about the organizational structure, financial condition and safety of the agency, the quality of analysts and especially the independence of the agency and the process documentation in the rating are but a few of the chapters regulated here. The rules are detailed, comprehensive, strict and above all monitored by the SEC. The fact that until now only nine agencies, including 6 U.S. agencies and a Canadian agency, have received approval for the SEC, may well be regarded as protectionism. Numerous rating agencies specialized in niche products (e.g., mutual fund rating) or specific industries (automotive ratings) or sizes of companies (SME rating), respectively, and some rating agencies possibly only covering national markets have applied for NRSRO status in vein. The list of SEC-approved rating agencies based on the NRSRO standard can be seen at www.sec.gov/nrsro.htm.

Another already mentioned body of rules and regulations which is respected not only by the rating agencies, but also by banks and generally all credit rating and solvency assessment companies, are the so-called IOSCO standards, which were written in 2004 as commitment rules. As these regulations are very extensive and are designed to ensure a high quality in credit, creditworthiness, and solvency ratings, investors or borrowers are well-advised to consider whether the evaluating institution has accepted (comply) these standards or possibly supplements them with its own rules (explain). The standards and rules elaborately presented on the IOSCO website (www.iosco.org) refer predominantly to (1) ensuring the quality and integrity by written documentation, thorough analysis and validated systems, (2) independence in making a rating decision by avoiding conflicts of interest or any investment in rating objects, (3) the demand for speedy publication and transparency of ratings, and (4) the obligation to maintain confidentiality of the information received, on which the creditworthiness and solvency judgment is to be based.

The BDRA (Federal Association of the rating analyst and advisor) in Germany set up another quality standard for ratings in 2014. The BDRA is active as a professional association for rating advisors and rating analysts and represents the interests of around 500 members, some rating agencies included. Professional rating courses have also been offered by the wholly-owned subsidiary Rating Cert GmbH since 2013. The association has frequently commented on developments in financial markets as well as on creditworthiness and solvency rating methodology in the past. The BDRA Code of Conduct from 2014 can be seen as a national response to IOSCO and also tries to increase the quality of credit ratings or the solvency judgments, respectively. In that sense membership in the association is already to serve as a seal of approval since the obtainment thereof requires the passing of a test in which expert knowledge as well as defined personal requirements such as personal responsibility, neutrality and independence need to be demonstrated in the process of creditworthiness rating. Other criteria for accreditation are secrecy and the renunciation of information abuse gained from the rating in the sense of avoiding conflicts of interest. The Code of Conduct even postulates that the analyst should waive the rating of creditworthiness or solvency of a debtor or financial object, if documents and information provided give no sufficient basis for the rating.

Given the many standards and commitment rules it is obvious that numerous rules could apply in case of disputes surrounding the rating of creditworthiness or solvency. Standards or even legal regulation regarding the quality of rating analysts, however, are still lacking, and it should be clear that no matter how strictly regulated creditworthiness and solvency rating models and systems are, they can only be as good as the professional competence of the rating person.

6. Outlook and Benefits of Creditworthiness and Solvency Ratings

The critical review of the current state of regulation or over-regulation of banks and rating agencies should not obscure the fact that ratings of creditworthiness and solvency also have their benefits. Aside from the protection of creditors and depositors, also borrowers and rating objects should recognize these benefits for themselves. Gaining information to manage one's own corporate finances could be mentioned here. Risks can be identified and remedied. An optimization of the rating by improving indicators or uncovering weaknesses might lead to a reduction in credit conditions. In a good corporate rating according to the WACC-CAPM model a company's value becomes apparent. Ratings can represent an early warning system in case of financial difficulties and sensitize the management or the owners towards financial risks. Published creditworthiness and solvency

ratings can create trust or possibly establish a better bargaining position for customers, suppliers and all involved stakeholders of a company. Based on a rating a company may take advantage of alternative financing instruments, such as issuing corporate bonds and is not necessarily dependent on a bank loan.

References:

- Atlas R. (2002). "Enron's collapse: Credit ratings—Enron spurs debt agencies to consider some changes", *The New York Times*, 22 January 2002.
- Büschgen H. and Everling O. (Hrsg.) (2013). *Handbuch Rating*, Wiesbaden.
- Everling O. and Niggemann K. A. (Hrsg.) (2007). *Finanzrating—Gestaltungsmöglichkeiten zur Verbesserung der Bonität*, Betriebswirtschaftlicher Verlag Dr. Th. Gabler, Wiesbaden.
- Morgenson G. (2010). "As rating agencies shared data, Wall St. seized advantage", *The New York Times*, 23 April 2010.
- Morgenson G. (2010). "Louise story: Prosecutors ask if 8 banks duped rating agencies", *The New York Times*, 12 Mai 2010.
- O. V. BMWi-Monatsbericht (2010/12). "International monetary fund: Global financial stability report", October 2010, S. 12.
- Rügemer W. (2012). *Rating-Agenturen: Einblicke in die Kapitalmacht der Gegenwart*, München.
- Wyatt E. (2002). "Credit agencies waited months to voice doubt about Enron", *The New York Times*, 8 February 2002.