

## Essay

# If You Misrate, Then You Lose: Improving Credit Rating Accuracy Through Incentive Compensation

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*Credit rating agencies (CRAs) serve many roles in maintaining properly functioning debt markets. Their contribution to both Enron-era financial scandals and the 2008-2010 financial crisis, however, has led to many calls for credit rating reform. This Essay proposes an incentive compensation scheme in which CRAs are paid with the debt they rate. If a CRA overrates debt, then the CRA suffers a financial penalty because the debt the CRA receives as compensation is less valuable than the cash compensation that the debt is replacing. We believe that this reform, though imperfect, would be more likely to generate accurate ratings than other credit rating reform proposals. We also discuss extensions of our basic debt compensation proposal that mitigate some of debt compensation's weaknesses, though at the cost of greater complexity.*

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## I. Introduction

How does one estimate the probability that a loan will go into default? This question is critical in the face of the 2008-2010 financial crisis. The simplest answer may be to “leave it to the market,” but there are several obstacles to this approach. To protect against financial instability, governments may provide some sort of guarantee to creditors of financial institutions. To ensure that financial institutions do not exploit this guarantee, regulators may require financial institutions to hold “safe” capital, which in turn requires some estimate of the default probabilities of securities held by financial institutions.<sup>1</sup> Default probability estimates are also useful for preventing pension managers and other money managers from taking excessive risks. Finally, many credit securities have relatively illiquid markets, making market-oriented estimates of default probabilities imperfect. This problem grows especially acute in periods of market failure, such as the stoppage of markets for mortgage-backed securities and commercial paper in the fall of 2008.

Credit ratings exist to ameliorate many of these deficiencies. Credit rating agencies (CRAs), such as Standard & Poor’s, Moody’s, and Fitch, are paid by loan issuers to estimate the default probability of loans.<sup>2</sup> Issuers pay for ratings, because a host of government regulations require investors to hold ratings above a certain threshold; without a rating, the pool of investors for the loan shrinks. By providing information to suppliers of capital, ratings also help mitigate asymmetric information problems that may undermine market functioning.<sup>3</sup> This has created an enormous market for credit ratings. American CRAs rate over \$30 trillion of debt,<sup>4</sup> and Moody’s has had the highest profit margin in the Standard & Poor’s 500 for five consecutive years.<sup>5</sup>

<sup>1</sup> BASEL COMM. ON BANKING SUPERVISION, INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS: A REVISED FRAMEWORK (2004), available at <http://www.bis.org/publ/bcbs107.pdf?noframes=1> [hereinafter BASEL II].

<sup>2</sup> U.S. Securities and Exchange Commission, Credit Ratings Agencies—NRSROs, <http://www.sec.gov/answers/nrsro.htm> (last visited Nov. 18, 2009) (“A credit rating agency is a firm that provides its opinion on the creditworthiness of an entity and the financial obligations (such as bonds, preferred stock, and commercial paper) issued by an entity.”).

<sup>3</sup> See George G. Triantis & Ronald J. Daniels, *The Role of Debt in Interactive Corporate Governance*, 83 CAL. L. REV. 1073, 1110 (1995).

<sup>4</sup> See Jeffrey Manns, *Rating Risk After the Subprime Mortgage Crisis: A User Fee Approach for Rating Agency Accountability*, 87 N.C. L. REV. 1011, 1036 (2009).

<sup>5</sup> See *Hearing on Credit Rating Agencies and the Financial Crisis Before the H. Comm. on Oversight and Government Reform*, 111th Cong. 2 (2008) [hereinafter *House CRA Hearing*].

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Unfortunately, failures by the three primary bond raters have played a central role in the 2008-2010 financial crisis.<sup>6</sup> The agencies gave high ratings to securities through a form of financial alchemy.<sup>7</sup> These ratings facilitated the sale of the securities to institutions seeking relatively high yields from securities that met or exceeded their minimum rating qualifications, helping to fuel the housing and credit bubbles by increasing access to credit. Financial companies, the creators of the securities, held mortgages and other assets as inventory to form more securities. When the housing and leveraged buyout bubbles burst, the mortgages underlying the securities began to default, reducing the value of the highly-rated securities and of the inventory held by financial companies. These reductions in value, in turn, reduced the capital cushion of highly-leveraged financial companies, creating the conditions for the financial meltdown.<sup>8</sup> Finally, a lack of confidence in the accuracy of ratings contributed to market failures fueled by information asymmetries. Without reliable ratings, complicated securities became untouchable at almost any price.<sup>9</sup>

Unlike many other organizations implicated in the financial crisis,<sup>10</sup> Standard & Poor's, Moody's, and Fitch continue to exist and occupy the same role that they did before the crisis.<sup>11</sup> Rating agencies emerged

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<sup>6</sup> See Manns, *supra* note 4, at 1043-47 ("Rating agencies not only appear culpable for facilitating the crisis but also appear grossly negligent, if not willfully complicit, in papering over its magnitude and allowing the bubble market to grow even more.") (citation omitted); see also *House CRA Hearing*, *supra* note 5, at 4 (statement of Rep. Waxman, Chairman, H. Comm. on Oversight and Government Reform) ("The story of the credit rating agencies is a story of a colossal failure. The credit rating agencies occupy a special place in our financial markets. Millions of investors rely on them for independent objective assessments. The rating agencies broke this bond of trust . . ."); David Reiss, *Subprime Standardization: How Rating Agencies Allow Predatory Lending to Flourish in the Secondary Mortgage Market*, 33 FLA. ST. U. L. REV. 985, 989-91 (2006); Mark Whitehouse, *Slices of Risk: How a Formula Ignited Market That Burned Some Big Investors*, WALL ST. J., Sept. 12, 2005, at A1; Joseph R. Mason & Joshua Rosner, *Where Did the Risk Go? How Misapplied Bond Ratings Cause Mortgage Backed Securities and Collateralized Debt Obligation Market Disruptions* 34-47, May 3, 2007, <http://ssrn.com/abstract=1027475>.

<sup>7</sup> See generally Efraim Benmelech & Jennifer Dlugosz, *The Alchemy of CDO Credit Ratings* (Nat'l Bureau of Econ. Research, Working Paper No. 14878, 2009), available at <http://www.nber.org/papers/w14878> (explaining how financial instrument issuers manipulated risky assets to achieve preferred credit ratings).

<sup>8</sup> See Floyd Norris, *The Homes May Be Solid, but the Loans Look Shaky*, N.Y. TIMES, June 30, 2007, at C3; Posting of Peter Cohan to BloggingStocks, *The \$18 Trillion Unpaid Price of Financial Alchemy*, <http://www.bloggingstocks.com/2007/08/18/the-18-trillion-unpaid-price-of-financial-alchemy/> (Nov. 18, 2007, 10:05 EST).

<sup>9</sup> Cf. George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970) (discussing asymmetric information and market failure).

<sup>10</sup> These include Fannie Mae, Freddie Mac, Bear Stearns, Lehman Brothers, American International Group, and Washington Mutual.

<sup>11</sup> The CEO of Moody's, Raymond MacDaniel, for example, first took office in early 2005 and continues in the position to the present despite the heavy criticism leveled at CRAs in general and Moody's in particular. See Moody's Corporation, *Officers and Directors*, <http://ir.moody.com/management.cfm> (last visited Nov. 18, 2009).

similarly unscathed from the criticism of their ratings that followed high-profile corporate scandals including Enron and WorldCom.<sup>12</sup>

Given the rating agencies' pivotal role in the crisis and seeming immunity from adverse repercussions, it is no surprise that proposals for reforming rating agencies abound. Some argue that barriers to entry for rating agencies should be reduced, allowing competition to improve the quality of ratings.<sup>13</sup> Others assert that rating agencies should be subject to liability for ratings mistakes, creating incentives for agencies to minimize errors. Still others blame the conflict of interest that arises because agencies are paid by the very debt issuers whose debt they rate. These conflicts of interest are exacerbated when issuers hire agencies to both perform ratings and to provide the issuers with consulting services regarding how to obtain preferred ratings. Instead of this method of payment, reformers advocate alternative payment systems, such as user subscriptions, government mandated user fees, or government support.<sup>14</sup> Finally, some advocate the abolition of investor restrictions that depend on ratings. Instead, the government could provide ratings itself, require agencies to use market prices to calculate risk, or simply rely on caveat emptor.

While all of these proposals have merit, each has significant flaws.<sup>15</sup> This Essay proposes that a rating agency incentive compensation scheme should be added to the menu of proposed rating agency reforms. The incentive compensation scheme works as follows. Instead of receiving cash for their rating of a security, the agencies should receive some of the debt that they are rating. The debt should not be distributed to the agency at once, but should be parceled out slowly as the rating agency rerates the debt until the debt matures. The value of the income streams associated with the debt the agency receives should be evaluated not at the discount rate for the debt in question, but rather at the average discount rate applied to all debt with the same rating and maturity as the debt the agency receives. This proposal for CRA incentive compensation creates conditions under which inaccurate ratings hurt the agencies' profitability, giving them greater incentive to rate accurately. If the agencies overrate a debt issue, for example, then the cash flows associated with the debt will

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12 See John C. Coffee, Jr., *Understanding Enron: "It's About the Gatekeepers, Stupid,"* 57 BUS. LAW. 1403, 1408-09 (2002); Carol Ann Frost, *Credit Rating Agencies in Capital Markets: A Review of Research Evidence on Selected Criticisms of the Agencies*, 22 J. ACCT. AUDITING & FIN. 469, 482 (2007) ("In particular, it was claimed that CRAs' failure to lower Enron's credit rating below investment grade until only a few days before Enron's bankruptcy proved that they were woefully lacking in diligence and competence.").

13 See, e.g., Claire A. Hill, *Regulating the Rating Agencies*, 82 WASH. U. L.Q. 43, 85-89 (2004) (advocating this competition-based reform to the credit ratings industry).

14 See, e.g., Manns, *supra* note 4 (advocating a user fee-based scheme and describing alternative reform options).

15 See discussion *infra* Part III.

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not be sufficiently discounted. As a result, the agency will get lower cash flows for a given fee (the fee being the units of debt received in exchange for rating services), reducing the agency's cash flows compared to what they would have received under an accurate rating.

Debt compensation constitutes the Essay's core proposal, and offers the benefit of improved incentives not to overrate without creating excessive administrative problems. Debt compensation, however, is no panacea. It may, for example, create incentives to underrate securities.<sup>16</sup> To address this flaw with the debt compensation for CRAs plan (as well as other flaws), we also consider requiring CRAs to write put and call options on a predetermined amount of the debt they rate. This extension further improves CRA incentives, though at the cost of considerable added complexity.

If underrating becomes a problem, then having the CRAs write call options on the debt they rate can mitigate underrating. If a CRA underrates a security, then other market participants, such as other CRAs, might exercise the call options issued by the primary CRA to buy the debt for the inaccurately cheap price established by the rating. Thus, the CRA cannot profit from underrating securities and loses money from overrating securities. Ratings accuracy should therefore improve because it is in the financial self-interest of the CRAs to rate accurately. This reform is particularly promising because it relies on a considerably more direct accuracy improvement mechanism than other reform proposals.

This Essay proceeds as follows. Part II examines the role of the CRAs in the financial crisis. Part III discusses existing reform proposals and the flaws in these proposals. Rather than duplicating other work on these topics, the Essay instead highlights the elements relevant to the incentive compensation proposal. Part IV develops the incentive compensation plan and then examines flaws in the plan. Part V lays out our conclusion.

## II. The Function of Rating Agencies

### A. *Resolving Asymmetric Information Problems in Credit Markets*

Without reliable information, credit markets cannot operate efficiently. When a borrower knows more about its credit quality than a creditor does, the creditor will fear that the borrower will only agree to a transaction when the creditor is providing capital too cheaply. As a result, the creditor will raise the interest rate it charges in order to protect itself

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<sup>16</sup> Other mechanisms may reduce the problem of underrating. *See infra* Section IV.C.

against the possibility that the debtor is a “lemon.”<sup>17</sup> But the increase in price that the creditor seeks will, in turn, cause safe borrowers to refuse to borrow because they will have to overpay for credit due to their inability to prove their quality to uninformed creditors. Only high-risk borrowers, who have little to lose, will agree to borrow at the rate available, which further raises the premium demanded by creditors. In the extreme, only very low quality borrowers will borrow, in spite of the fact that many other transactions would be efficient in the presence of better information.

Prospective loan givers could acquire information about repayment probabilities themselves, but this would be extremely costly. Indeed, the benefits of the expensive acquisition of information may be smaller than the costs of the acquisition, leading to the market failure described above. Moreover, information about the quality of a corporation’s credit costs a great deal to acquire, but this information can be shared with additional parties at extremely low marginal cost. One creditor can “free ride” off the costly information obtained by another creditor, which implies that information about loan quality will ultimately be under-produced.

There are several solutions to this informational problem. One is to create an intermediary between loan issuers and loan seekers, such as a bank.<sup>18</sup> Banks often have longstanding relationships with loan seekers, mitigating the informational asymmetry between capital buyers and sellers. Moreover, the bank may engage in large credit transactions, justifying the informational expense in a way that smaller creditors could not.

The bank solution, however, is costly and incomplete. Banks take a “cut” of loan proceeds in exchange for their roles as intermediaries. In addition, individuals with capital face uncertainty when providing capital to the bank. The asymmetric information problem reappears between the creditor and the bank/borrower. One way of mitigating this uncertainty is by allowing bank depositors to withdraw their deposits at will, but this makes banks unstable, as they then hold short-term assets and long-term liabilities. The asymmetric information problem also reappears if the bank tries to sell one of its loans to a less informed party.

CRA offers an alternative means of reducing asymmetry between borrowers and creditors. A company pays a CRA to produce an informational public good relating to the corporation—its credit rating.

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17 For seminal articles exploring the possibility of asymmetric information and market failure, see, for example, Akerlof, *supra* note 9; Stewart C. Myers & Nicholas S. Majluf, *Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have*, 13 J. FIN. ECON. 187 (1984) (discussing these phenomena in the context of equity in corporations); and Michael Rothschild & Joseph Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information*, 90 Q.J. ECON. 629 (1976) (discussing these phenomena in the context of loans).

18 See, e.g., Eugene F. Fama, *What’s Different About Banks?*, 15 J. MONETARY ECON. 29 (1985).

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The CRA then makes the rating widely available. The rating benefits the corporation by mitigating information asymmetries, improving the corporation's ability to raise capital. If the information provided by the CRA is sufficient, then corporations and creditors can disintermediate the bank and transact directly with each other. For example, debtors and creditors may write minimum required credit ratings into a loan covenant, thereby reducing the informational burden on creditors to monitor the debtor to insure it is not adjusting its risk portfolio.

### B. *Role in the Regulation of Financial Institutions*

The above account explains why CRAs might exist without any official regulatory standing. Their role is significantly enhanced, however, by their government-granted quasi-official status.<sup>19</sup> Because banks, with short-run assets and long-run liabilities, are inherently unstable, many governments choose to protect against bank runs through the use of deposit insurance.<sup>20</sup> The insurance, however, creates moral hazard. Neither banks nor depositors bear the full risk of failed loans, as the government's deposit insurance must cover losses in the event of insolvency. To mitigate the moral hazard problem, regulators require banks to maintain a minimum amount of capital, which insures that losses are initially borne by bank shareholders rather than the government or depositors.<sup>21</sup> The appropriate capital cushion depends on the riskiness of the bank's loan portfolio. If the bank makes loans to risky borrowers, then it needs a larger capital cushion for a given loan amount, reflecting the higher probability that a risky loan will default and the insurance policy will need to be redeemed.

Without examining every loan made by a bank, however, it is extremely difficult for regulators to determine the riskiness of a loan. Instead, regulators rely on credit ratings as a proxy for the risk associated with a loan.<sup>22</sup> The higher a loan's credit rating, the less capital a bank must hold relative to the size of the loan. Because capital reserves do not earn interest, they are expensive and reduce returns on equity. Other things

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<sup>19</sup> See generally Frank Partnoy, *The Paradox of Credit Ratings*, in RATINGS, RATING AGENCIES AND THE GLOBAL FINANCIAL SYSTEM 65 (Richard M. Levich, Giovanni Majnoni & Carmen Reinhart eds., 2002) (describing the role of CRAs' government-granted, semi-official status in establishing their credibility).

<sup>20</sup> See, e.g., Douglas W. Diamond & Philip H. Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 J. POL. ECON. 401 (1983).

<sup>21</sup> See, e.g., BASEL II, *supra* note 1.

<sup>22</sup> Rating Agencies and the Use of Credit Ratings Under the Federal Securities Laws, Securities Act Release No. 8236, Exchange Act Release No. 47,972, Investment Company Act Release No. 26,066, 68 Fed. Reg. 35,258, 35,258 (June 12, 2003) [hereinafter Rating Agencies Release] (stating that the SEC "has relied on credit ratings from market-recognized credible rating agencies for distinguishing among grades of creditworthiness in various regulations under the Federal securities laws" since 1975).

equal, banks prefer to make loans with higher credit ratings because these loans require less capital and, therefore, lower the banks' opportunity costs. If ratings are unduly optimistic, banks will hold inadequate capital.

Regulators often apply credit ratings to protect principal as well. Insurance companies obtain money from beneficiaries and invest this money in different assets. These companies have an incentive to choose high-risk, high-yield assets. If these assets succeed, then the companies enjoy all the profit. If the assets fail, then the losses are shared with the beneficiaries, who experience lower payouts. To protect beneficiaries,<sup>23</sup> state and federal law often requires insurers to invest in assets with high credit ratings ("investment grade assets").<sup>24</sup> This minimizes the risk that beneficiaries will not be paid. It also further heightens the importance of credit ratings.

In addition to directly reducing asymmetric information costs for creditors, debtors thus have regulatory reasons to pay CRAs for ratings. Without a credit rating, borrowers cannot obtain funds from potential creditors such as insurance companies or pension funds.<sup>25</sup> Banks will be more reluctant to lend, because unrated loans entail higher capital requirements. The regulatory role of credit ratings also heightens the significance of "investment grade" ratings. A rating of "junk," rather than investment grade, substantially reduces the pool of creditors available to a borrower, as the government will not insure against the high default risk that characterizes "junk."<sup>26</sup>

In this environment, it is no surprise that borrowers invariably pay CRAs to obtain ratings. Ratings reduce asymmetric information problems

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23 Again, free rider problems prevent individual beneficiaries from directly monitoring a company's investment policies.

24 See, e.g., 17 C.F.R. § 229.10(c)(1)(i)(A) (2009) (requiring Nationally Recognized Statistical Rating Organization (NRSRO) ratings for issuers submitting filings under the Securities Act of 1933 and Securities Exchange Act of 1934).

25 See Rating Agencies Release, *supra* note 22.

26 The importance of high ratings to institutional investors and banks provides a partial explanation for the rapid diffusion of "structured finance" products. In structured finance, investment banks take a pool of assets, any one of which is frequently below investment grade. Joshua Coval, Jakub Jurek & Erik Stafford, *The Economics of Structured Finance*, J. ECON. PERSP., Winter 2009, at 3, 5-7. They then structure different products from this pool of assets. See, e.g., Adam B. Ashcraft & Til Schuermann, *Understanding the Securitization of Subprime Mortgage Credit* (Wharton Fin. Insts. Ctr., Paper No. 07-43, 2008), available at <http://ssrn.com/abstract=1071189>. Some products start reducing payments whenever one of the underlying assets defaults, while other products only begin reducing payments when all or almost all of the assets have defaulted. Coval et al., *supra*, at 5-7. These latter, senior products were often given investment grade ratings, in spite of the fact that the underlying assets are below investment grade; the chance of a large majority of the underlying assets defaulting may be very low, even if the chance of any one underlying asset defaulting is quite high. *Id.* The ability to create some investment grade assets from underlying junk enables structured financial products to expand the pool of potential creditors. The investment grade ratings, however, depended heavily on misguided assumptions about the (non)correlation of the values of the underlying assets. *Id.*

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and expand the available pool of creditors by mitigating regulatory constraints.

### C. *The Failure of Credit Ratings to Serve Their Intended Function*

The problem with the current system of borrower-financed credit ratings is that it creates conflicts of interest.<sup>27</sup> If there are a number of CRAs competing for business, then a borrower can “shop around” for the best rating.<sup>28</sup> Competition may thus cause ratings to fail to provide unbiased estimates of the possibility of default. This problem is exacerbated when CRAs do not simply provide ratings, but also provide ratings consultation services.<sup>29</sup> In these consultation services, CRAs report what borrowers need to do to attain certain ratings. All things equal, borrowers want to provide the least possible protection to creditors, while attaining any given rating. Inevitably, consulting therefore degrades the quality of a given rating, as all firms that pay consulting fees will aim for minimum protection for the rating, rather than average protection.

This degradation of ratings quality played an important role in the financial meltdown of 2008-2010.<sup>30</sup> Banks holding overrated securities watched the value of their assets rapidly diminish, and did not hold adequate capital to protect their solvency.<sup>31</sup> The federal government was thus forced to recapitalize the banks to prevent the financial system from freezing due to a lack of capital.<sup>32</sup> In addition, lack of confidence in ratings contributed to the unraveling of several markets, such as the market for mortgage-backed securities.<sup>33</sup> Once ratings were found to be untrustworthy, the information asymmetry between the sellers of mortgage-backed securities and the buyers grew in importance. Buyers

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<sup>27</sup> See, e.g., TECHNICAL COMM., INT’L ORG. OF SEC. COMM’NS, THE ROLE OF CREDIT RATING AGENCIES IN STRUCTURED FINANCE MARKETS 15-16, *available at* <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD263.pdf> [hereinafter IOISC REPORT].

<sup>28</sup> Roger Lowenstein, *Triple-A Failure*, N.Y. TIMES, Apr. 27, 2008, (Magazine), at 36, *available at* <http://www.nytimes.com/2008/04/27/magazine/27Credit-t.html> (“The banks pay only if [the rating agency] delivers the desired rating. . . . If Moody’s and a client bank don’t see eye-to-eye, the bank can either tweak the numbers or try its luck with a competitor like S&P, a process known as ratings shopping.” (addressing a statement by former Moody’s CEO Tom McGuire)).

<sup>29</sup> See IOISC REPORT, *supra* note 27, at 15-16.

<sup>30</sup> See Triantis & Daniels, *supra* note 3, at 1110.

<sup>31</sup> See, e.g., *Big California Bank Fails, Has China Branches*, REUTERS, Nov. 7, 2009, <http://www.reuters.com/article/domesticNews/idUSTRE5A60BD20091107> (describing the closure of one such bank due to insufficient capital reserves).

<sup>32</sup> The government was responding to calls to recapitalize banks by Edmund S. Phelps and others. See, e.g., Edmund S. Phelps, *We Need to Recapitalize the Banks*, WALL ST. J., Oct. 1, 2008, at A25.

<sup>33</sup> See, e.g., *House CRA Hearing*, *supra* note 5, at 167 (statement of Rep. Elijah Cummings, Member, H. Comm. on Oversight and Government Reform); Julie Creswell & Vikas Bajaj, *Bond Raters in Effort to Repair Credibility*, N.Y. TIMES, Feb. 8, 2008, at C1.

became unwilling to purchase the securities at almost any price, an archetypal version of the “lemons problem.”<sup>34</sup>

### III. Existing Reform Proposals

The current financial meltdown, along with previous crises, has spawned a number of reform proposals for CRAs. The goal of the proposals is simple. By increasing the incentives for CRAs to rate accurately, the proposals hope to both mitigate asymmetric information problems that destabilize markets and to improve the quality of regulations that are based on accurate ratings. This Part briefly examines these proposals. The goal here is not to comprehensively evaluate the proposals but rather to place the new proposals developed in Part IV in context.

#### A. Competition

The three largest CRAs—Standard & Poor’s, Moody’s and Fitch—have a combined market share of between 85% and 95%.<sup>35</sup> Part of the cause of this concentration is that rating agencies require official designation as a Nationally Recognized Statistical Rating Organization (NRSRO) in order for their ratings to carry regulatory weight.<sup>36</sup> The procedures for NRSRO designation are cumbersome and poorly specified, creating a barrier to entry.<sup>37</sup>

Many argue that lack of competition impedes the quality of credit ratings.<sup>38</sup> Indeed, in 2006 Congress passed a statute reducing barriers to NRSRO designation, hoping that an increase in competition would improve the quality of ratings.<sup>39</sup>

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<sup>34</sup> See Creswell & Bajaj, *supra* note 33.

<sup>35</sup> See, e.g., *Hearing on Assessing the Current Oversight and Operations of Credit Rating Agencies Before the S. Comm. on Banking, Hous. & Urban Affairs*, 109th Cong. (2006) (statement of Alex J. Pollak, Resident Fellow, Am. Enter. Inst.), available at [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109\\_senate\\_hearings&docid=f:39602.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_senate_hearings&docid=f:39602.pdf) (arguing that increased competition “will bring in time better customer service, more innovation, more customer alternatives, greater price competition, and reduced duopoly profits, and indeed better credit ratings will emerge”); John Hunt, *Credit Rating Agencies and the “Worldwide Credit Crisis”: The Limits of Reputation, the Insufficiency of Reform, and a Proposal for Improvement*, 2009 COLUM. BUS. L. REV. 109.

<sup>36</sup> See 17 C.F.R. § 229.10(c)(1)(i)(A); Hunt, *supra* note 35, at 133.

<sup>37</sup> See *The Credit Rating Agency Duopoly Relief Act: Hearing on H.R. 2990 Before the H. Comm. on Financial Servs.*, 109th Cong. 21 (2005) (statement of Sean Egan, Managing Director, Egan-Jones Rating Co.) (“[C]urrent regulators are not willing to state what the problems are [with unapproved NRSRO applications], why the... applications have not been approved or disapproved, or what even the status of the application is.”).

<sup>38</sup> See, e.g., Claire A. Hill, *Rating Agencies Behaving Badly: The Case of Enron*, 35 CONN. L. REV. 1145, 1152 (2003) (“The obvious place to start [with rating agency reform] is the government-created (or at least government-strengthened) near-duopoly.”).

<sup>39</sup> See Hunt, *supra* note 35, at 133-34.

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The mechanism through which competition is supposed to improve ratings is unclear. Competition may imply that companies that provide inaccurate ratings lose business, raising the incentive to produce accurate ratings. Competition may, however, also have adverse effects on the quality of ratings. With multiple agencies, issuers will have greater ability to shop around for the best rating.<sup>40</sup> Moreover, the present lack of competition creates “rents” for CRAs. These rents are placed at risk by poor agency performance. If the rents are eliminated by competition, however, then the CRAs may have less incentive to preserve their reputations because their reputation cannot earn rents. Instead, the CRAs may prefer to sacrifice small future profits for larger current gains.

In total, the effect of increased competition on ratings quality is ambiguous. While competition may improve ratings quality, it is doubtful that the entry of new CRAs will alone solve the problem of poor ratings.

### B. *Altered Liability Regimes*

At present, CRAs are well insulated against lawsuits by investors in loans rated by the agencies.<sup>41</sup> A number of critics have argued that the agencies should be subject to some liability for their ratings.<sup>42</sup> The argument is straightforward. If CRAs are liable for negligent ratings, they will be less likely to be negligent, and will improve the quality of their credit ratings.

Placing liability on CRAs undoubtedly increases their incentives to avoid negligent ratings. Such liability, however, may work too well. Liability is an extremely blunt instrument for improving ratings quality. A single negligent rating may cause billions of dollars in losses, causing instant bankruptcy for an agency. Agency fees, by contrast, tend to be much smaller. Thus, placing unlimited liability on CRAs may simply terminate the credit ratings business, with potentially deleterious effects. Even if agencies do not go out of business, they will become hyper-cautious; an aggressive rating may lead to bankruptcy while an overly circumspect rating causes little marginal harm. Underrating may prove as harmful to healthy market functioning as overrating. Inaccurate ratings of

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<sup>40</sup> See generally Vasiliki Skreta & Laura Veldkamp, *Ratings Shopping and Asset Complexity: A Theory of Ratings Inflation* (Nat'l Bureau of Econ. Research, Working Paper No. 14761, 2009), available at <http://www.nber.org/papers/w14761> (claiming that increased debt complexity and more CRA options may lead to less accurate ratings even without intentional misrating).

<sup>41</sup> See Frank Partnoy, *The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies*, 77 WASH. U. L.Q. 619, 710-11 (1999); see also *SEC Hearings on Issues Relating to Credit Rating Agencies*, Nov. 21, 2002 (statement of Amy Lancellotta, Senior Counsel, Investment Company Institute), <http://www.sec.gov/news/extra/credrate/investcoinstit.htm>.

<sup>42</sup> See, e.g., FABIAN DITTRICH, *THE CREDIT RATING INDUSTRY: COMPETITION AND REGULATION* 142-45 (2007); Hill, *supra* note 13, at 57.

any sort fail to mitigate the asymmetric information problem. In addition, underrating means that banks will face excess capital constraints.

Some commentators therefore advocate some form of partial liability for CRAs.<sup>43</sup> Though this solution limits the possibility of bankruptcy-inducing liability, it also limits the incentive to avoid negligence. Moreover, neither unlimited liability nor partial liability improves agency incentives to provide accurate ratings in the more standard case where the agency is not negligent. As a result, liability may lead to extensive agency activity to establish non-negligence, without actually improving the accuracy of most ratings. This is to say nothing of the reality that the complexity of modern debt instruments has also made it exceedingly difficult for the government to effectively oversee CRAs at all.<sup>44</sup> This poses a serious problem for liability-based regulation of rating agencies.

### C. *Public Funding*

Credit ratings have many characteristics of a public good. Ratings entail high fixed costs of production—researching a debtor is costly and time-consuming—but zero marginal costs since the information can be shared costlessly with any potential creditor. Consequently, it is no surprise that some have proposed various forms of public funding for ratings. Public funding for ratings mitigates the conflict of interest that occurs when issuers serve as both the subject of investigation and the client.

While public funding mitigates conflicts of interest between agencies and potential creditors, it introduces other problems. Where will the funding come from? If money comes from the public fisc, then all taxpayers must pay for a product that directly benefits only a narrow class of investors.<sup>45</sup> User fees collected from investors are one solution that ties burdens more tightly to benefits,<sup>46</sup> but determining which investors (shareholders, bondholders, employees) will pay creates problems of its own.

Even if the funding problem is solved, the production of credit ratings grows more complex with public funding. A government agency could produce ratings, but the government does not have a great history of keeping abreast of financial innovations—a role that is critical for rating

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<sup>43</sup> See generally Hunt, *supra* note 35 (outlining the insufficiency of reform proposals that do not include at least partial liability); Manns, *supra* note 4 (advocating rating agency liability).

<sup>44</sup> See Manns, *supra* note 4, at 1027; Steven L. Schwarcz, *Private Ordering of Public Markets: The Rating Agency Paradox*, 2002 U. ILL. L. REV. 1, 2-6, 18-20.

<sup>45</sup> This argument should not be given undue weight. Nearly all public goods benefit some more than others.

<sup>46</sup> See Manns, *supra* note 4 (explaining that a user fee system would avoid a full public subsidy for a small group of relatively wealthy beneficiaries and instead require that the potential beneficiaries fund the ratings themselves).

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agencies.<sup>47</sup> If public funds are granted to private credit raters, then some means of regulation must be found to determine who receives funding and who does not.

Moreover, public funding does not directly create incentives to produce accurate ratings. Instead of aiming to rate accurately, agencies will seek to provide the type of ratings that ensure future public funding. Non-conformist ratings may be squelched, since these ratings are likely to attract more negative attention for failure than conventional ratings. If underrating does not jeopardize funding, but overrating does, then public funding will lead to systematic underrating, with negative consequences.<sup>48</sup>

### D. *Eliminating the Regulatory Role of CRAs*

One obvious solution to credit agency conflicts is to limit their role. If ratings are untrustworthy, they should not be placed at the heart of banking or insurance regulatory schemes. Instead, many argue that creditors must take responsibility for their lending decisions rather than relying on a proxy such as a CRA, or, at a minimum, they must rely on CRAs considerably less.<sup>49</sup> If regulators must impose risk-based capital requirements to protect deposit insurance, then market prices for loans are much better indicators of risk than are credit ratings.<sup>50</sup>

This solution has numerous virtues. It limits the potential for regulatory arbitrage. A generous credit rating does not allow a bank to obtain higher leverage, because capital requirements are determined by the price of the loan rather than the loan's rating. Eliminating the regulatory role of ratings may also improve the accuracy of loan prices. Without the "crutch" of ratings, lenders must directly research debtors. Prices will, therefore, reflect educated creditor judgments rather than supply swings caused by ratings-induced market discontinuities, such as the "investment grade" requirement. In turn, more accurate pricing will provide a greater foundation for risk-based capital requirements, as the market price will provide a best-estimate of the true risk of loan defaults.<sup>51</sup>

Eliminating the regulatory role of CRAs does not imply that agencies will cease to exist. The agencies will still have a role in providing

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<sup>47</sup> See Stephen J. Choi & A.C. Pritchard, *Behavioral Economics and the SEC*, 56 STAN. L. REV. 1 (2003).

<sup>48</sup> See *infra* Section IV.B.

<sup>49</sup> See Partnoy, *supra* note 41, at 704-07; Adam Posen & David Smick, *Disenfranchise the Ratings Agencies*, 22 INT'L ECON. 4, 8-9 (2008). The SEC itself has implicitly endorsed this school of thought in softening requirements that issuers acquire ratings. See References to Ratings of Nationally Recognized Statistical Rating Organizations, Exchange Act Release No. 58,070, 73 Fed. Reg. 40,088 (July 1, 2008) (to be codified at 17 C.F.R. pts. 240, 242, 249), available at <http://www.sec.gov/rules/proposed/2008/34-58070.pdf>.

<sup>50</sup> See Partnoy, *supra* note 41, at 704-07.

<sup>51</sup> *Id.*

information to combat the “lemons problem” in credit markets described above. Only the quasi-official status of CRAs in regulating money management would be curtailed.

Limiting agencies’ regulatory role is no panacea. Many loans are not actively traded, meaning that market prices do not necessarily provide a reliable gauge of risk. While rating agencies are imperfect, they often provide more information than illiquid markets do. In addition, credit ratings are at the heart of the current bank regulatory system. Dramatically altering this carefully constructed, if imperfect, system imposes considerable demands on regulatory capacities at a time when many other aspects of the regulatory system are in flux. Other things equal, a more limited solution to the problem posed by CRAs is desirable.

The next Part seeks to provide just such a solution by altering CRA incentives to produce accurate ratings.

#### IV. Incentive Compensation for Credit Rating Agencies

##### A. *Compensating Credit Rating Agencies with Debt*

We propose that regulators adjust the means by which loan issuers compensate agencies such that the issuer will pay the rating agency with the debt that the agency is rating. Aside from changing the compensation structure, the SEC can leave the system by which issuers choose rating agencies untouched. In the present system, issuers are free to “shop” for ratings from different agencies. Agencies compete on both price and the rating terms that they provide. The incentive compensation scheme will not change the price competition aspect of ratings;<sup>52</sup> different rating agencies should bid for business, lowering the cost of ratings for issuers. The price will be set in the contract between the agency and the issuer to provide rating services.

While the price will be specified in the contract between the rating agency and the issuer, the manner in which the price will be paid will be specified by the SEC. But how should the stream of debt compensation be valued? To reduce the propensity for raters to overrate, we believe that they should be valued by using a reference group of loans with similar terms and ratings.<sup>53</sup>

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<sup>52</sup> The incentive for agencies to compete to offer better ratings to issuers would be reduced under the incentive compensation scheme proposal. If regulators were concerned about the potential insufficiency of the monetary disincentive to overrating, they could impose further restrictions on the rating process.

<sup>53</sup> We necessarily assume here that there will be sufficiently liquid markets for the debt instruments in the selected reference groups to approximate prices for the compensation debt.

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For example, suppose that credit rating agency *R* agrees to rate loan issuer *D*'s debt for a fee of \$500. Each unit of the debt *D* is issuing pays \$1 next year. The value of these payments depends on the probability that *D* will default as well as the general rate at which investors are willing to supply capital for repayment next year.<sup>54</sup> Suppose further that agency *R* has many other clients. The credit markets value \$1 next year at \$0.90 for clients that agency *R* has rated AAA. One dollar next year from companies that have a BBB rating costs only \$0.80 in the credit markets, reflecting the BBB debt's higher probability of default.

*D* agreed to pay \$500 to *R*. If *R* gives *D* a AAA rating, then each unit of *D*'s debt (paying \$1 in one year) is worth \$0.90. Therefore, *R* should receive 555.56 units of debt ( $\$500/\$0.90$ ) as its fee from *D* if *R* gives *D* a AAA rating. If *R* gives *D* a BBB rating, then each unit of *D*'s debt is worth \$0.80. *R* should receive 625 units of debt ( $\$500/\$0.80$ ) as its fee under a BBB rating.

This fee structure gives *R* a monetary incentive not to overrate. Suppose that the true default probability of *D*'s debt is typically associated with a BBB rating. At present, assume business development incentives encourage *R* to give *D* a AAA rating, as this makes *D* more likely to choose ratings from *R*. With debt compensation in place, however, *R* will pay a steep cost for overrating *D*. If it gives a AAA rating, then *R* will receive 555.56 units of debt. At market prices, this debt is only worth \$444.40 ( $555.56 \times \$0.80$ ). In other words, *R*'s fee is effectively reduced below the agreed price if it overrates a security. To prevent this occurrence, *R* will have a strong incentive to rate *D* as BBB. With this accurate rating, *R* receives 625 units of debt, implying that the true value of its fee will be the agreed upon \$500 ( $625 \times \$0.80$ ).<sup>55</sup> As excessively high ratings will be priced not at market value but rather at the average market value of all debt in the given ratings category, *R* has incentives to ensure that the true market value of the debt it rates aligns with the average market value of all the debt in its ratings category. For reasons of self interest, the agency should provide the most accurate ratings possible.

Because a rating provides information over time rather than at one moment, it is crucial that rating agency incentives are preserved until a bond matures. If a rating agency were paid in full at the outset, the agency would have strong incentives to overrate the debt at its next opportunity in order to artificially inflate the value of its compensation debt.<sup>56</sup> Using the example from above, imagine *R* is paid with 625 units of BBB debt in

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<sup>54</sup> See MARK GRINBLATT & SHERIDAN TITMAN, FINANCIAL MARKETS AND CORPORATE STRATEGY 370-421 (2d ed. 2002).

<sup>55</sup> Below, we will discuss the possibility that the rating agency bids an amount more than market price, with the understanding that it will overrate the security.

<sup>56</sup> Even if a rating agency is required to hold debt to maturity, it will have an incentive to overrate the debt in the future in order to attract more business.

order to satisfy its \$500 rating fee. At some point thereafter, this same debt will need to be rereated. Were *R* then to disingenuously overrate the debt, the value of the incentive compensation debt it already holds might go up, as the market responds to the change in rating.<sup>57</sup>

In order to prevent this, credit raters should be paid incrementally over time as they rate the debt, ensuring their ratings remain accurate at every stage of the rating process. At each step, the rating agency's incentives to artificially inflate the debt's rating in order to increase the value of its last payment will be counterbalanced by its interest in receiving the full value of its next compensation installment. As a simple example of how this would operate, imagine a scenario in which *R* was hired to rate *D*'s debt twice over the course of one year. Instead of an issuer paying *R* \$500 worth of the debt *R* rated at the time of *R*'s initial rating, the issuer should pay *R* \$250 worth of debt at the time of the first rating ( $T_1$ ) and \$250 more at the time of the second rating ( $T_2$ ). If the debt initially receives a BBB rating (at  $T_1$ ), *R* would receive 312.5 units of debt ( $\$250/\$0.80$ ). In the full payment up-front scenario, *R* would have incentives at  $T_2$  to inflate the debt rating to AAA in order to increase the market value of its payment from \$500 to \$562.50 ( $625 \times \$0.90$ ). If the debt payments are staggered, however, these incentives disappear.

While *R* would gain \$31.25 ( $312.5 \times (\$0.90 - \$0.80)$ ) with staggered payments by way of its ratings inflation, it would impose a nearly identical loss in the value of its second debt payment installment. As the debt would now be valued with AAA class debt (worth \$0.90 per unit), *R* would only receive a payment of 277.77 units of debt as its second payment ( $250/\$0.90$ ). The true value of this  $T_2$  payment would only be \$222.22 ( $277.77 \times \$0.80$ ) and the total value of *R*'s  $T_1$  and  $T_2$  compensation would be \$503.47. *R* has artificially and problematically increased its compensation for overrating debt by 0.6%—an extremely small gain for the risk of a flawed rating.<sup>58</sup> By staggering debt compensation payments, the gains from intentional, systematic overrating decrease significantly.

#### B. *Intentional Overrating and Underrating*

Compensating rating agencies with debt, and staggering compensation, may still allow for ratings distortions. This compensation mechanism does not interfere with an issuer's decision of how much to

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<sup>57</sup> For the remainder of this Part, assume that the market responds to a change in rating with an increase in market value that perfectly reflects the change in rating. In reality, some market participants may discern the rating agency's bias, causing the market value to change by less than it would if the change in ratings were unbiased. The change in market value may be reduced, but the principle of the example in this Part will remain the same.

<sup>58</sup> This small gain could be reduced to zero with a more complicated fee division than the 50% in  $T_1$  and 50% in  $T_2$  scenario outlined here.

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pay for a rating, and collusion between debt issuers and raters may still lead to systematic overrating. Debt compensation also creates incentives for CRAs to underrate debt offerings.

In a market without collusion, and all other things being equal, an issuer should prefer to purchase its ratings from the CRA with the lowest rates.<sup>59</sup> If, however, an issuer were certain that a CRA would overrate its debt, it may be willing to pay more for that exaggerated rating. While the rating agency in a collusion-free market is averse to overrating, it may be willing to overrate if it can reap compensation with a face value above the market rate.

As an example of how this might operate, an issuer would normally refuse a bid that is above the market rate of \$500, but if it is confident that *R* will overrate its debt, it may be willing to pay an inflated price. If *R* put in a bid to rate the debt for \$562.50, and the issuer knows that *R* would rate its BBB debt as AAA, the issuer would accept. *R* gives the debt a AAA rating and is accordingly compensated with debt valued at the standard AAA market rate, receiving 625 units of debt ( $\$562.50/\$0.90$ ). The true value of this payment would not be *R*'s quoted price, but would instead be \$500 ( $625 \times \$0.80$ )—in this case the true market price. *R* has managed to both overrate the debt and receive its standard compensation, and the issuer has received its inflated rating.

The debt issuer's incentives are clear. It need only establish a relationship with a rating agency it trusts to overrate its debt. In the above example, while *R* would have received more units of debt had it given the debt a BBB rating, this single instance of exceptional compensation would likely come at the cost of future business with that issuer. In overrating the debt, they forfeit the above-market compensation they ostensibly quoted, but an issuer will always choose their bids over similar bids from an agency that rates debt in good faith. This type of collusion leaves both the issuer and the rating agency with their desired outcomes, while leaving ratings systematically exaggerated. Competition and collusion can thereby lead to overrating despite the compensation debt model—just as it does in the current cash payment model.

This risk, however, does not mean that the basic debt compensation structure offers no advantage. While the opportunity for a lucrative long-term relationship with a debtor may give CRAs an incentive to overrate, this incentive is counteracted by the short term pain overrating will cause to the value of the CRA's debt compensation. At present, by contrast, overrating causes no immediate pecuniary harm to the CRA.

There is also a risk that CRAs will intentionally underrate debt. If *R* were to quote the market price of \$500 and determine that the debt was

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<sup>59</sup> One of the benefits of our proposed reform is that it does not interfere with the integrity of this process.

AAA grade, it may have incentives to give the debt a BBB rating. With a BBB rating,  $R$  will receive 625 units of debt ( $\$500/\$0.80$ ). As the debt is really worth  $\$0.90$  per unit,  $R$  will have effectively been paid  $\$562.50$  ( $625 \times \$0.90$ ), considerably above the market rate. If a CRA was known to systematically underrate debt, it is unlikely an issuer would accept their bid, even if it were at market rates. If rating agencies all systematically underrated debt, though, issuers may have little recourse—and the accuracy of debt ratings would suffer.

The risks of overrating and underrating described here are partially offsetting. Collusion between the agency and the issuer is against the issuer's short-term interest. By overrating the debt in a collusive manner, the agency is foregoing greater short-term profits that would arise through underrating or accurately rating. Such a collusive relationship is more difficult to maintain than a relationship that always suits both parties' selfish interests.<sup>60</sup> If explicit collusion is illegal, it may be extremely difficult to maintain implicit collusive overrating. Moreover, a consistent pattern of paying above-market prices to raters raises red flags, further complicating the ability to collude.

Similarly, underrating is against the rater's long-term financial interest. Although the real value of a rating fee goes up if it is underrated, consistent underrating may destroy the business of a rating agency. Clients will no longer hire a CRA that consistently underrates. Consequently, the danger of underrating may prove low. Moreover, underrating causes less systemic risk to the financial system than overrating. Underrating inefficiently lowers the profits of financial institutions, while overrating threatens the stability of financial institutions with insufficient capital. Underrating is also less likely to cause a "lemons problem" market failure than overrating.

### C. *Preventing Intentional Underrating and Overrating*

Section IV.B demonstrated that incentives to underrate and overrate are not eliminated by debt compensation, though they are mitigated. Because correcting these lingering incentives to misrate is so complicated, as discussed in this Section, this Essay's primary recommendation is to use simplified debt compensation as part of a series of reforms to the CRA process. This Section, however, develops a more complicated incentive compensation scheme whereby misrating incentives are further reduced through the use of put and call options. While it is likely that the complexity induced by this scheme would be more costly than its

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<sup>60</sup> See, e.g., AM. BAR ASS'N SECTION OF ANTITRUST LAW, ANTITRUST LAW AND ECONOMICS OF PRODUCT DISTRIBUTION 44 (2006) ("Therein lies the difficulty of maintaining a cartel—the incentives to defect . . . are strong.").

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incentive-improving effects, the “put and call” proposal is an example of how creative use of incentive compensation plans can further reduce the risk of misrating.

A put option mechanism may help to prevent overrating.<sup>61</sup> A put option is a contract between the writer of the option and a buyer stipulating that the buyer may force the writer to purchase a specified quantity of an asset for a specified “strike price.” The application to the relationship between a CRA and a debt issuer is straightforward. At the time when the rating agency and issuer agree to the terms of the rating, the rating agency could also sell (or give) a put option to a third party.<sup>62</sup> One appealing third party would be another rating agency, which would operate as a check on the agency hired by the issuer. Here, the strike price of the option would simply be the average market value of debt in the class at which the debt is rated. If at some later date it becomes clear that the debt is less valuable than the CRA initially stated, the third party will force the primary rating agency to purchase some pre-arranged quantity of the debt at a price that is in keeping with the rating but exceeds the true value of the debt. This would diminish incentives to overrate and encourage rating agencies to keep ratings current.<sup>63</sup>

Imagine that *R* gives debt a AAA rating despite its true BBB quality, and it charges an above-market price to do so. In the example above, *R* charged \$562.50, when the market price should have been \$500—and that example will suffice here as well. Beyond pledging to rate the debt for \$562.50, though, here *R* has also written a put option—perhaps for the quantity of debt it was paid: 625 units.<sup>64</sup> If it ultimately becomes clear that the debt is BBB quality, and worth only \$0.80 per unit, the third party will exercise their option and force *R* to purchase the 625 units of debt, and *R* will be forced to pay \$0.90 per unit, in keeping with the original rating. *R* will therefore pay \$562.50 (625 x \$0.90) for only \$500 worth of debt (625 x \$0.80). Third parties will only exercise put options in the case of an overrating, as exercising a put option after an underrating would entail

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61 Unlike the previous discussion, this discussion assumes that market participants do not blindly follow ratings but rather form their own opinions about the quality of debt. This assumption is likely to be true with respect to other rating agencies, which specialize in forming their own opinions regarding the quality of debt issuances. Generic market participants, by contrast, may be less likely to form their own opinions.

62 It is crucial that a (non-issuer) third party has the discretion to exercise the option, as this eliminates the possibility of collusion that would be present if the CRA sold the put option to the debt issuer.

63 This is not the same as allowing market prices to replace ratings, which is not feasible for many bonds, as discussed *supra* in Section III.A. By establishing a put with a fixed price, the put option creates limits on the degree of overrating. If the put option is held by another rating agency, then the other rating agency will be capable of making a rough estimate of the bond's true value, limiting the potential for overrating.

64 This amount is just one possible example. The greater the quantity, the more severe the potential disincentives to overrating the debt.

selling the debt for less than it is worth. While put options thereby offer some relief from the risk of overrating, another protection is required to prevent intentional underrating; it is, unsurprisingly, the opposite of a put—a call option. Forcing the rating agency to sell a call option to a third party would diminish incentives to underrate.

CRA's can only reap the gains of intentionally underrating debt if they are permitted to keep it to maturity. Allowing a third party to appropriate those gains makes it considerably less attractive to seek them through intentional underrating. If *R* underrates debt in order to receive more units of compensation debt than it should, but is forced to sell those units at the discretion of a third party, *R* will forgo opportunities to underrate debt. If *R* gives AAA debt a BBB rating, and its fee is \$500, it gains a surplus of \$62.50.<sup>65</sup> If, however, *R* has also sold a call option at the time of the rating, a third party can simply force *R* to sell the debt for the average market price of debt at *R*'s initial rating. Here, that would require selling the 625 units of compensation debt that are actually worth \$562.50 for only \$500—eliminating the surplus *R* gained from its inaccurate underrating. If *R* had intentionally overrated the debt, no third party would exercise its call option, as this would require the third party to buy the compensation debt for more than it is worth.

Compensating CRA's with the debt they rate represents a simple step toward creating rating agency incentives for accurate ratings. Further, staggering rating agency compensation in line with the debt's rerating schedule would preserve these benefits. Incentives to underrate and overrate remain, however, requiring additional incentive realignment. Put and call options check these overrating and underrating incentives, respectively. While these reforms are likely no more invasive or disruptive than many other proposals, they present their own problems and complications. We address these, and other, issues in the next Section.

#### D. *Complications and Qualifications*

Our proposed reform promises to improve ratings by realigning CRA incentives. This proposal necessarily changes how rating agencies will behave, and these changes may not always be desirable. First, Standard & Poor's, Moody's, and Fitch all currently disavow taking any factors other than default risk into account when they rate assets. As Fitch puts it, its "credit ratings do not directly address any risk other than credit risk. In particular, ratings do not deal with the risk of a market value loss . . . due to changes in interest rates . . . and other market considerations."<sup>66</sup> While

<sup>65</sup> See *supra* Section IV.B.

<sup>66</sup> FitchResearch, Fitch Ratings Definitions 2009, <http://www.fitchratings.com/corporate/fitchResources.cfm?detail=1> (last visited Nov. 18, 2009).

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default risk has a great deal of impact on asset value, there are several other factors that may influence the value of debt. This is salient to this discussion because if rating agencies are paid with debt, they will necessarily become concerned with the overall value of debt rather than simply its default risk.

Standard & Poor's ratings under the current model "are not indications of the market liquidity of a debt security or its price in the secondary market."<sup>67</sup> Under this reform, though, rating agencies will necessarily take factors like liquidity into account. A great deal of literature has shown that an asset's liquidity affects its market price for fairly straightforward reasons.<sup>68</sup> An asset that enjoys a more liquid market is more valuable simply because owners have more control over when they can buy and sell it. This is a particularly attractive feature for limiting losses when an asset is rapidly declining in value.

The quantity of debt a rating agency is compensated with will be a function of the average market value of debt at that given rating, and that market value will partly be a function of the debt's liquidity. If a CRA anticipates that it will be compensated with debt that it knows is illiquid relative to the average debt with the same default risk, the CRA may manipulate its ratings to account for this divergence. This reform, then, produces ratings that would be qualitatively different from the ratings currently generated by CRAs.

The impacts of this change could be partially mitigated by altering the "reference group" that determines the price, and therefore the quantity, of debt compensation. To this point, the reference group for a given rating has been all other debt issues that share that rating. Instead, the reference group could be further limited. For example, the reference group for *D*'s issuance could be all debt with the same rating that is issued by companies of similar size with relatively similar maturity. Groups with such similarities are likely to have further similarities, such as similar liquidity and sensitivity to changes in interest rates. As a result, differences in value are likely to be driven by differences in default probabilities rather than other factors. The appropriate reference group therefore mitigates the degree to which debt compensation alters rating agency practice.

Second, paying rating agencies with debt and potentially forcing them to hold the debt to maturity may cause cash flow problems for CRAs. It is,

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<sup>67</sup> STANDARD & POOR'S, GUIDE TO CREDIT RATING ESSENTIALS 1 (2009), [http://www2.standardandpoors.com/spf/pdf/fixedincome/SP\\_CreditRatingsGuide.pdf](http://www2.standardandpoors.com/spf/pdf/fixedincome/SP_CreditRatingsGuide.pdf). Further, "[c]redit ratings can also speak to the credit quality of an individual debt issue, such as a corporate or municipal bond, and the relative likelihood that the issue may default." *Id.* at 3.

<sup>68</sup> See, e.g., Edwin J. Elton et al., *Factors Affecting the Valuation of Corporate Bonds*, 28 J. BANKING & FIN. 2747, 2756 (2004); Pierre-Olivier Weill, *Liquidity Premia in Dynamic Bargaining Markets*, 140 J. ECON. THEORY 66, 66 (2008) ("[R]eturns are related to liquidity, broadly defined as the ease of buying and selling.").

of course, less desirable to be paid with less liquid assets than with more liquid assets. This reform calls for an end to paying rating agencies with a perfectly liquid asset: cash. It may simply be prohibitively onerous for rating agencies if they are no longer paid upfront and with cash. This problem is compounded by the necessity of staggering debt compensation over time. For the reasons outlined in Section IV.A, the only way to keep rating agency incentives in line over the course of a continual ratings process is to pay them in installments as they rerate debt. Thus, rating agencies are being paid with relatively illiquid assets, and they are not receiving the full amount of their compensation until they have rerated an asset for the last time.<sup>69</sup>

Third, forcing CRAs to write put and call options on the debt they rate will further alter the business model of the CRAs. By requiring CRAs to essentially guarantee their ratings against deviation in either direction, this reform forces them to bear considerably more risk than they currently bear. The implications of the inevitable risk aversion that would result are difficult to predict, but this would, at the very least, represent a significant change to the status quo.

By simply limiting the amount of options sold, however, this risk would be severely attenuated. It would, therefore, almost certainly be necessary to limit them to the total amount charged for the ratings. Moreover, the amount of risk borne by an agency is directly related to the accuracy of its ratings. If the agency maintains a relatively accurate debt rating, the cost of having the put and call options exercised will be minimal.

## V. Conclusion

CRAs serve many purposes. In predicting the likelihood that a loan will go into default, CRAs facilitate governmental investment protection by allowing the government to require that relatively “safe” assets are held. They also potentially limit money managers’ capacity to take excessive risks by making relative asset safety known. Additionally, CRAs generate information about relative riskiness for assets in illiquid markets where that information may not otherwise be available. Claims that determination of relative risk should be left to the market notwithstanding, CRAs play a pivotal role in reducing information asymmetries in debt markets.

Yet CRA failures played a notoriously central role in both the Enron-era financial scandals and the 2008-2010 financial crisis. These failures inevitably led to calls for CRA reform, and many proposed reforms offer

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<sup>69</sup> It should be noted, however, that the bonds that may be used to compensate a CRA will produce a steady cash flow.

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both promising improvements and their own difficulties. Increased competition among rating agencies may lead to more accurate ratings, but the mechanism by which this would happen is unclear and increased competition may, ironically, lead to even less accurate ratings.<sup>70</sup> Altered liability regimes would make misrating less desirable, but a no-liability regime would actually make agency incentives to provide accurate ratings more attractive if the agency is not otherwise acting negligently. Liability regimes craft incentives to encourage CRAs to avoid negligence, not to encourage CRAs to rate debt accurately.

Public funding is an attractive option if ratings are analogized to more typical public goods, for which barriers to entry are high and information can be shared costlessly. Many commentators also point to the current “issuer pays” model for the perverse incentives that lead to CRA failure.<sup>71</sup> Public funding, however, would not necessarily guarantee more accurate ratings. The government’s capacity to generate accurate ratings is suspect, and the incentives of public officials charged with rating debt may be more closely aligned with keeping their mandate than rating accurately.<sup>72</sup> As neither the government nor the private sector promises accurate ratings, other commentators have argued that the regulatory role of rating agencies should be eliminated. While the market may suffice for more liquid debts, however, very little information about the riskiness of a particular debt instrument would be communicated by an illiquid market.

Compensating rating agencies with debt operates considerably differently than the other reform proposals mentioned. It requires less upheaval than the calls for altered liability regimes, public funding, or the elimination of the CRAs’ regulatory role. It is, further, likely to generate more accurate ratings than those likely to result from greater competition between CRAs. Compensating CRAs with the debt they rate will encourage them to rate debt accurately. Requiring them to write put and call options on their compensation debt will further encourage them to eschew intentional misrating, though at the cost of greater complexity. While this reform invites its own complications, it represents a constructive step toward ensuring that CRAs rate debt accurately. To the extent that more accurate debt rating will decrease the probability of a similar financial crisis in the future, this reform has great promise.

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70 See Skreta & Veldkamp, *supra* note 40.

71 See, e.g., IOSC REPORT, *supra* note 27.

72 See *supra* Section III.C.