How to Reform the Credit-Rating Process to Support a Revival of Private-Label Securitization

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1. Introduction

Ratings reflect an independent and fundamental analysis of the relevant factors that could influence a security's credit risk – whether the issuer will be repaid in full and on time...We believe that ratings agencies should compete based on the quality of their analysis and the strength of their staff...Deven Sharma, President of Standard & Poor's (May 16, 2010).

Modern contracting theory stresses the role of asymmetric information. Borrowers and other obligors usually have a more accurate picture of their willingness and ability to fulfill a contract than their counterparties do. In equilibrium, investors and creditors that are *aware* of their informational disadvantage tend to exact a compensating premium for their risk of being deceived.

Information compiled by honest, independent, and competent credit-rating organizations (CROs) can lessen this risk. CRO analysts focus on predicting default rates and, in some cases, loss-severity on various kinds and pools of individual securities. Analysis conducted by a CRO can create value for an issuer as long as the disclosure of the rating results in an interest-rate reduction (net of the cost of the rating) that exceeds the reduction that would result if the issuer simply disclosed information and invited investors' to make their own judgments about the issuer's creditworthiness. Mr. Sharma's statement clarifies that in CROs' current business model - a CRO sells research, not opinion. Issuers pay the CRO to have a security rated. The interest-rate reduction that a CRO can offer a particular issuer depends both on the degree of third-party confidence in the quality and reliability of its research and on the cost an investor would otherwise incur in obtaining an analysis of equal quality.

¹ This paper extends and draws upon Herring and Kane (2010).

Because securities that slice and dice cash flows from pools of underlying assets are particularly hard to analyze, it is no accident that the boom and bust that Figure 1 shows in the stock price of Moody's (the only CRO whose stock trades publicly) correspond to the boom and bust in the flow of private-label asset-backed securities shown in Figure 2. Figure 3 shows that, as the securitization business became a global one, Moody's opened numerous overseas offices. According to the firm's 10-K for 2010, Moody's now operates more than 70 subsidiaries in about 25 foreign countries. During the post-bubble era of 2008-2010, revenues from its international business rose nearly to the level of its US revenues.

Although Moody's went public in 1996, its stock price remained nearly flat until 2001 and peaked at roughly \$71 in 2007. In the last few years of the bubble, more than 40 percent of Moody's revenues came from rating securitized debt. At this writing (March 2012), the flow of private-label residential mortgage-backed securitizations (RMBS) remains particularly small and Moody's stock price had recovered only to a level about 47 percent below its peak.

The two other major CROs - Standard & Poor's (S&P) and Fitch Ratings Ltd - are subsidiaries of other firms. While we can't observe stock prices for these institutions, it is reasonable to presume that the sharp fall-off in the volume of private-label securitizations in 2007 reduced the economic value of their enterprises in much the same way, particularly because some institutional investors and several regulators required that securities issuers obtain two or even three ratings.

CROs add value only to the extent that the information they produce improves investors' ability to assess and price risk. Both household and institutional investors sought help in understanding securitizations that entailed intricate legal documentation, obscured salient facts about underlying deals, and posed short time frames for purchasing the securities offered. When (as Figure 4 shows) CRO ratings of complicated securitizations suddenly revealed themselves to be wildly inaccurate, CRO certification lost value and asset-backed debt became unattractive. To prevent the securitization channel for housing finance from drying up completely, authorities in the US have supported the debt of the government-sponsored enterprises (GSEs) that engage in housing finance and the Fed has purchased securitized debt guaranteed by the GSEs as well. But the massive fiscal expenditures this support requires cannot continue indefinitely.

This paper reviews the functions of CROs and the reform strategies that emerged in the US and Europe. Most reform plans have country-specific features. They seek to develop rules and ethical codes that would reduce conflicts of interest, promote transparency, and strengthen CRO and issuer disclosure, but apply differently to CROs that are headquartered in different nations. While prescriptive legislation and government-imposed codes are useful, they inevitably contain loopholes in enforcement that generate unexpected and

unwanted consequences. We argue that, to be successful, codes of conduct and their enforcement need both to be multinational and to focus specifically on improving CROs' incentives to produce accurate ratings.

An unusual feature of the CRO industry in the US is its longstanding exemption from civil liability to users for defects in the allegedly expert information it supplies. The industry now faces a tidal wave of investor lawsuits challenging the idea that this exemption from damage claims for excessively optimistic ratings should extend to the reckless and corrupt practices uncovered in U.S Senate (2011). The industry takes refuge in the First Amendment concept of freedom of the press and resists the Dodd-Frank effort to impose experts' liability, which the Securities Act of 1933 applies to "underwriters" and other "control persons" that provide information incorporated into a security's offering prospectus. It refuses to determine and accept the degree of responsibility for the quality of its *future* work that is needed to substitute in investors' minds for their loss of reputation.

One way to improve analyst independence and establish responsibility for the quality of their future analysis would be for CROs and authorities to identify -and implement institutionally- a distinction between the inherently fiduciary activity of developing credit ratings and the profit-making business of selling ratings data to issuers; cf. Froeba (2009). These two functions require different forms of regulation and supervision. Because ratings analysts perform an expert certification function much like that of actuaries, appraisers, and accountants, it would be a natural step to define themselves as a group of specialized professionals and proceed to develop and foster a dynamic process for setting ethical standards and training and operating procedures whose sole and explicit purpose would be to serve the public interest. As it does with some other professions, government regulation could adopt a twofold role in overseeing this profession's standard-setting process. First, officials could assess how well the standards that apply to the securitization process align the interests of CROs and security issuers with those of different kinds of investors. Second, officials could see both that the standards adapt in timely fashion to changing circumstances and that they are adequately enforced.

After reviewing the history of credit ratings, this paper tackles three tasks: to clarify the temptation that CROs faced as they became more and more central to the securitization process, to explain why CROs are currently unable to do much to assist issuers in reviving the RMBS and collateralized debt obligation (CDO) business, and to identify strategies of reform that might overcome the challenges CROs face in regaining credibility. Rebuilding an industry's lost reputation is a difficult task, but it is a problem that CROs must solve if private markets for securitized residential mortgages are to revive. The volume of securitizations and the flow of real investment around the world will remain depressed unless and until CRO firms and authorities in financial-center countries work out and adopt

a viable plan for mitigating the incentive conflicts that undermine investor confidence in analysts' ability and willingness to rate securitizations accurately.

2. The Evolution and the Usefulness of Credit Ratings

In response to the collapse of the securitization market and the global credit crunch that followed, private groups and policymakers around the world have explored a variety of reforms, including forcing securitizers to rotate the CROs they use and even the complete abandonment of credit ratings (IOSCO 2008). To sort through these reforms in a meaningful way, it is critical to define and understand three issues: 1) What functions have CROs served? 2) How did they achieve credibility historically? 3) How can they regain credibility in markets for asset-backed securities? The next few paragraphs address these questions and lay out the context within which reforms must unfold.

A. What Functions Have Credit Ratings Served?

Capital markets can operate without CROs. The world had active bond markets for at least 300 years before the first CRO came on the scene. But early capital markets, based largely in Europe, restricted themselves predominantly to trading sovereign debt issued in each sovereign's own currency. For this limited capital market, credit risk was easy to analyze. CROs could add little value.

The first CROs were established in the United States where a robust corporate bond market first emerged in the mid-19th century. The US financed much of its growth in canals, railways and other infrastructure projects through bonds that were issued by private corporations. The big three CROs emerged in response to breakdowns that these markets suffered early in the 20th Century. When numerous bonds issued by private corporations had either defaulted or fallen sharply in value, investors saw the wisdom of paying for expert help in assessing credit risk.

CROs facilitated investment by non-specialist lenders, diminished asymmetries in information between borrowers and lenders, reduced overlaps in effort, and facilitated comparisons across securities. In these ways, their activities broadened and deepened access to capital markets for borrowers and lenders alike. Over time, CROs evolved a successful methodology for evaluating and classifying credit risk. They built their reputations and validated their methods by comparing the statistical performance of hundreds of classifiable securities and sorting out differences in the survival rates of securities² and the corporations that issued them. Quality differences are summarized in a series of letter grades.

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² This function is critical for structured credit instruments, but it also applies to a considerable amount of conventional corporate debt. For example, subordinated debt will usually carry a lower rating than senior debt and long-term debt will usually carry a lower rating than short-term debt.

"Investment-grade" securities receive a grade ranging from a high of AAA to a low of BBB (or Baa3).³ Securities rated below this range are often described as "junk." (See Table 1 for a comparison of the grading systems used by each of the three major CROs.)

Today, for bonds issued by well-established corporations, the value that CROs can add is reduced by the wide availability of data on quality differences contained in credit spreads and the prices of credit default swaps. But potential value-added for CROs remains high in assessing the creditworthiness of innovative instruments, illiquid securities, and initial public offerings.

B. How Did CROs Achieve Credibility?

Investors came to trust the judgment of CROs only after they established a track record for accuracy and a reputation for independence from both issuers and distributors of the securities CROs rated. Initially, CRO incentives aligned nicely with those of investors because their principal source of revenue was the sale of bond manuals to investors. These manuals assigned risk-ratings to publicly-traded bonds and were intended to help subscribers assess the credit risk of alternative investments. A CRO became and remained profitable only to the extent that the value it added to customers' assessments of risk made it worthwhile for investors to subscribe to its publications.

Over time, the successful performance of incumbent CROs raised a natural barrier to new entrants. Because credibility came from being successful over time, the lack of a track record put new firms at a disadvantage. Long before the SEC began to certify CRO reliability, the market was dominated by the three firms that started the industry.

C. When and Why Did the Concerns for Accuracy by CROs and Investors Diverge?

Two events caused a misalignment to develop between the interests of investors and CROs. The first distortion was a direct consequence of evolving efforts by government regulators to outsource to the CROs a good part of the job of evaluating the creditworthiness of the institutions they oversaw. The second was the growing ease with which investors could physically duplicate CRO manuals. This meant that CROs could no longer keep control of the information they produced. Their inability to enforce their copyrights can be viewed as a form of Schumpeterian creative destruction that emerged indirectly as a consequence of improvements in copying and information technology.

Beginning with the Great Depression, US banking regulators, state insurance regulators, overseers of pension funds and the Securities and Exchange Commission (SEC)

³ Some tranches of securitizations were judged to be so secure that they received a super AAA rating.

decided that they could use ratings issued by the CROs to control the credit risk exposure of the institutions that they supervised. Taking on these quasi-governmental functions drove an expanding wedge between the interests of CROs and those of household and institutional investors. As Frank Partnoy (1999) has stressed, this allowed CROs to add regulatory dispensations to their product lines. Opportunities for manipulating these dispensations gave regulated institutions a perverse appetite for over-rated securities. By purchasing a security whose rating it knew to be inflated, a bank or other financial firm could reduce the effective burden of government capital requirements without risking penalties from government supervisors.

Inevitably, the demand of regulated institutions for highly-rated assets greatly exceeded the supply of bonds offered by highly-rated corporations. Indeed, the number of nonfinancial corporations in the United States receiving this top rating fell from 50 in 1980 to only 2 in 2009. The insistence of various regulators that their regulatees hold large amounts of highly-rated assets boosted the growth of the securitization market. Securitizers could manufacture substitutes for top-rated bonds if - and only to the extent that - CROs could or would certify that particular synthetics were equivalent to bonds issued by AAA and AA-rated corporations. Table 2 illustrates the place that CROs held in forging a chain of due diligence for securitizations. CROs not only certified the work of the parties that preceded them in the securitization chain, they were expected to have overseen the work of model-builders and servicers as well.

In recent years, the demand for over-rated debt was intensified by two additional channels through which governmental supervisory authority was outsourced to CROs. First, supervisors of major US housing-related government-sponsored enterprises (GSEs), such as Fannie Mae and Freddie Mac, allowed these firms to fulfill Congressional mandates to support low-income housing loans by purchasing AAA-rated tranches of securitizations constructed from pools of subprime and other kinds of high-risk mortgage loans. GSE demand for AAA-rated subprime and other high-risk mortgage securitizations was far from discriminating and was met by an increasingly shoddy supply. By the time the bubble burst in 2007, the GSEs held roughly half of outstanding AAA-rated securitizations.

Second, Basel II's standardized minimum capital standard for internationally active banks was framed so that it too relied heavily on CRO ratings. A regulated institution's capital requirements could be reduced by holding instruments that had received a higher credit rating for high-return securities than traditional credit analysis would justify. In fact, banks were willing to pay a premium for over-rated securities. More than a few securitizers were happy to service the increased demand by designing relatively opaque securities that exploited weaknesses in the CROs' credit models and governance process. This supported an increased demand for the services of CROs willing to mis-certify such securities. Thus, Basel II increased CRO revenues and the salaries that managers of CROs could pay themselves for

over-rating synthetic instruments. Using ratings for regulatory purposes distorted the interests of managers of regulated institutional investors and intensified CRO conflicts of interest by aligning their cash flows more closely with those of issuers. Institutions and issuers both benefitted when CROs' analysts overstated credit quality.

In selling information, CROs resemble newspapers and other kinds of news media. Changes in technology undermined CROs' ability to fund their operations from subscription fees. Widespread use of copying machines and the introduction of faxes and emails made it increasingly difficult for CROs to get users of ratings to pay them by subscribing to their published work, a problem the internet is imposing on newspapers today. Eventually revenue from selling bond rating manuals to investors could no longer cover costs. Early in the 1970s, this led CROs to jettison their subscriber revenue model. Instead of collecting revenue from subscribers, they decided to collect fees from the issuers of securities that they were rating. While CROs had always resembled newspapers and magazines in relying on revenue from subscribers and newsstand sales to readers, they were now getting to collect the equivalent of advertising revenues. This created a more reliable stream of revenue, but shifting to this new pricing plan created a worrisome congruence of issuer and CRO benefits from inflated ratings.

We maintain that the courts should have ruled that a ratings-for-sale orientation invalidated CROs' First Amendment freedom-of-the-press protections. Because newspapers and magazines carry paid advertising, *proving* their editorial independence is a perennial issue. To mitigate the conflicts of interest that advertising revenues pose, reputable news media have strict codes of ethics designed to insulate their editorial judgments from commercial pressures, and laws require them to avoid and correct false advertising. Somehow CRO managers convinced judges, investors, and regulators that the intangible value of maintaining their reputation for accuracy would negate the temptation to favor important individual issuers over what had become free-riding investors. Nor was anything done to make sure that the structure of executive compensation was linked more strongly to the intangible value of CRO reputation than to the flow of short-term profits.⁴ Revenues from dicey securitizations supported executive salaries that steadily milked CROs' hard earned reputations for reliability until these reputations were nearly destroyed. In effect, CRO managers sold out - rather than sustained or enhanced their firms' reputations.⁵ At the

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⁴ One possibility would be to amortize the revenues received for rating a securitization over the lives of the securities issued. This would ensure that rapid increases in the volume of ratings (which could too easily be achieved by lowering the quality of the ratings) would not be immediately translated into larger bonuses and salaries. Amortizing the revenue from multi-year securities (rather than accruing the upfront value of fees) would constrain how much current income could be distributed as salaries and bonuses. It might also encourage managers to take a longer-term view of the accuracy of their evaluations because substantial and sustained undervaluations of risk would reveal themselves over time and make it easier to reduce the compensation paid to managers and analysts whose work undermined the future value of certification by the CRO.

⁵ See US Senate Subcommittee Report (2011, 243-317). A steady flow of securitizations creates incentives for CRO managers that are much stronger that the prospect of losing the custom of a single corporation that issues

height of the subprime bubble, a handful of issuers of securitizations could and did direct billions of dollars a year in revenue to cooperative CROs.

Without making CROs accountable for the consequences, regulators allowed CROs to enable insurance companies, depository institutions, and investment banks to reduce their effective capital requirements and also to determine what securities were eligible for investment by public pension funds, mutual funds, and money-market mutual funds. Ratings could even determine whether particular institutions (e.g., life and bond insurance companies) could effectively do business at all. This is because life insurers rated below the A category cannot easily write new business and guarantees from bond insurers that are not highly rated cannot improve a borrower's cost of capital enough to earn a breakeven premium.

Ratings issued by the CROs also became increasingly important as a way to trigger covenant provisions in private contracts as well. A ratings downgrade may accelerate repayments of loans, increase collateral requirements in credit default swaps, force liquidation of collateral in Collateralized Debt Obligations, and accelerate payment under guaranteed insurance contracts (GICs). Especially during difficult times, a downgrade could set off a downward spiral for the corporation in question, possibly ending in bankruptcy.

D. How CROs became NRSROs

Although CRO ratings had been used for regulatory purposes since the 1930s, the SEC did not specify whose ratings it would rely upon until 1975. In that year, it devised a category of Nationally Recognized Statistical Rating Organization (NRSRO). Initially, applications for this status were processed in an opaque manner through the issuance of no-action letters and very few NRSROs were formally designated. This system was not changed until the Credit Agency Reform Act of 2006. Among other things, this Act attempted to make NRSRO status easier to obtain. Despite these pro-competitive intentions, two years later, only 10 NRSROs had been designated. Even now, the big three CROs dominate the field, with Moody's and Standard & Poor's far more important that Fitch.

Of course, it is important to see that enhancing competition need not improve the quality of ratings. CROs can and do compete in other ways than ratings accuracy and the data and models used in the rating process are *not* readily available to be checked by outside experts. Competition might increase innovation in credit risk modeling, lower fees, and improve the accuracy of credit ratings. Alternatively, it could result in a race to the bottom if

bonds from time to time and generates only a small fraction of annual CRO revenues. Moody's, the only free-standing CRO for which such information could be straightforwardly obtained, received nearly half of its revenue from subprime securitizations in 2006.

new NRSROs competed for market share by concocting inflated ratings for the benefit of issuers that sought only to borrow more cheaply and to regulated institutions that wished to hold over-rated securities as a way to extract safety-net subsidies. Although profitable in the short run, this strategy insured an inevitable decline in the intangible CRO reputations when ratings proved consistently wrong. This strategy could not and did not succeed in the long run.

E. What Undermined Confidence in CROs?

In 2007-2008, the unprecedented wave of downgrades summarized in Figure 4 revealed how badly CROs had overstated the quality of subprime-related securities, collateralized debt obligations, and various other complex securitizations. The worst year for multi-notch downgrades of corporate securities was 2001, which recorded the collapse of Enron, WorldCom and the largest sovereign default to date, that of Argentina. That experience is contrasted in Figure 4 against the downgrades observed for subprime residential mortgage-backed securities from 2007 to 2008. Even in the year of maximal corporate defaults, triple-notch downgrades of corporate debt proved extremely rare. Moreover, such downgrades were concentrated in the speculative class. In 2007-2008, triple-notch downgrades affected nearly 68% of BBB-rated subprime securitizations. This was disruptive and potentially destabilizing because BBB is just above the lower bound that defines the investment-grade securities that regulated institutions are generally required to hold. Downgrades of a broad class of securities below investment grade may cause regulated institutions to sell these securities more or less simultaneously, undermining the liquidity of secondary markets and driving down prices to levels that create fire sale losses for selling institutions and transmit balance-sheet losses to institutions that hold the downgraded securities.6

It would be wrong to infer from the concentration of early downgrades in the lowest grades that CROs did a good job of rating AAA tranches. Because most subprime securitizations are tranched into a "waterfall" structure for absorbing losses, CROs had to rerate low-grade tranches before higher-rated securities could even begin to be analyzed. Eventually, nearly 60 per cent of the AAA-rated securities were downgraded by at least three notches.

Whether or not explicitly recognized on a holder's balance sheet, losses occasioned by rising credit spreads generated by downgrades lowered the value of outstanding securities.

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⁶ To some extent other institutions can mask losses on unsold securities by drawing on accounting gimmicks. Classifying an asset as "held to maturity" or placing it in the "banking book". These strategies allow items to be carried on a bank's balance sheet at the lower of cost or current market value (which because it requires effort and documentation seldom the option employed).

This decline in asset values undermined the viability of institutions and the liquidity of markets around the world. With CRO ratings discredited, investors lost faith both in the ability of firms to manage and communicate their risks and in the ability of governments to oversee the process. Soon it became clear that monoline insurers that guaranteed repayments to investors in securitizations no longer had the reserves to back up their guarantees. This had adverse consequences for seemingly unrelated markets. For example, when markets lost confidence in the monoline insurers, yields on insured municipal bonds rose and their holders' net worth declined, too.

The weaknesses revealed in the models and samples used by CROs and other experts to forecast and price risk called into question the competence of executives responsible for supervising these functions and of higher and outside supervisors who were supposed to monitor their behavior. Uncertainty about what institutions might fail crippled interbank markets and securitized debt hardly traded at all. Figure 2 shows that for almost a year, new issues of privately-sponsored securitizations all but vanished.

Prior to the Dodd-Frank Act of 2010, ratings firms in the United States had been subject to light-touch oversight by the Securities and Exchange Commission. The European Union was somewhat quicker to address the collapse of investor confidence in the work of CROs. More than 40 percent of structured securities had been placed in Europe and it was dangerous for EU regulators to suppose that the historically ineffective US SEC would fix things quickly. The preamble to the EU regulation on credit rating "agencies" expresses a particularly European concern: that, despite the importance of credit rating activity, "most credit rating agencies have their headquarters outside the Community. Most Member States do not regulate the activities of credit rating agencies or the conditions for the issuing of credit ratings."

On May 6, 2009, the European Parliament legislated that, beginning in 2010, CROs operating in the EU have to register with the Committee of European Securities Regulators (CESR) and also with the member nation in which they are based. Provisions were also made to accept "third country ratings" through an endorsement system in which an EU-based CRO must guarantee that the third-country ratings are held to standards equivalent to EU standards. EU (2009, 55) states: "In order to maintain a high level of investor and consumer confidence and enable the ongoing supervision of credit ratings issued in the Community, credit rating agencies whose headquarters are located outside the Community should be required to set up a subsidiary in the Community in order to allow for the efficient

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⁷ See Official *Journal of the European Union* 2009, L 302/1. While technically true, it should be noted that Fitch is controlled by a French holding company, Fimilac, S.A., headquartered in Paris. Fitch itself, however, is dual-headquartered in New York and London.

supervision of their activities in the Community and the effective use of the endorsement regime."

Day-to-day oversight of the CRO will still be conducted by a home-country supervisor and, if the CRO has branches in several other EU countries, by a "college" of national supervisors from each of the countries in which the CRO has major operations. National regulators are required to impose strict rules ranging from disclosure of CRO models (although not in such detail that a rival could replicate them) and methodologies to corporate governance standards. To lessen conflicts of interest, CROs in the EU may not provide advisory services. They must use a specific symbol to differentiate the letter grades of complex products from those assigned to ordinary bonds. They must maintain a data repository of outcomes with CESR that can be accessed by the public. EU-based CROs must have at least two directors on their boards whose salary does not depend on the profits of the CRO. Finally, they must develop an internal process to review specifically the quality of their ratings and publish an annual transparency report.

Although CESR is supposed to coordinate standards, national enforcement of EU rules is bound to support differences in the operational meaning of rating grades even within the EU. To show that regulatory competition survives between Europe and the US, we may note that the EU officials have expressed interest in the opportunity to gain competitive advantage from taking charge of the registration process. EU (2009, 73) states: "The Commission should also submit a report to the European Parliament and the Council assessing incentives for issuers to use credit ratings agencies established in the Community for a portion of their ratings."

F. The US Response

The US response proved slower and, as long as it was managed solely by the SEC, more tentative. The Dodd-Frank Act was not passed until three years after the crisis began. In the meanwhile, the SEC amended its rules to require NRSROs to make additional public disclosures about the methods used in rating structured-finance instruments, to publish histories of their ratings, and to maintain internal records to help strengthen examinations by

⁸Utzig (2010) notes that "Contrary to policymakers' intentions, the creation of a European CRO could result in investors considering the ratings of European companies and structured finance products to be of lower quality than the ratings of companies in other regions. This would have an adverse effect on the funding opportunities and costs of European firms and would weaken the EU financial market. An inappropriate attempt of this kind to boost competition in the ratings market could thus damage the reputation of credit ratings as a whole and fly in the face of the actual objective of state regulation."

the SEC. Like the EU, the SEC also prohibited NRSROs from both advising a client on how to obtain a particular rating and actually rating the security they helped to design.⁹

In September 2009, the SEC adopted additional amendments calling for broader disclosures of ratings histories, including initial rating and subsequent actions such as downgrades, upgrades, affirmations, and placements on watch lists. It also created a mechanism to allow NRSROs that were not hired to rate particular structured finance products to determine and monitor credit ratings for these issues anyway. It was thought that this might help investors by providing a greater diversity of views and facilitating entry into the rating industry.

While the Dodd-Frank Act was wending its way through Congress, the SEC issued numerous other proposals for comment that it might still eventually adopt. Several proposals aimed at helping investors understand which issuers generate the most revenue for the CRO, presumably to limit the scope for conflicts of interest. Another proposal would have required disclosure of preliminary credit ratings in specified circumstances to alert investors that "ratings shopping" might have occurred and that such shopping might reduce the quality or reliability of the ratings.

The most potentially powerful proposal sought to enhance CRO accountability by lifting their current exemption from experts' liability under the Securities Act for ratings that were used by issuers and other distributors to market securities issued in SEC-registered offerings. Table 3 shows the public liability established by the Supreme Court for another watch-dog agent, independent public auditors. This degree of accountability and range of sanctions is an order of magnitude greater than anything CROs have faced. For designated classes of securities, this provision could make them accountable for the kinds of self-dealing, negligence, and recklessness in rating that was documented in the Senate subcommittee report (U.S. Senate 2011).

The Dodd-Frank Act goes some distance in this direction by subjecting CROs to experts' liability for statements about ratings contained in any prospectus for asset-backed securities. This liability was to exist from the date of passage (July 22, 2010) forward. However, industry pushback has been intense. Showing the clout of the CRO industry, the SEC has indicated that for an indefinite time it will not bring enforcement actions against issuers that do not disclose ratings in their prospectus.

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⁹ While this reform seems superficially meaningful, it may be a distinction without practical importance. When a CRO assigns a rating to an issue, it must explain why it would not be rated higher. Even though these interchanges are not labeled "advising" they are the functional equivalent.

The other daring features of the Dodd-Frank Act (DFA) include removal of numerous statutory references to CRO ratings and a requirement for federal agencies to modify their regulations to remove references to credit ratings. In addition, the DFA orders federal agencies that regulate financial institutions to stop relying on credit ratings issued by CROs. However, the DFA leaves it up to these agencies to come up with alternative ways of assessing credit risk and assuring due diligence. While not yet established, these alternative methods of assessment are bound to incorporate subjective elements that will be difficult to define and police (Haselkorn and Hepinstall, 2011).

For banking agencies, credit ratings were enshrined in prudential standards and in capital requirements in particular. The SEC and the Commodity Futures Trading Commission (CFTC) used them in much the same way to supervise brokerage firms, money market mutual funds and collective funds under their respective jurisdictions.

In May 2011, the SEC issued a proposal to allow brokerage firms to develop and use credit-risk models of their own making based on a mix of factors specified by the regulator and other relevant factors chosen by each firm. The proposed lack of standardization in risk assessment in this proposal seems excessive. Firms and federal agencies must be directed to: (1) find ways to assess and designate best practices; (2) respond to deviations from this standard with appropriate sanctions; and (3) disclose sufficient relevant information for third parties to audit the accuracy of ratings models and to offer alternative opinions, when appropriate.

Finally, the Act establishes an Office of Credit Ratings within the SEC to oversee credit rating activity. The Act acknowledges that conflicts of interest must be carefully monitored and addressed. Section 932 (a) (4) sets up a tiered process for addressing conflicts of interest. The CROs are to conduct reviews to determine whether incentive conflicts at the employee level influenced any credit rating and to revise the rating where this seems appropriate. In turn, the SEC is directed to review the code of ethics and conflicts-of-interest policies of each registered NRCRO. But what actions SEC personnel might take when these reviews prove unsatisfactory has yet to be specified.

3. Recognizing Credit Rating as a Profession

In the words of Morgenson (2011): "It is hard to say what's more exasperating: the woeful performance of the credit ratings agencies during the recent mortgage securities boom or the failure to hold them accountable in the bust that followed."

The DFA leaves it to regulators to identify gaps in the usefulness of ratings information. By and large, CROs focus only on point estimates and on too few of the several dimensions of credit risk. Two of the three dominant CROs claim only to estimate the

probability of default, while the third goes on to estimate the value of loss given default. But professional statisticians have always stressed interval estimation and portfolio theory shows that, in any event, a security-by-security rating of credit risk is inadequate to measure or manage portfolio risk. In large portfolios, an individual issuer's probability of default matters less than the probability that many securities will default at the same time. So long as ratings neglect correlations in default probabilities across asset classes and the standard deviations of their point estimates of default probabilities, ratings will remain of limited value to investors and regulators even if CRO conflicts of interest were eliminated.

To the extent that CROs act in a *de facto* fiduciary capacity, top managers and ratings personnel owe clients duties of loyalty, competence and care. Figure 5 shows that in managing credit today many classes of alleged experts make probabilistic assessments of the likelihood and consequences of default on individual securities and on different tranches of structured securitizations. Both within and across firms, expert assessments can differ widely in quality. At CROs, conscientious professional employees should want to subject themselves to an incentive structure that encourages each and every one of them to provide his or her best assessment of default probabilities, loss given default, correlations, and standard errors of estimate and to do this not only when a security is issued but also to update these assessments promptly when and as conditions change. As in other professions that combine art with science, the most effective way to achieve that goal is through heightened transparency that permits experts to review and critique one another's methods and assessments. The insistence of CROs on shielding their methods from external replication and testing impedes progress and encourages profit-driven securitizers and top managers of CROs to punish (or fail to reward) analysts for accurate work. As in other industries, property rights to improvements in methods can be established and licensed through the patent process.

Over time, peer interaction can judge which experts and methods are sound and whether new methods price market outcomes more accurately. If incentive compatibility were established between the enterprise and the various users of CRO services, accurate work would be worth more to employers because it would reduce investor uncertainty and enable issuers to borrow on more favorable terms.

A. Establishing Standards of Best Business Practice

Singly or in concert, governments could convene a Board of leading participants in securitization markets and give them a mandate to improve the transparency of the securitization process and to set standards of practice that would realign the incentives of loan originators, securitizers, and CROs with those of final investors. Herring and Levinson (2009) propose that this be done by a Securitization Transaction Approval Review (STAR) Board. Board membership would be tilted toward leading institutional investors: pension funds, mutual funds, insurance companies, banks and endowments. However, it would also

include various service providers – underwriting investment banks, originating lenders, lawyers, accountants, rating agencies and monoline insurers – on the grounds that such enterprises share an interest in revitalizing and properly incentivizing the securitization process.

Not every tranche of every securitization can be rated adequately using existing data or models and investors need to know when a rating is and is not particularly dicey. Investors would be assured that securitizations awarded the STAR standard meet industry-wide best practices for transparency, diligence, documentation, statistical modeling, and information communication. It would also certify that the financial incentives of all service providers line up with the interests of final investors. By reducing agency costs engendered by the securitization *process* itself, the STAR label can allow investors to price the fundamental risks inherent in each deal without having to worry about pricing substantial amounts of unresolved incentive conflict.

STAR evaluation requires for all service providers the establishment and regular reassessment of explicit best practices. STAR committees would adjust and refine the standards over time. For example, CROs would be expected to opine on the credit quality of the securities based on criteria that STAR would specify. We would expect STAR to enforce rigorous transparency requirements such as: 1) full disclosure of the assumptions a CRO uses in assigning a given rating; 2) full disclosure of all information received from the sponsor of a securitization; and 3) disclosure of statistical or stress tests designed to estimate the stability of the rating to changes in circumstances and assumptions. CROs would *not* be required to disclose the parameters or forms of their models to the extent that they contain proprietary information. CRO personnel ought to be given incentives to report upon and improve the accuracy of their models. Rating personnel need to be closely scrutinized concerning assumptions they make about correlations in the underlying collateral.

Lawyers and underwriting investment bankers would be required to assume an affirmative obligation to look for and report undisclosed information about correlations in the underlying collateral or anomalies in the securitization structure that might adversely affect performance. Most importantly, to align incentives between service providers and investors, fees paid to each party in the securitization process should be subject to claw backs and deferred compensation, where appropriate. And the CROs would be subject to the same kind of liability as other professionals. In this way providers of securitization services would be exposed to loss if the loans held as collateral were to systematically default with greater than predicted frequency and they would share the economic risks of the transaction as partners with the investors. No one wants CROs to rate only safe securities, but it is reasonable to expect them to rate all securities as accurately as possible.

4. Conclusion

By calling themselves "agencies," Credit Rating Organizations implicitly encourage at least some investors to forget that they are dealing with profit-making firms. The word "agency" conveys an undeserved impression of actions in the public interest that in practice users cannot expect. Around the world, the enhanced credibility of major CROs and regulation-induced institutional demand for highly-rated assets supported a disastrous bubble in privately-sponsored securitizations. Widespread loss of confidence in CROs' ability or willingness to provide accurate ratings for complex securitizations led to the bubble's bursting in 2007 and the resulting decline in the value of asset-backed securities rendered many institutions deeply insolvent. As individual insolvencies deepened and suspicion spread to other similar institutions, the securitization market collapsed. Far from demanding new issues, institutions lobbied their governments to take existing holdings off their hands at subsidized prices.

The CRO business model is rife with conflicting incentives. CROs produce benefits for four distinct customer groups: issuers, regulated investors, unregulated investors, and regulators. Issuers want the highest rating they can obtain and to conceal or sugarcoat adverse information to keep their borrowing costs low. Unregulated investors and regulators want the most accurate possible estimates of risk so that they can safely substitute CRO analysis for their own due diligence. Regulated investors want the issues they buy to be as highly rated as possible to conserve regulatory capital and to maximize projected returns on the regulatory capital they hold. Unfortunately, most investors cannot assess the quality of the analysis they receive until long after their investment decisions have been made. Regulators can, in principle, look carefully into the models and data CROs employ, but their inclination and incentives to do so are not apparent.

When technological advances persuaded the CROs to shift from investor-pays to issuer-pays compensation, these incentive conflicts became especially intense. As the revenues from complex structured securitizations grew and became concentrated among a few high-volume issuers, these issuers gained and exercised market power over CRO managements. This power deepened the incentive conflicts that CRO managers face. At the same time, the volume and complexity of new instruments increased the benefits that investors could gain from substituting the judgment of trusted expert analysts for their own due diligence and increased the ability of regulators to excuse and hide acts of regulatory forbearance.

Complexity also increased the kinds of information an issuer might seek to withhold. For years, investor trust in the reputations of major CROs (Moody's, Standard & Poor's, and Fitch) was sustained by their reasonably good track record in rating corporate debt.

Aligning the interests of agents and final investors has been a problem because conflicts exist between the goals of maximizing the short-term value of CRO profits and protecting the wealth of their shareholders and other parties. Government reliance on ratings in writing financial regulations encouraged fiduciary institutions to allocate billions of dollars based on CRO assessments. The fiduciary responsibilities of CROs must be defined and enforced because history shows that they cannot simply be presumed. Widespread dissatisfaction with the performance of the CRO industry before and during the securitization crisis has not been accompanied by a political consensus about how its activities should be reformed. By moving in uncoordinated directions, legislation in the US and EU threatens to undermine the efficiency of world credit markets. Authorities have yet to deal effectively with the root problems of improving the transparency of the ratings process and realigning the incentives of CROs, issuers, regulators, and investors.

Removing ratings from all rules and regulations will diminish but not eliminate pressure for grade inflation. The effort to do this should encourage experts of all kinds to advise investors in creative ways about the credit quality of securities and institutional portfolios. Sales of regulatory dispensations resemble the sin of Simony that priests and bishops committed in the Middle Ages by selling spiritual and temporal indulgences. Regulatory reliance on CRO ratings empowered CROs to sell the equivalent of plenary indulgences to would-be sinners. Such policies make diligent efforts to produce honest ratings information less rewarding than it should be.

Participants in the securitization process should realize the essential policy challenge is not simply reviving RMBS activity. Restoring confidence in the ratings process is equally important. Trust can only be increased by establishing ground rules that improve transparency and independence while assuring better incentives within the CROs for building ratings models and handling underlying data. It is appropriate to allow the details of plans for doing this to be proposed by insiders who fully understand the details of the securitization process, but it is equally appropriate to insist that governments and other outsiders challenge and rework insider plans to identify and eliminate subtle burdens that the financial industry might otherwise conspire to shift to taxpayers and other poorly represented groups.

References

Adrian, Tobias, and Hyun Shin. 2009. "The Shadow Banking System: Implications for Financial Regulation," Federal Reserve Bank of New York Staff Report 382 (July). http://www.newyorkfed.org/research/staff reports/sr382.pdf

European Union. 2009. "Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on Credit Rating Agencies," *Official Journal of the European Union* (September 16).

Froeba, Mark. 2009. Testimony, "Examining Proposals to Enhance the Regulation of Credit Rating Agencies." Senate Committee on Banking, Housing, and Urban Affairs (August 5). Washington DC.

Group of Twenty (G-20). 2008. *Declaration of the Summit on Financial Markets and the World Economy.* Washington DC: G-20.

http://www.g20.org/Documents/g20_summit_declaration.pdf.

Group of Twenty (G-20). 2009. *Declaration on Strengthening the Financial System.* London: G-20.

http://www.g20.org/Documents/Fin Deps Fin Reg Annex 020409 - 1615 final.pdf.

Haselkorn, Dov, and Michael Hepinstall, 2011, *Impact of Proposed Alternatives to Credit Ratings in Market Risk Capital Rules*. New York: Oliver Wyman.

Herring, Richard, and Allen Levinson. 2009. "Restoring Confidence in Securitization – Why and How" (May).

http://fic.wharton.upenn.edu/fic/Policy%20page/other%20policy%20analyses.htm

Herring, Richard and Edward Kane. 2009. "Financial Economists Roundtable Statement on Reforming the Role of the Rating Agencies in the Securitization Process," *Journal of Applied Corporate Finance*, 21(1/Winter).

_____. 2010. "Ratings 'Agencies': How Regulation Might Help," *CESifo DICE Report* 1/201.

IOSCO, 2008, *Code of Conduct Fundamentals for Credit Rating Agencies*, The Technical Committee of the International Organization of Securities Commissions, Madrid.

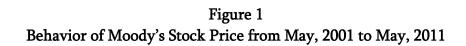
Morgenson, Gretchen. 2011. "Hey, S.E.C., that Escape Hatch is Still Open," *New York Times,* Business Section, March 6.

Partnoy, Frank. 1999. "The Siskel and Ebert of Financial Markets? Two Thumbs Down for the Credit Rating Agencies," *Washington University Law Quarterly* 77 (October).

Sharma, Deven. 2010. "Standard & Poor's on the Right Way to Create a Credit Rating," *Washington Post*, May 11: A16.

United States Senate, Committee on Homeland Security and Governmental Affairs, Permanent Subcommittee on Investigations. 2011. "Wall Street and the Financial Crisis: Anatomy of a Financial Collapse, Majority and Minority Staff Report (April 23). Washington, D.C.

Utzig, Siegfried. 2010. "The Financial Crisis and the Regulation of Credit Rating Agencies: A European Banking Perspective," ADBI Working Paper Series 88 (January).



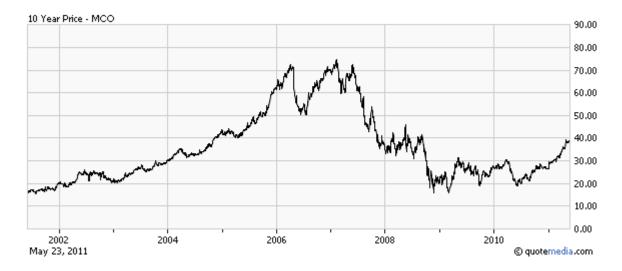
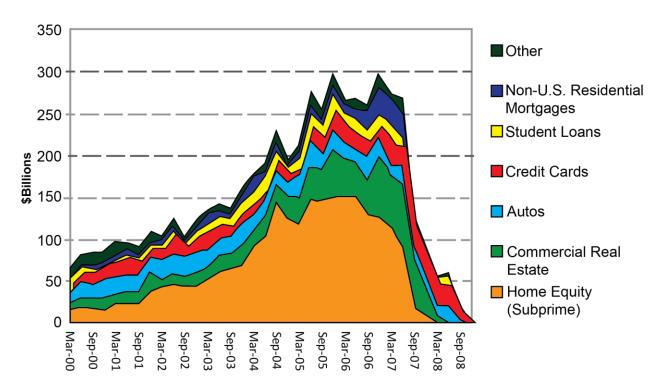


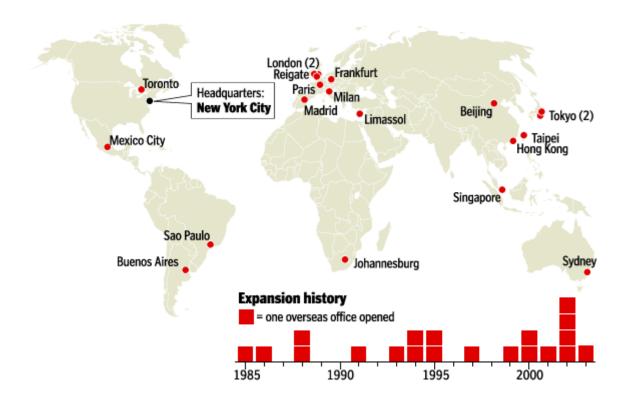
Figure 2

The Boom and Collapse of the Market in Privately-Sponsored Securitizations: New Issuance of Asset-Backed Securities in Three Months Prior to Date Shown, 2000-2008



Source: Adrian and Shin (2009)

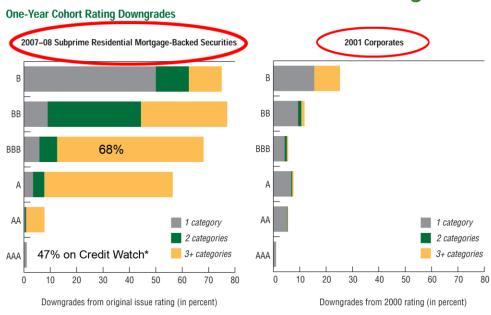
Figure3
Moody's Overseas Expansion, 1985-2004
Moody's overseas expansion began in earnest in 1985 when it opened its Tokyo office. Two decades later it had 20 overseas offices.



Source: Moody's and public filings as compiled and presented by The Washington Post.

Figure 4
Ratings for Structured Securities Prove Much More Volatile than for Corporate Debt

Multi-Notch Downgrades Undermine Confidence in Ratings

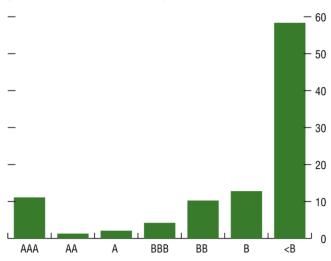


Source: Standard & Poor's. * As of 1/31/08

Source: IMF GFSR, 4/08, Box 2.3, p. 61.

Where Did All the AAA's Go?

(In percent, as of June 30, 2009)

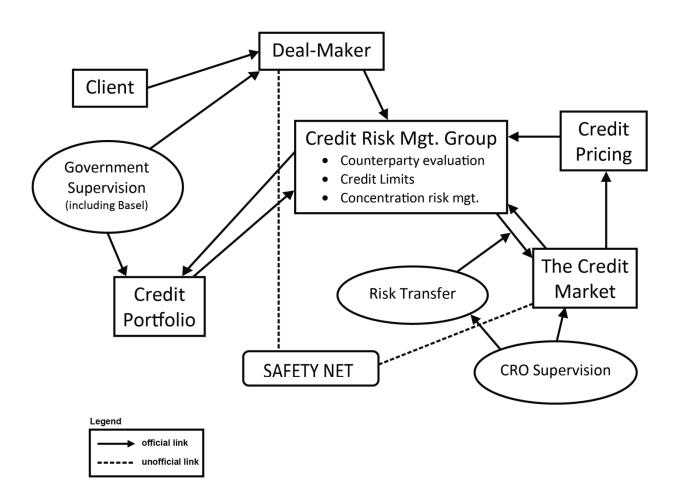


Source: Standard & Poor's.

Note: S&P rating distribution of 2005–07 issued U.S. AAA-rated asset-backed security collateralized debt obligations.

Sources: IMF Global Financial Stability Report, April 2008, Chapter 2, Structured Finance: Issues of Valuation and Disclosure, page 61 and IMF Global Financial Stability Report, October 2009, Chapter 2, Policy Initiatives Aimed at Restarting Sustainable Securitization, p. 17

Figure 5
Financial Engineering: The Modern Credit-Risk Management Process Uses More Outside
Information and Entails Extra Deal making



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 ${\bf TABLE~1}$ History and Rating Schemes of the Big Three CROs

	Quality	Fitch Ratings	Moody's	Standard &Poor's
Started		1913, NYC	1909, NYC	1906 Standard Rating Service. Merged with Poor's to form S&P, 1941
Grades	Investment	AAA	Aaa	AAA
	Investment	AA+, AA, AA-	Aa1, Aa2, Aa3	AA+, AA, AA-
	Investment	A+, A, A-	A1, A2, A3	A+, A, A-
	Investment	BBB+, BBB, BBB-	Baa1, Baa2, Baa3	BBB+, BBB, BBB-
	Speculative	BB+, BB, BB-	Ba1, Ba2, Ba3	BB+, BB, BB-
	Speculative	CCC+, CCC, CCC-	Caa	CCC+, CCC, CCC-
	Speculative	CCC+, CCC, CCC-	Ca	СС
	Speculative	С	С	С
	Default	D		D

Source: The websites of each of the three CROs

Table 2

Parties Whose Short-Cutting of Due Diligence Helped to Inflate the Value of Securitized Loans and/or to Hide Leverage and Interest-Rate Risk Taken by Institutions Protected by the Safety Net

- A. Accounting Profession & Appraisers
- B. Lenders, Investment Bankers & Derivatives Dealers
- C. CROs: Credit Rating Organization
- D. Statistical Modelbuilders
- E. Monoline Credit Insurers
- F. Financial Servicers
- G. GSEs and Trusted Investors (Made the Markets)
- H. Affordable Housing Goals set by Congressional Committees Overseeing the Financial Services Industry

By certifying the public reports that collectively depict a corporation's financial status, the independent auditor assumes a public responsibility transcending any employment relationship with the client. The independent public accountant [465 J.S. 805, 818] performing this special function owes ultimate allegiance to the corporation's creditors and stockholders, as well as to the investing public. This "public watchdog" function demands that the accountant maintain total independence from the client at all times and requires complete fidelity to the public trust. To insulate from disclosure a certified public accountant's interpretations of the client's financial statements would be to ignore the significance of the accountant's role as a disinterested analyst charged with public obligations.

U.S. vs. Arthur Young & Co. (1984) 465 U.S. 805, 817-18