

crisisresponse

PUBLIC POLICY FOR THE PRIVATE SECTOR

Credit Rating Agencies

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currently under debate,
and providing insights
for emerging-market policy
makers.*



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No Easy Regulatory Solutions

In the United States and Europe faulty credit ratings and flawed rating processes are widely perceived as being among the key contributors to the global financial crisis. That has brought them under intense scrutiny and led to proposals for radical reforms. The ongoing debate, while centered in major developed markets, will also influence policy choices in emerging economies: whether to focus on strengthening the reliability of ratings or on creating alternative mechanisms and institutions that can perform more effectively the role that in developed markets has traditionally been conferred on credit rating agencies.

A credit rating is an opinion on the creditworthiness of a debt issue or issuer. The rating does not provide guidance on other aspects essential for investment decisions, such as market liquidity or price volatility. As a result, bonds with the same rating may have very different market prices. Despite this fact, and even though each rating agency has its own rating methodologies and scales, market participants have often treated similarly rated securities as generally fungible.¹

According to rating agencies, ratings are opinions and not recommendations to purchase, sell, or hold any security. In the United States rating agencies assert that they have the same status as financial journalists and are therefore protected by the constitutional guarantee of freedom of the press. They contend that this protection precludes government regulation of the content of a rating opinion or the underlying

methodology. While similar protection does not exist in other countries, rating agencies have generally stated in contracts with ratings users that their opinions are not financial advice. This has traditionally shielded them from investor litigation and until recently prevented direct regulation of their operations.

Credit ratings are aimed at reducing information asymmetries by providing information on the rated security. They can also help solve some principal-agent problems, such as capping the amount of risk that the agent can take on behalf of the principal. In addition, ratings can solve collective action problems of dispersed debt investors by helping them to monitor performance, with downgrades serving as a signal to take action. Indeed, a rating from a recognized rating agency, while not intended to do so, effectively reduces the burden on investors to research the credit-

worthiness of a security or issuer. Credit ratings are typically among the main tools used by portfolio managers in their investment decisions and by lenders in their credit decisions. The reliance on ratings also reflects regulatory requirements in most countries.

Regulatory reliance on credit ratings

2

U.S. regulators first used credit ratings in the 1930s to limit the riskiness of assets held by regulated entities, though the practice has expanded significantly since the 1970s (Levich, Majnoni, and Reinhart 2002). Until recently, however, the regulatory treatment of rating agencies has been paradoxical: regulatory standards have been predicated on credit ratings, but there has been little direct oversight of how the ratings are made (box 1).

Traditionally, market discipline has been the preferred course of action: rather than government

licensing, rating agencies have received market recognition; rather than regulatory requirements, rating agencies have voluntarily adopted best-practice standards. The ratings and the rating agencies issuing them have been largely exempt from established legal standards applying to traditional forms of investment advice in the United States and the European Union. That has helped shield rating agencies from private litigation for inaccurate or misleading statements.

Despite the limited oversight, regulators have depended extensively on credit ratings in setting regulatory policies. The Joint Forum (2009), reviewing the use of credit ratings across financial sectors in major jurisdictions, found that they are used for five key purposes:

- Determining capital adequacy requirements for financial institutions (such as securitization exposures for banks in Basel II)

Box

Regulation of rating agencies before the financial crisis

1

International Organization of Securities Commissions

IOSCO's Statement of Principles Regarding the Activities of Credit Rating Agencies (2003) and Code of Conduct Fundamentals for Credit Rating Agencies (2004) contain four categories of voluntary principles for rating agencies to adopt on a "comply or explain" basis: quality and integrity of the rating process, independence and avoidance of conflicts of interest, responsibilities to the investing public and issuers, and public disclosure of their own code of conduct. The IOSCO Code does not address government regulation of rating agencies or include an enforcement mechanism, though several rating agencies voluntarily developed their own codes of conduct along similar lines. In fact, as IOSCO (2009) notes, "neither IOSCO nor any other international body currently is in a position to determine whether or not a given [credit rating agency] in fact complies with its own code of conduct in the manner in which its public statements indicate" (p. 3).

Regulation in the United States

The U.S. Securities and Exchange Commission (SEC) in 1975 began an informal process of recognizing rating agencies—by giving them the designation *nationally recognized statistical rating organizations* (NRSROs)—which permitted regulated entities such as brokerage companies and mutual funds to rely on their ratings to satisfy specific regulatory requirements. This designation involved minimal, informal oversight, since it relied on market acceptance rather than regulatory standards.

In 2006, following a series of corporate scandals and especially the one involving Enron, the U.S. Congress passed the Credit Rating Agency Reform Act. The act provided the SEC with explicit legal authority to require rating agencies electing to be treated as NRSROs to register with it (thereby opening a clear path of entry for new competitors) and to comply with certain requirements. These include periodic reporting on activities and the public disclosure of information on internal standards and policies as well as rating methodology and performance. The act also empowered the SEC to conduct on-site inspections of rating agencies and to take disciplinary action for violations of the law. But it prohibited the SEC from regulating the credit rating process, including the procedures and methodologies used. The relevant rules were adopted in 2007 and revised in 2009.

Regulation in the European Union

Before 2009 oversight of rating agencies in the European Union relied largely on voluntary adherence to the IOSCO Code as overseen by the Committee of European Securities Regulators. In addition, the Capital Requirements Directive (2000/12/EC), which adopted the Basel II framework in the European Union, allows the use of external credit assessments—to be provided by external credit assessment institutions recognized by national authorities—in determining risk weights when calculating the minimum regulatory capital requirements of banks. To promote convergence, the Committee of European Banking Supervisors has issued guidelines on the recognition of such institutions. Finally, the EU Market Abuse Directive (2003/125/EC) and the Markets in Financial Instruments Directive (2004/39/EC) exclude credit ratings from the definition of investment recommendations.

- Identifying or classifying assets, such as for eligible investments (for example, of mutual funds) or permissible concentrations (for example, of asset managers)
- Evaluating the credit risk of assets in securitization or covered bond offerings
- Determining disclosure requirements (such as for rated entities)
- Determining prospectus eligibility (for example, whether investment-grade-rated debt is eligible for expedited or automatic regulatory review before its offering)

By incorporating credit ratings into their requirements, regulators effectively outsourced many regulatory functions to rating agencies and made credit ratings essential for issuers and the cornerstone of regulations across a range of financial sectors. As a result, rating agencies now play a critical role as de facto “capital market gatekeepers”—despite their apparent lack of liability and their reluctance to assume such a responsibility. Some commentators have argued that the “hardwiring” of rating agencies in regulation both forces market participants to use their services and protects the rating agencies from outside competition and liability.²

A credit rating has therefore become a precondition for a debt offering in virtually every country with a debt market. By contrast, credit ratings are largely irrelevant in equity markets, presumably because U.S. and European regulatory policies do not require a rating to offer and sell equity securities.³

The credit rating industry is highly concentrated, with two companies (Standard & Poor’s and Moody’s) dominating the market in most countries. This can be attributed to high barriers to entry, stemming from reputational capital and the breadth of coverage built by successful rating agencies over time as well as by the designation in the United States of nationally recognized statistical rating organizations (NRSROs).⁴ Rating agencies face pressure to compete so as to maintain market share and revenues, but the industry has high operating margins and exceptional profitability.

Credit ratings and the financial crisis

Credit rating agencies have been extensively criticized for their role in fueling the unsustainable

growth of the asset-backed structured finance debt market—a major catalyst for the global financial crisis. But many of the complaints about them are not new.

Failures of ratings on structured securities

Credit rating agencies played a pivotal role in the development of the structured finance market. Because many institutional investors and even banks viewed debt with the same credit rating as fungible, even the most complex, innovative, or opaque debt instrument could be sold as long as it received an investment-grade rating. Unlike with corporate debt, underwriters and originators of structured finance quickly realized that there was no natural limit to the supply of new structured securities that could be created. Moreover, the lower transparency and greater complexity in this market ensured a heavy reliance by market participants on rating agencies. Partly as a result, the global market for nontraditional debt offerings grew enormously in a short period, dramatically increasing the revenue stream and profitability of rating agencies.⁵

While the easy availability of (what turned out to be flawed) ratings fueled the growth of this market, the subsequent downgrades in ratings accelerated the market’s collapse. The appetite for highly rated structured securities, combined with the belief that housing prices would always rise and that securitized loans would not create risks for the originator, prompted mortgage lenders to relax credit underwriting standards and expand into higher-risk market segments (such as subprime mortgages) in order to originate loans solely for the purpose of securitizing them—the “originate to distribute” model. This increase in risk appetite does not seem to have been detected by rating agencies or investors. While rating agencies awarded high ratings to these transactions, eventually many of them were substantially downgraded as a result of the dramatic increase in defaults of the underlying assets, sometimes shortly after issuance. The unprecedented speed and scale of the losses suffered by investors was a major contributor to the crisis, particularly in its early stages.⁶

The failure of rating agencies to correctly predict structured debt defaults has prompted many commentators to ask whether the rating system for such securities is fundamentally flawed. Some

have suggested that the failure reflects a basic difference in the quality of data used to develop ratings. While corporate debt ratings are based on publicly available, audited financial statements, structured debt ratings are based on nonpublic, nonstandard, unaudited information supplied by the originator or nominal issuer. Moreover, rating agencies had no obligation to perform due diligence to assess the accuracy of the information and often relied on representations and warranties from the issuers about the quality of the data, which later proved to be inadequate.

Traditional rating methodologies also proved to be a poor fit for structured finance or asset-backed pools. Because rating agencies often lacked extensive historical loss experience for innovative structures or transactions based on untested assets (for example, subprime mortgages), they used different (and sometimes inappropriate) analytical tools and assumptions to determine the risk of default and losses. Their computer-driven simulation models—like those used by investment banks—were based on market assumptions that proved to be faulty or incomplete. For example, there was a failure to appreciate default correlation within and across pools of assets due to common underlying economic factors such as the housing market or to contemplate declines in housing prices. Anecdotal evidence shows that rating agencies sometimes deviated from standard assumptions in rating unique structures and failed to disclose those changes. Finally, pressures to maintain market share and increase profits appear to have prompted them to relax their own criteria and to avoid hiring new staff or investing in costly new databases and rating models.

While some of the rating agencies' own analysts identified these problems and expressed concerns, rating agencies continued to rely on these tools.⁷ Some commentators have attributed this behavior to conflicts of interest—particularly relating to the “issuer pays” business model—that were not properly managed. On the institutional side, a few investment banks controlled much of the deal flow and often “shopped around” for the highest ratings on their lucrative issuance deals, including by playing one rating agency against another when informally consulting them on structures to achieve high ratings.⁸ Moreover, even though rating agencies enjoyed exceptionally high profit

margins,⁹ they chose not to compete with the salaries of investment banks, resulting in high turnover and the replacement of senior structured finance analysts with less experienced staff.¹⁰

Broader credit rating failures

While structured finance failures have been the focus of criticism of rating agencies' performance, the problem is not new. Rating agencies have long been accused of being slow to react to market events. Examples include their failure to foresee severe financial problems of sovereign issuers (as in Latin American debt crises and the 2001 collapse of Argentina) and established corporations (Enron, Worldcom, Parmalat), including in the current crisis.¹¹ More broadly, some empirical literature finds that ratings have little informational value and that rating changes generally lag the market: although ratings may represent *relative* credit risk fairly well, they may be less reliable as indicators of *absolute* risk and rarely appear to affect market prices.¹²

This raises the question of whether regulators and market participants should rely on credit ratings at all. Those arguing that they should not often use as evidence the fact that market-based indicators (those linked to such factors as share price and credit default swap spreads) are much more forward-looking than ratings in the case of failing firms. But this overlooks the fact that these indicators are volatile and may be susceptible to market manipulation. While they provide valuable point-in-time information for trading purposes, their value for other uses—such as the initial sale of a security or the eligibility of specific securities for longer-term investment—may be limited. By contrast, ratings are intended to be “through the cycle” indicators—based on hard data and subject to appeal processes—that strike a balance between short-term accuracy and longer-term stability.

Of course, delays in downgrading a rating may be due to factors other than incompetence or time horizon. A downgrade can have such an adverse effect on a rated sovereign or corporate issuer that it can destabilize the issuer or the market for its securities. Rating agencies may therefore be reluctant to downgrade because of the impact on the (usually not publicly disclosed) triggers in private financial contracts, even if the

downgrade is already reflected in market prices.¹³ This may represent a case in which overreliance by market participants on a few rating agencies could reinforce practices that compromise the integrity of their ratings.

Policy responses

Many reports have examined the role of rating agencies in the crisis and provided recommendations for addressing their perceived failures.¹⁴ In response to those failures, authorities have introduced a range of regulatory measures (box 2). While there is no consensus on a single set of reforms, the measures that have been announced do show convergence around several objectives:

- Managing conflicts of interest, including through governance reforms in rating agencies
- Improving the quality of rating methodologies, particularly for structured finance
- Increasing transparency and disclosure obligations
- Introducing direct government oversight to replace self-regulation

Other regulatory measures are also being discussed, ranging from refining existing disclosure requirements to conferring a formal gatekeeper responsibility on rating agencies that would include a due diligence obligation and possibly some legal liability for their rating reports. But some commentators argue that such reforms are

Box

Regulatory reforms in response to the financial crisis

2

International Organization of Securities Commissions

In response to the role of rating agencies in the structured finance debacle, IOSCO revised the Code of Conduct Fundamentals for Credit Rating Agencies in 2008 by strengthening each of the four categories of principles. Revisions include measures to strengthen the quality of the rating process, ensure subsequent monitoring and timeliness of ratings, prohibit analysts' involvement in the design of structured securities, increase public disclosures, periodically review compensation policies, and differentiate structured finance ratings from others. To avoid cross-border regulatory fragmentation, IOSCO has proposed the use of its code as a template for supervision of rating agencies and has developed a model examination module to facilitate inspections.

Group of 20

In the April 2009 Declaration on Strengthening the Financial System the G-20 leaders agreed that all credit rating agencies whose ratings are used for regulatory purposes should be subject to an oversight regime that includes registration and is consistent with the IOSCO Code. They also agreed that national authorities will enforce compliance, with IOSCO playing a coordinating role, and that rating agencies should differentiate ratings for structured products and increase disclosures. Finally, they asked the Basel Committee to review the role of external ratings in prudential regulation and identify adverse incentives that need to be addressed.

Regulation in the United States

In 2009 the U.S. Securities and Exchange Commission (SEC) amended its regulations for rating agencies to require enhanced disclosure of performance statistics and rating methodologies, disclosure on their Web site of a sample of rating actions for each class of credit ratings, enhanced record keeping and annual reporting, and additional restrictions on activities that could generate conflicts of interest (for example, prohibiting rating agencies from advising issuers on ratings and prohibiting ratings personnel from participating in any fee discussions or negotiations). But the SEC has deferred action on whether to impose rules that would require nationally recognized statistical rating organizations (NRSROs) to change their rating symbols specifically for structured finance proposals or whether to substantially eliminate references to NRSRO ratings in its rules.

Regulation in the European Union

A regulation on credit rating agencies was approved in April 2009 by the European Parliament and was followed by a communication on financial supervision by the EU Commission in May 2009. All rating agencies that would like their credit ratings to be used in the European Union will need to apply for registration to the Committee of European Securities Regulators (CESR) and be supervised by it and the relevant home member state. Ratings by rating agencies operating exclusively from non-EU jurisdictions may be acceptable on a case-by-case basis if the oversight framework of their country of origin is deemed to be equally stringent. Registered rating agencies are subject to new, legally binding rules that are based on (but sometimes go beyond) the IOSCO Code, including prohibition from advisory services, enhanced disclosure and transparency requirements, differentiation of the ratings of complex products, and stronger internal governance mechanisms. The CESR will establish a central repository, accessible to the public free of charge, with historical data on the rating performance of all registered rating agencies.

insufficient and merely treat the symptoms of the problems and not the root causes. These commentators tend to focus instead on three areas in which there has been much discussion but few reforms: promoting competition in the credit rating industry, rethinking the issuer-pays business model, and reducing the regulatory franchise of rating agencies.

Promoting competition

Some commentators have suggested that promoting competition among rating agencies would be a preferable solution for improving the quality of ratings. But reforms aimed at doing so are complicated by the fact that size and market recognition may be higher barriers to entry than regulatory status, turning the credit rating industry into an oligopoly. In fact, there are already many smaller players in the industry, most of which have the same standing for regulatory purposes as the major rating agencies but have failed to gain market acceptance and thus remain limited to geographic or product niches. Given the limited ability of regulators to encourage new entry, alternative approaches to using competition to improve the quality of ratings have been proposed.¹⁵

A strategy of increasing competition might actually lower the quality of ratings, however. The reason is that new entrants in an issuer-pays system would probably compete by offering higher ratings or by lowering prices and thus reducing both the level of effort in ratings and their reliability.¹⁶ Moreover, there may be a benefit to having a limited number of global credit rating agencies: it promotes greater consistency and uniformity in ratings across markets, making it easier for investors to compare debt securities issued in different countries.

Rethinking the issuer-pays model

Rating agencies have long argued that their concern for maintaining reputational capital insulates their rating decisions from undue influence. But it has been suggested that the issuer-pays business model fundamentally compromises the objectivity of the rating process. Some commentators propose mandatory conversion to an “investor pays” model in which rating agencies would earn fees from users of the rating information. This change,

while dramatic, would not be unprecedented. The major rating agencies relied on subscription fees as their primary source of revenue for most of their history until the early 1980s. In fact, three rating agencies with NRSRO designation in the United States currently operate on an investor-pays model, but they remain small.

To the extent that the collective failures of rating agencies have been due to compromised objectivity, this approach may be a welcome solution. But it would be difficult to implement without adverse consequences. For example, investors are unlikely to be willing to pay the substantial subscription fees necessary to generate a comparable revenue stream. As a result, an investor-pays model would probably result in substantially fewer offerings receiving ratings, to the detriment of smaller issuers and less liquid issues. Critics of this model—which include the large rating agencies—also suggest that it would not eliminate conflicts of interest but instead shift them from issuers to investors. Hybrid solutions—in which an issuer would pay an existing rating agency for a rating but be required to seek a second rating from a “subscriber fee” rating agency or a hybrid rating agency owned and supervised by a consortium of institutional investors—may be worth exploring.

Reducing the regulatory franchise

If, as some believe, credit ratings should not be given a “regulatory license” relative to other forms of financial risk assessment, the right solution would be to reduce market participants’ reliance on them. To the extent that such reliance stems from regulation, this argument implies eliminating regulations that are predicated on the existence of a credit rating. That would fundamentally alter the regulatory framework across a broad range of financial sectors.

This reform, while desirable, needs to be well conceived to maintain the public-good aspects of credit ratings and to avoid unintended consequences such as increased costs and reduced access to capital markets.¹⁷ The current regulatory framework is so reliant on ratings that significant changes can only take place over time. Moreover, there have been no credible proposals for instruments or institutions that could take on the role of ratings in regulation. Regulators seem

unwilling (and perhaps unable) to take up the role themselves, while market-based indicators, as noted, have their own problems.

Conclusion

In 2007 Christian Noyer, governor of the Bank of France, reflected the general consensus among regulators and market participants at the time when he said, “The rating system goes hand in hand with the development of large liquid, deep and international markets. It is a precondition and a tool for ensuring the smooth functioning of these markets.”¹⁸ In 2009 the same statement would probably provoke a lively debate.

Authorities have introduced a range of regulatory measures related to credit rating agencies in response to their failures in this crisis. While no consensus has formed around a single set of reforms, the measures announced thus far are aimed primarily at introducing direct government oversight to replace self-regulation and improving the accuracy of ratings and the integrity of the rating process, particularly for structured finance. By contrast, despite extensive debate, there has been limited action on promoting competition in the credit rating industry and revising the issuer-pays model—probably for good reason, because there are no easy solutions. Reducing the hardwiring of rating agencies in regulatory frameworks is essential to minimize complacency among market participants and regulators, though this step needs to be taken cautiously to avoid unintended consequences.

3. The much greater upside of equity issues compared with debt issues may create incentive for investors to do their own analysis rather than rely in part on third parties (such as rating agencies) to minimize costs.

4. Despite many applications for NRSRO status, only one new general-purpose credit rating agency was approved by the U.S. Securities and Exchange Commission (SEC) between 1975 and 2002, helping to perpetuate the oligopolistic market structure. According to the SEC, the three largest rating agencies issued almost 99 percent of outstanding ratings of issuers in the United States.

5. Rating structured securities was far more profitable than rating corporate bonds. According to Partnoy (2006), the fees of Standard & Poor's for corporate debt issues are in the range of 3–4 basis points of the issue size and typically range between US\$30,000 and US\$300,000. The fees for structured finance issues can reach up to 10 basis points and are even higher for more complex transactions. Because of the higher fees and the dramatic growth in the number of rated issues, structured finance accounted for 54 percent of the ratings business revenues for Moody's by 2006.

6. According to Moody's, the 12-month downgrade rate for the global structured finance market reached a historical high of 35.5 percent in 2008, up from 7.4 percent in 2007 and much lower levels in previous years.

7. The U.S. Congressional hearings in October 2008 on the rating agencies and the financial crisis brought to light several reports of current or former rating agency staff voicing concerns about lack of resources, inadequate data, or inappropriate rating models (<http://oversight.house.gov/story.asp?ID=2250>).

8. Rating agencies do not formally consult on the structuring of securities. But their analysts often provide informal guidance to investment banks on the application of rating agencies' criteria and mitigation measures.

Investment banks put great pressure on rating agencies to relax their criteria for structured finance in the early 2000s, since this asset class had had a much better historical performance than corporate debt until then.

9. According to U.S. Congressman Henry Waxman during the Congressional hearings in October 2008, Moody's had the highest profit margin of any company in the S&P 500 for five years in a row.

10. Investment banks commonly hired structured finance analysts (there is as yet no mandatory “cooling off” period for such moves), which arguably facilitated exploitation of loopholes in rating methodologies.

11. For example, the three large rating agencies gave an investment-grade rating to the debt of Lehman

Notes

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1. In fact, rating agencies assess only relative creditworthiness, although they also prepare historical performance studies that estimate the *ex post* realized probability of default for their ratings. Those studies clearly show that the same rating does not correspond to the same probability of default across asset classes or between rating agencies.

2. According to Partnoy (2006, p. 82), “ratings are valuable not because they contain valuable information but because they grant issuers ‘regulatory licenses.’”

Brothers up until the day it filed for bankruptcy, on September 15, 2008.

12. Changes in market prices may reflect anticipation of rating changes, however, making it difficult to conclusively accept this assertion. See FER (2008) for a discussion and for literature references.

13. For example, the downgrading of AIG's debt on September 16, 2008, triggered collateral calls on credit default swap contract provisions that AIG had with banks around the world. The inability of the company to raise the required liquidity forced the U.S. Federal Reserve to step in and bail it out.

14. See, for example, IOSCO (2008), ESME (2008), SIFMA (2008), U.S. SEC (2008), CGFS (2008), FER (2008), Acharya and Richardson (2009), Veron (2009), de Larosiere Group (2009), and FSA (2009).

15. For example, the U.S. SEC has proposed requiring issuers and rating agencies to provide subscriber-based competitors with all information received from the underwriter, including nonpublic, commercially valuable data. It has long been argued that access to confidential information from issuers gives rating agencies an unfair advantage over providers of creditworthiness assessments based on public information.

16. Becker and Milbourn (2008) suggest that increased competition has driven down the overall quality of corporate ratings and may impair the reputational mechanism on which they depend.

17. For example, elimination of rules allowing expedited prospectus review based on credit ratings would add to the workload of regulators with constrained budgets and delay processing, while elimination of prudential rules premised on credit ratings in investment management would increase the burden on money managers and probably create additional liability concerns.

18. Comments at the Symposium on Financial Ratings, organized by Cercle France-Amériques, Paris, December 12, 2007.

References

Acharya, V. V., and M. Richardson, eds. 2009. *Restoring Financial Stability: How to Repair a Failed System*. Hoboken, NJ: Wiley Finance.

Becker, B., and T. Milbourn. 2008. "Reputation and Competition: Evidence from the Credit Rating Industry." Working Paper 09-051, Harvard Business School, Cambridge, MA.

CGFS (Committee on the Global Financial System). 2008. *Ratings in Structured Finance: What Went Wrong*

and What Can Be Done to Address Shortcomings?

CGFS Paper 32. Basel: Bank for International Settlements.

de Larosiere Group. 2009. *Report of the High-Level Group on Financial Supervision in the EU*. Brussels.

ESME (European Securities Markets Experts Group). 2008. "Role of Credit Rating Agencies." Report to the European Commission. http://ec.europa.eu/internal_market/securities/docs/esme/report_040608_en.pdf.

FER (Financial Economists Roundtable). 2008. "Reforming the Role of the Statistical Ratings Organizations in the Securitization Process." Statement released December 1, Philadelphia.

FSA (U.K. Financial Services Authority). 2009. *The Turner Review: A Regulatory Response to the Global Banking Crisis*. London.

IOSCO (International Organization of Securities Commissions). 2008. "The Role of Credit Rating Agencies in Structured Finance Markets." Technical Committee Final Report. <http://www.iosco.org/>.

—. 2009. "International Cooperation in Oversight of Credit Rating Agencies." Technical Committee Note. <http://www.iosco.org/>.

Joint Forum. 2009. *Stocktaking on the Use of Credit Ratings*. Basel: Bank for International Settlements.

Levich, R. M., G. Majnoni, and C. Reinhart, eds. 2002. *Ratings, Rating Agencies and the Global Financial System*. New York: Kluwer Academic Publishers.

Partnoy, F. 2006. "How and Why Credit Rating Agencies Are Not Like Other Gatekeepers." Legal Studies Research Paper 07-46, University of San Diego School of Law.

SIFMA (Securities Industry and Financial Markets Association). 2008. "Recommendations of the Credit Rating Agency Task Force." http://www.sifma.org/capital_markets/docs/SIFMA-CRA-Recommendations.pdf.

U.S. SEC (U.S. Securities and Exchange Commission). 2008. *Summary Report of Issues Identified in the Commission Staff's Examinations of Select Credit Rating Agencies*. Washington, DC.

Veron, N. 2009. "Rating Agencies: An Information Privilege Whose Time Has Passed." Bruegel Policy Contribution 2009/01, Briefing Paper for the European Parliament's ECON Committee. <http://veron.typepad.com/>.

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