

# Policy Analysis

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## *Regulation, Market Structure, and Role of the Credit Rating Agencies*

by Emily McClintock Ekins and Mark A. Calabria

### Executive Summary

During the financial crisis of 2008, the financial markets would have been better served if the credit rating agency industry had been more competitive. We present evidence that suggests the Securities and Exchange Commission's designation of Nationally Recognized Statistical Rating Organizations (NRSROs) inadvertently created a de facto oligopoly, which primarily propped up three firms: Moody's, S&P, and Fitch. We also explain the rationale behind the NRSRO designation given to credit rating agencies (CRAs) and demonstrate that it was not intended to be an oligopolistic mechanism or to reduce investor due diligence, but rather was intended to protect consumers. Although CRAs were indirectly constrained by their reputation among investors, the lack of competition allowed for greater market complacency. Govern-

ment regulatory use of credit ratings inflated the market demand for NRSRO ratings, despite the decreasing informational value of credit ratings. It is unlikely that this sort of regulatory framework could result in anything except misaligned incentives among economic actors and distorted market information that provides inaccurate signals to investors and other financial actors. Given the importance of our capital infrastructure and the power of credit rating agencies in our financial markets, and despite the good intentions of the uses of the NRSRO designation, it is not worth the cost and should be abolished. Regulators should work to eliminate regulatory reliance on credit ratings for financial safety and soundness. These regulatory reforms will, in turn, reduce CRA oligopolistic power and the artificial demand for their ratings.

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**Miscalculations by issuers, investors, credit rating agencies, and regulators contributed to the crisis, but such miscalculations should have come as no surprise given the incentive structure of our financial markets.**

## **Introduction**

Starting in late summer 2007, credit rating agencies (CRAs) began extensive downgrading of mortgage-backed assets and continued to downgrade them through the fall of 2008. On September 15, 2008, Moody's, Standard and Poor's (S&P), and Fitch downgraded American International Group (AIG), the nation's largest insurance company, after which AIG's stock price fell 61 percent. The same day, Lehman Brothers and Merrill Lynch filed for bankruptcy, just months after Bear Stearns declared its insolvency. Several days afterward, U.S. Treasury Secretary Henry Paulson and Federal Reserve Chairman Ben Bernanke asked Congress for the ability to purchase \$700 billion in bad mortgage-related debt. President George W. Bush warned that without the bailout the "entire economy was in danger."

The credit rating agencies' downgrading of assets did not cause the financial crisis of 2008, but they did shock the world in how they revealed what were apparently inflated ratings for corporate debt. Miscalculations by issuers, investors, credit rating agencies, and regulators contributed to the crisis, but such miscalculations should have come as no surprise given the incentive structure of our financial markets.

This policy analysis does not seek to explain all the causes of the financial crisis. Instead, we focus on the role that regulations, implemented in 1936 by the U.S. Comptroller of the Currency and in 1973 by the Securities and Exchange Commission (SEC), had in creating regulatory dependency on designated credit rating agencies' ratings.<sup>1</sup> These regulations resulted in reduced competition and inflated market demand in the CRA industry, which in turn likely led to sustained complacency in ratings' methodologies and potentially allowed for massive risk to go ignored in the marketplace.

The financial markets would have been better served if the credit rating agency industry had been more competitive. We present evidence that suggests the Securities and

Exchange Commission's (SEC) designation of Nationally Recognized Statistical Rating Organizations (NRSROs) inadvertently created a de facto oligopoly, which primarily propped up three firms: Moody's, S&P, and Fitch. The NRSRO designation given to credit rating agencies was not intended to be an oligopolistic mechanism or to reduce investor due diligence, but rather was intended to protect consumers. Although CRAs were indirectly constrained by their reputation among investors, the lack of competition allowed for greater market complacency. Government regulatory use of credit ratings inflated market demand for NRSRO ratings, despite the decreasing informational value of credit ratings.

Our analysis demonstrates how well-intentioned regulation can have unanticipated effects, and, in some cases, these unintended consequences become part of a perfect storm of other problems contributing to a financial crisis. We must consider not just the intended effects of regulatory proposals, but also the second- and third-order effects of the regulations. Once those have been considered, we should conduct a cost-benefit analysis. In the case of the NRSRO designation and its use in regulations, it is unlikely that this sort of regulatory framework could result in anything except misaligned incentives among economic actors and distorted market information that provides inaccurate signals to investors and other financial actors. Given the importance of our capital infrastructure and the power of credit rating agencies in our financial markets, and despite the good intentions of the uses of the NRSRO designation, it is not worth the cost and should be abolished. Regulators should work to eliminate regulatory reliance on credit ratings for financial safety and soundness. These regulatory reforms will, in turn, reduce CRA oligopolistic power and the artificial demand for their ratings.

We review the origins of the credit rating agency industry, what credit ratings agencies and their ratings do in the marketplace, and how the industry became regulated. We then examine the evidence to determine if the CRA

industry became a de facto oligopoly with complacent rating methodologies, whether it had captive and inflated demand, and what impacts it had on the financial markets.

## Credit Rating Agencies

### What Credit Rating Agencies Do

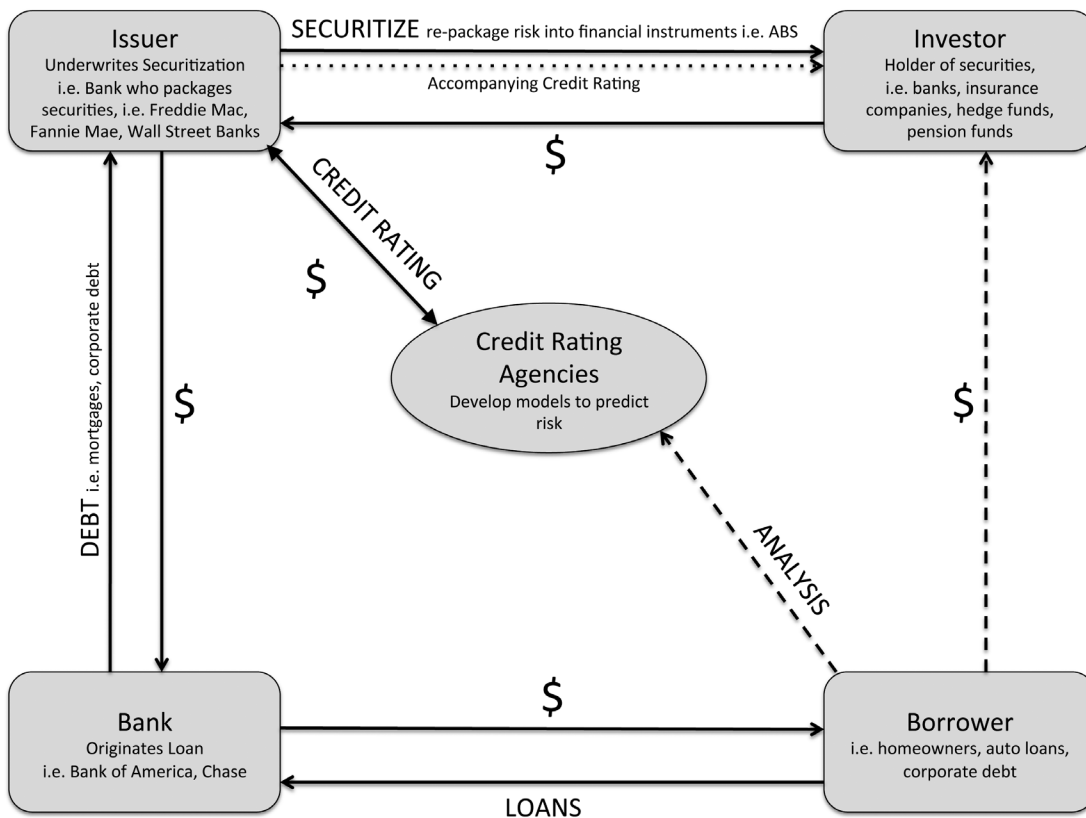
Credit rating agencies offer predictions as to the likelihood that a particular debt instrument will be repaid, in part or whole. Ratings can be offered on general corporate debt, in which case it is the overall financial health of the company that is being analyzed. Ratings can also be based on the credit risk of assets within a pooled security, such as a mortgage-backed security. Prior to the Great Depression, rating agencies also of-

fered some limited analysis of corporate equity values. The major rating agencies have generally asserted that they assess only credit risk and do not offer judgments as to losses that arise from an instrument's liquidity or lack thereof. Debate continues whether the losses witnessed during the recent financial panic were more the result of credit or liquidity losses, but we will not attempt to settle that debate here.

In the case of an asset-backed security the security's *issuers* purchase loans from banks, such as mortgages or corporate debt, and re-package the risk into a financial product that is purchased by *investors* as an investment vehicle. Investors pay issuers for the financial instrument and in return they receive the principal and interest paid on the debt (see Figure 1). However, debt is not always repaid

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**Figure 1**  
**The Role of Credit Rating Agencies**



Source: Figure constructed by authors.

Key: Solid lines represent asset transfer, dashed lines represent indirect payment transfer, and dotted line represents information transfer.

**Generally, ratings change only if the prospects of default actually change by a significant amount, rather than if there is a change in short-run credit risk.**

**Table 1  
Generic Moody's Credit Ratings Scale**

<b>Rating</b>	<b>Rating Definition</b>
Aaa	Obligations rated Aaa are judged to be of the highest quality, with minimal credit risk
Aa	Obligations rated Aa are judged to be of high quality and are subject to very low credit risk
A	Obligations rated A are considered upper-medium grade and are subject to low credit risk
Baa	Obligations rated Baa are subject to moderate credit risk. They are considered medium grade and, as such, may possess certain speculative characteristics
Ba	Obligations rated Ba are judged to have speculative elements and are subject to substantial credit risk
B	Obligations rated B are considered speculative and are subject to high credit risk
Caa	Obligations rated Caa are judged to be of poor standing and are subject to very high credit risk
Ca	Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest
C	Obligations rated C are the lowest-rated class and are typically in default, with little prospect for recovery of principal or interest

Source: Moody's Investors Service, "Rating Symbols and Definitions: January 2011," [http://www.moody.com/researchdocumentcontent/page.aspx?docid=PBC\\_79004](http://www.moody.com/researchdocumentcontent/page.aspx?docid=PBC_79004).

Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category, the modifier 2 indicates a mid-range ranking, and the modifier 3 indicates a ranking in the lower end of that generic rating category.

and thus investors have an interest in knowing the probability that they will be repaid. Credit rating agencies provide a solution to the information asymmetries between investors and financial firms that issue financial products by providing risk assessments in the form of creditworthiness gradations for financial products, such as with an ordinal scale, with the intent to make it easier for investors to compare different potential investments (see Table 1). Essentially, investors want to know the credit risk associated with debt instruments, such as corporate debt or mortgage-backed securities, in which they are about to invest. As lenders innovate new ways of repackaging risk in complicated se-

curitized financial products, investors are even more interested in the amount of risk associated with these new products. A comparison between ratings scales for Moody's, S&P, and Fitch can be found in Table 2.

Credit rating agencies do not frequently incorporate new information that may impact currently issued credit ratings, thus allowing these ratings to remain fairly stable over time. Generally, ratings change only if the prospects of default actually change by a significant amount, rather than if there is a change in short-run credit risk. This is called "rating through the cycle" rather than rating at a "point in time."<sup>2</sup> For example, parties who intend to hold assets over a long period

may be less interested in small changes that may be reversed with regular market movements. This method imposes fewer direct costs on issuers and investors since they may devote fewer resources to ensuring they are in compliance with regulatory capital requirements. Moreover, contracts between firms and investors often include “rating triggers” that are impacted by the credit ratings. A rating trigger is a contractual obligation to repay more quickly, provide more collateral, or any other such requirement. Frequently changing credit ratings could potentially raise the cost of financial instruments, as they could be subject to greater volatility and thus trigger faster repayment or additional collateral. For instance, when the CRAs downgraded AIG, the company was required to raise additional collateral, which contributed to its liquidity crisis.

In general, the original point of these ratings was to help investors make better decisions about what financial products to invest in. They also pressure issuers to respect their obligations, as well as assist in the market pricing of debt instruments. To prove that they add value beyond that already reflected in market prices, credit ratings need to dem-

onstrate accuracy over time. As the actual performance of the rating will not be discovered until long after its issuance, if even then, reputation can serve as an important source of market discipline, with changes to reputation having significant impact on credit rating agencies’ profitability and success.

The CRA business model generally works in one of two ways. Credit rating agencies can rate financial products and make those ratings available through a subscription service to investors. In this business model, CRAs’ primary clients are investors, and the CRAs have an incentive to keep ratings accurate so that investors will continue to pay their accurate ratings. The other CRA business model is for CRAs to sell individual ratings to financial-product issuers. The issuers then sell the financial products to investors, using the associated credit ratings as a form of “certification.” In this model, CRAs’ primary clients are issuers, and CRAs have some incentive to rate higher, but within what is credible, since their reputations matter to investors who purchase the rated financial products from the CRAs’ primary clients. In a competitive market, market participants would diminish the value of rat-

**Frequently changing credit ratings could potentially raise the cost of financial instruments.**

**Table 2**  
**Comparison between Moody’s, S&P, and Fitch Rating Scales**

Long-Term Rating Scales Comparison									
Standard & Poor’s	AAA	AA+	AA	AA-	A+	A	A-		
Moody’s	Aaa	Aa1	Aa2	Aa3	A1	A2	A3		
Fitch IBCA	AAA	AA+	AA	AA-	A+	A	A-		
Standard & Poor’s	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
Moody’s	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3
Fitch IBCA	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
Standard & Poor’s	CCC+	CCC	CCC-	CC	C	D			
Moody’s	Caa1	Caa2	Caa3	Ca	C				
Fitch IBCA	CCC+	CCC	CCC-	CC	C	D			

Source: Bank for International Settlements, “Long-term Rating Scales Comparison,” <http://www.bis.org/bcbs/qis/qisrating.htm>.



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ings inflation by discounting ratings that were inflated simply to please issuers. There is some evidence that investors do distinguish among the different rating agencies on the basis of quality, as found in a recent empirical study by Livingston, Wei, and Zhou, which added to previous studies finding similar results.<sup>3</sup> The authors help to reconcile previous findings that while issuers view S&P as being more accurate, investors favor Moody's.<sup>4</sup> Their findings suggest that it is the view of investors that ultimately has a greater impact on bond prices.

Typically, issuers purchase two credit ratings for each financial product, and sometimes three if the first two are split.<sup>5</sup> Investors, however, typically rely on only one rating. When the investor is a commercial bank and when multiple ratings exist for a security, capital rules generally require the lower rating to be utilized for calculating risk-weighted capital. Financial regulations usually require only a single rating when determining whether a particular asset can be "held," and, in the case of multiple ratings, allow the higher rating to be used to determine whether an asset is eligible to be held.<sup>6</sup>

### **The History of Rating Agencies**

The present-day credit rating industry has a long history, beginning in the 19th century with financial publishing. The Mercantile Agency, one of the first credit reporting agencies, was formed in 1841 and used a network of agents to gather information on operating statistics, business standing, and creditworthiness on businesses. (In fact, Lewis Tappan established the Mercantile Agency to ameliorate information asymmetries that likely led to the financial crisis of 1837.) It then disseminated this information to subscribers. Eventually what became today's credit rating agencies first emerged at the turn of the 20th century, as publishers from the financial press, such as John Moody and Henry Poor, began collecting financial and operating statistics on the railroad bond market and selling the information to subscribers. This information collection in-

cluded examining the quality of a business's portfolio of opportunities and the management's success in pursuing these opportunities, its ability to respect debt obligations, and its tendency to honor debts.<sup>7</sup> Eventually this information was used to create an estimate of risk associated with corporate debt. What we would now recognize as credit ratings were first issued by Moody's Analyzes Publishing Company in 1909, H. V. and H. W. Poor Company in 1916, Standard Statistics Company in 1922, and Fitch Publishing Company in 1924.<sup>8</sup> Langohr and Langohr argue that the expansion of the credit rating industry formed an information infrastructure necessary for bond markets to expand throughout the 20th century.<sup>9</sup>

During the Great Depression, John Moody's and Henry Poor's credit rating firms performed well, with their highly rated bonds being significantly less likely to default during a period of high bond default rates. This bolstered these companies' reputations for accuracy and dependability. Between World War II and the 1970s, the financial markets experienced relative stability, but innovation stagnated. For this reason, CRAs were only modestly profitable.

Major structural shifts took place during the later part of the 1960s and the 1970s, as market-based corporate funding became more common and the demand for ratings increased rapidly. The conduct of credit analysis is a function of banks and credit rating agencies. These entities compete in the marketplace for the provision of credit analysis. Commercial bank credit analysis usually takes place in the context of a loan, often held on its balance sheet, whereas rating agency analysis is performed in concert with the issuance of a marketable debt instrument. As inflation began to accelerate in the late 1960s and 1970s, commercial banks and thrifts found it increasingly difficult to raise deposits because of the legal limit, under Regulation Q, on what they could pay depositors. The extension of Regulation Q to savings and loans in 1966 further restricted the ability of traditional lenders to pro-

vide credit. Others, such as mutual funds, found that banks' funding problems presented a business opportunity in the provision of credit. As these other market participants generally lacked an infrastructure to conduct extensive bank-like credit analysis, they turned to the major rating agencies.

The first segment to undergo this transition was business lending. While railroad bonds had served as the catalyst for the growth of the U.S. corporate bond market, until the 1960s other nonfinancial industries still relied almost exclusively on either bank loans or internal funding for their financing needs. The inflation-induced disintermediation of bank business lending led to the growth of the nonfinancial commercial paper market, which tripled in size between 1975 and 1980.<sup>10</sup> The longer-maturity corporate bond market grew by 80 percent during these same years. With this growth in the structured finance market also came an increasing demand for credit ratings.<sup>11</sup> Then the boom of the U.S. residential mortgage-backed securities and home-equity loan markets rapidly increased the structured finance market. Starting in the 1980s, another contributing factor to increased demand was globalization, which enticed credit ratings agencies to expand beyond the United States. Agencies opened offices in the United Kingdom, Japan, France, Australia, Canada, India, Sweden, Russia, Mexico, and Australia. Thus, globalization and the introduction of new financial products to be rated drove greater demand for CRA products and accounted for a large share of CRAs' profitability.<sup>12</sup>

In response to changes in the marketplace, in 1974 Standard and Poor's shifted its business model and began charging issuers for ratings rather than charging a subscription service to investors. Lawrence White points out that this business model transition also coincided with the spread of low-cost photocopying that led to free riding among investors, who would share ratings.<sup>13</sup> The 1970 Penn Central default on \$82 million in commercial paper, followed

by liquidity crises, also refocused attention on the importance of credit risk. As issuers wanted to assure investors of quality ratings, they began actively seeking out ratings. As market demand for ratings shifted, CRAs began charging issuers rather than investors.<sup>14</sup> This business model change also coincided with the SEC introducing the NRSRO designation and incorporating it into regulations.

### **The History of Credit Rating Agency Regulation**

While the financial markets were changing and structured finance grew, government regulators also played a key role in the credit rating agency industry.<sup>15</sup> Regulators did not seek to regulate CRAs directly, but rather used credit ratings as a means to oversee the financial markets. Securities and Exchange Commission regulators wrote many rules that specifically identified CRAs, thereby indirectly creating a regulatory framework reliant on CRAs.

The first set of regulations involving credit rating agencies went into effect after the onset of the banking crisis in March 1931. Banks were in need of greater liquidity following the onset of the Great Depression, and so they dumped their lower grade bonds on the market, which contributed to the overall decline in bond prices. This lower valuation of bonds reduced the market value of bank's bond portfolios overall and contributed to bank failures, demonstrating that bond values, rather than simply defaults, also mattered to bank survival.<sup>16</sup> Consequently, the Office of the Comptroller of the Currency (OCC) set out to regulate banks' capital reserves with the hopes of preventing future bank failures. To do this, the OCC set minimum capital reserve requirements to ensure banks did not become overleveraged.

To ensure compliance with the new regulations, the OCC looked for an outside group with expertise in evaluating bonds to determine how much risk, and thereby, how much value, was associated with banks' assets. Credit ratings helped the OCC conduct

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a valuation of national bank bond portfolios, and the OCC provided incentives for investments highly rated by a CRA, increasing demand for ratings. The comptroller stipulated that national banks would not be required to charge off depreciation to market value on bonds receiving one of the four highest ratings.<sup>17</sup> This meant that publically traded bonds rated BBB or higher by at least one CRA could be valued at book value.<sup>18</sup> This increased the demand for credit ratings because otherwise defaults would have counted 25 percent against bank capital. In 1936, the OCC and the Federal Reserve directed that banks not hold bonds rated below BBB by at least two credit rating agencies. These rules introduced CRAs into the financial regulatory framework. Banks were now required to obtain credit ratings for their assets to ensure they met federal capital reserve requirements, and they also were provided additional incentives for having bonds rated highly by CRAs.

In the late 1960s, a considerable increase in volume on the New York Stock Exchange overwhelmed the mechanisms that brokers used to transfer securities. This, combined with a subsequent trading volume decline, drove nearly 100 brokerage firms out of business.<sup>19</sup> The SEC later concluded that inadequate access to liquid capital exacerbated the crisis, and thus sought to enforce more stringent capital requirements. Consequently, the SEC adopted another wave of banking regulation, beginning in 1973, with a uniform net capital rule.<sup>20</sup> Part of this wave included the Net Capital Rule for broker-dealers (Rule 15c3-1), which was intended to ensure “that registered broker-dealers have adequate liquid assets to meet their obligations to their investors and creditors.”<sup>21</sup> To ensure compliance, regulators turned to select credit rating agencies to measure leverage. This established a new designation for select credit rating agencies called the Nationally Recognized Statistical Rating Organization.

The broker-dealer net capital rule required broker-dealers to deduct percentages of market value from their proprietary securities’

position from their net worth, depending on the ratings of these securities.<sup>22</sup> This was intended to safeguard broker-dealer proprietary securities from price fluctuation risks. Obtaining investment-grade ratings from at least two NRSROs reduced the requirement of deducting particular percentages of market value from the net worth of instruments. This incentivized broker-dealers to invest in higher NRSRO rated instruments because it translated into higher net capital.

The SEC instituted the NRSRO designation to ensure that bank issuers would not simply find credit rating agencies whose only purpose was to deliver high ratings on financial instruments. Not all credit rating agencies were bestowed the NRSRO designation; instead, the SEC grandfathered in Moody’s, S&P, and Fitch rating agencies. These companies were selected because of their previous record of accurate ratings. The NRSRO designations did not ensure future accurate ratings, but instead were an endorsement of Moody’s, S&P’s, and Fitch’s past achievements. Obtaining a designation was not necessary for CRAs to operate, but doing so put them at a significant advantage, as particular investors (including both public and private pension funds, as well as insurance companies) were legally mandated to purchase investments highly rated by NRSROs. Moreover, other investors were also incentivized to purchase investments highly rated by NRSRO CRAs to obtain regulatory benefits. This boosted demand specifically for NRSRO CRA ratings.

The SEC did not grant many NRSRO designations, and those companies for which they did often merged, keeping the total number of NRSRO CRAs to about three to four. In 1982, the SEC designated Duff & Phelps, and in 1983, McCarthy, Cristanti and Maffei (MCM). In 1991, Duff & Phelps purchased MCM and spun off its credit rating business. That same year, the SEC designated IBCA, and in 1992, it designated Thomson Bankwatch for banks and financial institutions specifically. However, IBCA’s frustration with the SEC’s preventing them



from expanding their designation beyond bank ratings drove them to purchase Fitch in 1992. Fitch later bought both Duff & Phelps and Thomson BankWatch in 2000. Mergers quickly brought the number of CRAs down to three by the turn of the millennium.

Over time, regulators became increasingly dependent on NRSRO credit rating agencies, and as Langohr and Langohr argue, “the use of ratings in regulations is most widespread in . . . the U.S.”<sup>23</sup> In fact, by June of 2005, there were at least 8 federal statutes, 47 federal rules, and 100 state laws referencing credit ratings issued by NRSRO CRAs.<sup>24</sup> Table 3 highlights several examples of regulatory uses of NRSRO CRA credit ratings.<sup>25</sup>

CRAs came under fire in the early 21st century with the implosion of Enron, WorldCom, and Parmalat. The dominant CRAs with NRSRO designations gave most of these companies’ bonds investment-grade ratings within a few days or months of them declaring bankruptcy. Beyond these evident errors, critics blamed CRAs for instigating crises in particular industries. France Telecom SA’s CEO Michel Bon blamed a Moody’s downgrade for initiating a debt crisis. Interest groups with a stake in credit ratings, regulators, and legislators joined in greater scrutiny of credit rating agencies and regulatory dependency on the ratings. The U.S. Senate began conducting investi-

**Over time, regulators became increasingly dependent on Nationally Recognized Statistical Rating Organization credit rating agencies.**

**Table 3**  
**Sample List of Rules Referring to Nationally Recognized Statistical Rating Organization (NRSRO) Credit Rating Agencies (CRAs)**

<b>Investment Company Act of 1940 Rule 2a-7 enacted in 1991</b>	Less than 5 percent of money market mutual fund assets may be invested in commercial paper that NRSROs assign lower than the first or second highest tier. (NRSRO mentioned 29 times in Rule 2a-7.)
<b>Securities Exchange Act of 1934 “Exchange Act” Rule 15c3-1</b>	Required broker-dealers to deduct percentages of their proprietary securities’ market value when computing net capital. However, reduced deductions are required for particular securities rated investment grade by at least two NRSROs. <sup>a</sup>
<b>Secondary Mortgage Market Enhancement Act of 1984</b>	Congress used the term NRSRO in the definition of “mortgage related security,” requiring it to be rated in one of the two highest rating categories by at least one NRSRO.
<b>Simplification of Registration Procedures for Primary Securities Offerings, Securities Act 1992</b>	The SEC uses NRSRO ratings to help distinguish between different types of securities that may be issued using simplified registration procedures. <sup>b</sup>
<b>Investment Company Act of 1940 Rule 2a-7</b>	This rule requires money market funds to limit investments to “eligible securities” that are rated in either of the top two short-term debt rating categories by the requisite number of NRSROs. <sup>c</sup>
<b>Investment Company Act of 1940 Rule 3a-7</b>	Issuers of fixed-income securities rated in one of the top four rating categories by at least one NRSRO are exempted from registering and complying with the Investment Company Act. <sup>d</sup>
<b>Securities Exchange Act of 1934 “Exchange Act” Rule 10b-6</b>	Exempts particular transactions in nonconvertible debt and nonconvertible preferred securities from Exchange Act provisions if the securities are rated investment grade by at least one NRSRO. <sup>e</sup>

*Continued next page.*

**Table 3 Continued**

<b>Federal Deposit Insurance Act Section 1831<sup>e</sup></b>	Congress defines “investment grade” corporate debt for savings associations as only securities rated in one of the four highest categories by at least one NRSRO. <sup>f</sup>
<b>Employee Retirement Income Security Act of 1974</b>	Required both public and private pension funds to base part of their investment criteria on bond ratings provided by NRSRO designated CRAs.
<b>Retirement Income Security Act of 1974</b>	Mandated that both public and private pension funds base part of their investment criteria on bond ratings provided by NRSRO designated CRAs.

Source: Jonathan G. Katz, *SEC Concept Release: Nationally Recognized Rating Organizations*, Release Nos: 33-7085, 34-34616, IC-20508, International Series Release No. 706 (Washington: SEC, 1994)( File No. S7-23-94), p. 12.

<sup>a</sup> Please see 17 CFR 240,15c3-1, Adoption of Amendments to Rule 15c3-1 and Adoption of Alternative Net Capital Requirement for Certain Brokers and Dealers, Exchange Act Release No. 11497 (June 26, 1975); and 40 FR 29795 (July 16, 1975). Please also see Securities and Exchange Commission, Securities Exchange Act Rel. No. 34-10,525 (Washington: SEC News Digest, 1973).

<sup>b</sup> Please see Adoption of Integrated Disclosure System, Securities Act Release No. 6383 (March 16, 1982) and Adoption of Simplification of Registration Procedures for Primary Securities Offerings, Securities Act Release No 6964 (October 22, 1992).

<sup>c</sup> See 17 CFR 270.2a-7.

<sup>d</sup> See Exclusion from the Definition of Investment Company for Structured Financing, Investment Company Act Release No 19105 (November 19, 1992), 52 SEC Dkt. 4014.

<sup>e</sup> See 17 CFR 240 10b-6(a)(4)(xiii).

<sup>f</sup> See footnote five of 12 U.S.C. 1831e(d)(4)(A), enacted in 1989, at <http://www.sec.gov/rules/concept/34-34616.pdf>.

gations, holding hearings, and making proposals for reforms. This eventually led to the Credit Rating Agency Reform Act of 2006.

### **CRAs’ Dual Role**

The regulatory use of credit ratings reveals their dual role in the marketplace. As Beaver, Shakespeare, and Soliman explain, credit ratings have valuation and contractual uses.<sup>26</sup> First, credit ratings are intended to reduce information asymmetries between firms and investors and improve the functioning of financial markets. They are an opinion about the measure of investment quality and default probability. These, in turn, help marketplace investors form valuations of investments’ value and risks. Second, credit ratings are used for contractual purposes, primarily for regulatory compliance and private contracts. In a sense, NRSRO credit ratings are a regulatory license indicating a debt instrument is eligible by law for particular kinds of investments and regulatory

perks. This license also helps insulate fiduciaries’ liability when making investments.<sup>27</sup> Under a regulatory licensing regime, favorable NRSRO ratings can reduce the costs of regulation to market participants. As Coffee explains, “such sales of regulatory licenses need not be based on trust or reliance on the rating agencies ... but only on the short-term cost savings realizable”; or, in other words, the regulatory benefits realized.<sup>28</sup> NRSROs received their designations because of past good performance, not necessarily because of future good performance; as such, a regulatory license is not necessarily indicative of the quality or risk of the financial instrument receiving it.

## **Hypotheses**

### **Oligopoly**

A cursory overview of regulatory reliance on NRSRO-designated CRA ratings suggests

**Credit ratings are intended to reduce information asymmetries between firms and investors.**

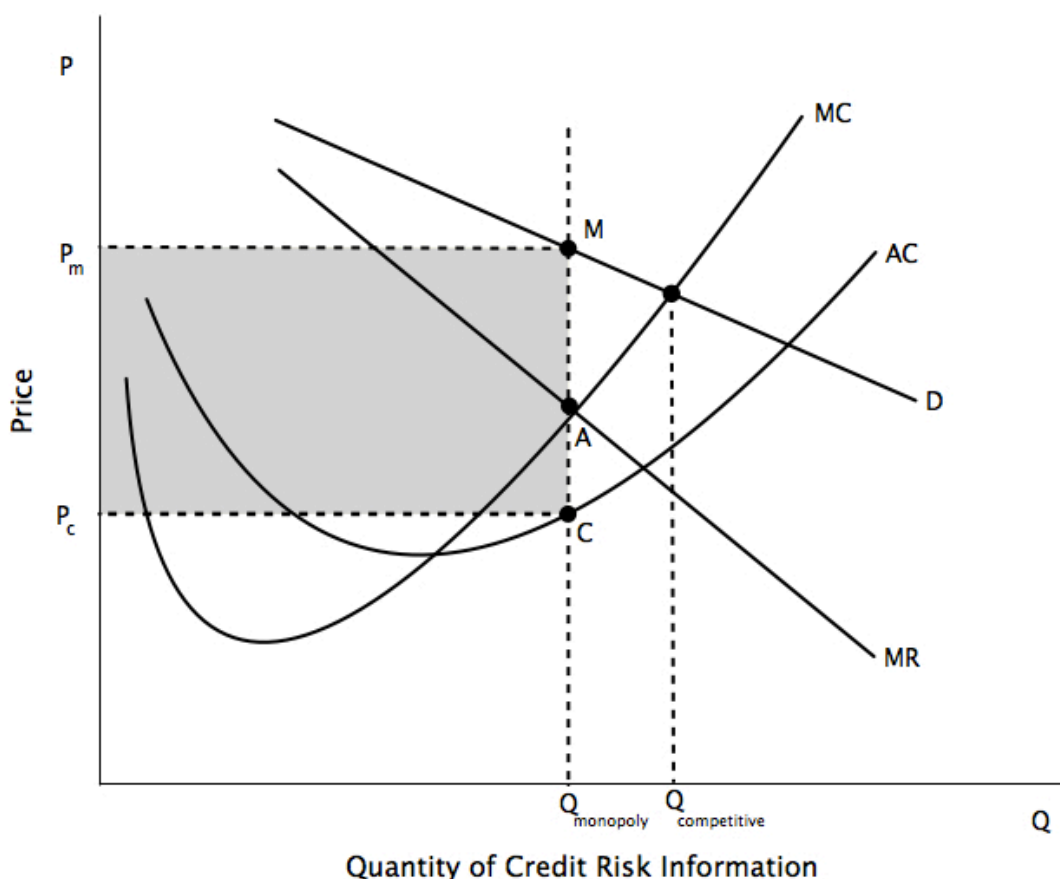
these firms likely operated in an oligopolistic market. Before examining the evidence we must first define what an oligopoly is, how it is created, and how it works.

An *oligopoly* is an industry dominated by few firms that is protected from additional competing firms by either artificial or natural barriers to entry, making it difficult for new firms to enter the market and credibly compete with the dominant firms. Reduced marketplace competition provides

oligopolistic firms greater market power than competitive firms because they can set price profitability above competitive levels and reduce output. This allows oligopolistic firms to enjoy higher profits than competitive firms because fewer firms fulfill market demand. In a competitive market new firms would enter the industry to capture a share of economic profits, but in an oligopoly they are prevented from doing so by barriers to entry (see Figure 2).

**In a competitive market new firms would enter the industry to capture a share of economic profits, but in an oligopoly they are prevented from doing so by barriers to entry.**

**Figure 2**  
**Lessons from a Monopoly Model**



Source: Chart constructed by authors.

Note: The figure demonstrates higher prices and lower quantity (or lower quality) of credit risk information with oligopolistic conditions compared with a competitive market. The shaded box represents economic profits gained via oligopolistic market power. MC is the marginal cost curve and AC is the average cost curve of conducting research and analysis to determine the quality of financial instruments. D is the demand curve, representing the demand for credit-risk information for financial instruments, and MR is the marginal revenue for each additional rated financial instrument. These, in turn, determine the price for credit ratings and the quantity (or quality) of credit risk information supplied. One can also view quantity of information supplied as informational quality because more information improves the quality of credit risk estimation.

**Reputational factors create natural barriers to entry in the credit rating agency market, but most barriers result from the regulatory designation of Nationally Recognized Statistical Rating Organization credit rating agencies.**

Generally, oligopolies result from either natural barriers to entry or government-created barriers to entry. Both tend to have higher prices, higher profits, and reduced quantity supplied than would otherwise be the case in a competitive market. Oligopolies sustained by natural barriers to entry remain susceptible to new technology and new entrants overtaking their oligopoly, creating a more competitive market. Oligopolies sustained by government regulation are also subject to competitive markets, but in some instances, their oligopolies may be sustained by government mandates.<sup>29</sup>

Although reputational factors create some natural barriers to entry in the CRA market, most of the barriers to entry result from the regulatory designation of NRSRO CRAs. Thus, we would expect the CRA market to be generally resistant to competitive pressure, be dominated by few firms, have high profits, and have restricted output supplied. Restricted output supplied can be in terms of informational output (quality as a dimension of quantity), rather than the sheer number of ratings produced. Without the threat of competition, oligopolistic CRAs are likely to become more complacent in their methodologies. Also, with fewer firms and reduced competition, markets may find it less likely to discover new tools to better measure credit risk.

#### **Reduced Investor Due Diligence**

Regulations incentivize investors to purchase financial instruments with high NRSRO credit ratings, rather than credit ratings with high informational value. Since it is hard to determine the accuracy of credit ratings, it is understandable why regulators use high NRSRO credit ratings as a proxy. Nevertheless, if investors were primarily concerned with accurate credit ratings, they would be more likely to make investment decisions in line with their own risk-return preferences and they would reward CRAs that are better at innovating methodologies to derive accurate ratings. However, if investors were primarily concerned with obtain-

ing regulatory benefits, they would be more likely to make investment decisions based on investments receiving high NRSRO credit ratings, and they would reward CRAs that were better at innovating methodologies to derive high ratings. Although the NRSRO firms charged with identifying investment vehicles eligible for purchase and or regulatory perks may also be the firms most likely to deliver accurate ratings, this is not necessarily the case. The NRSRO designation was given to firms for past good performance, but that does not guarantee those firms will continue to offer the most accurate ratings. Given investors' competing incentives to obtain accurate credit ratings (for information) and high NRSRO credit ratings (for regulatory benefit), it is not clear whether investors would necessarily punish NRSRO credit rating agencies that offered low-quality ratings.

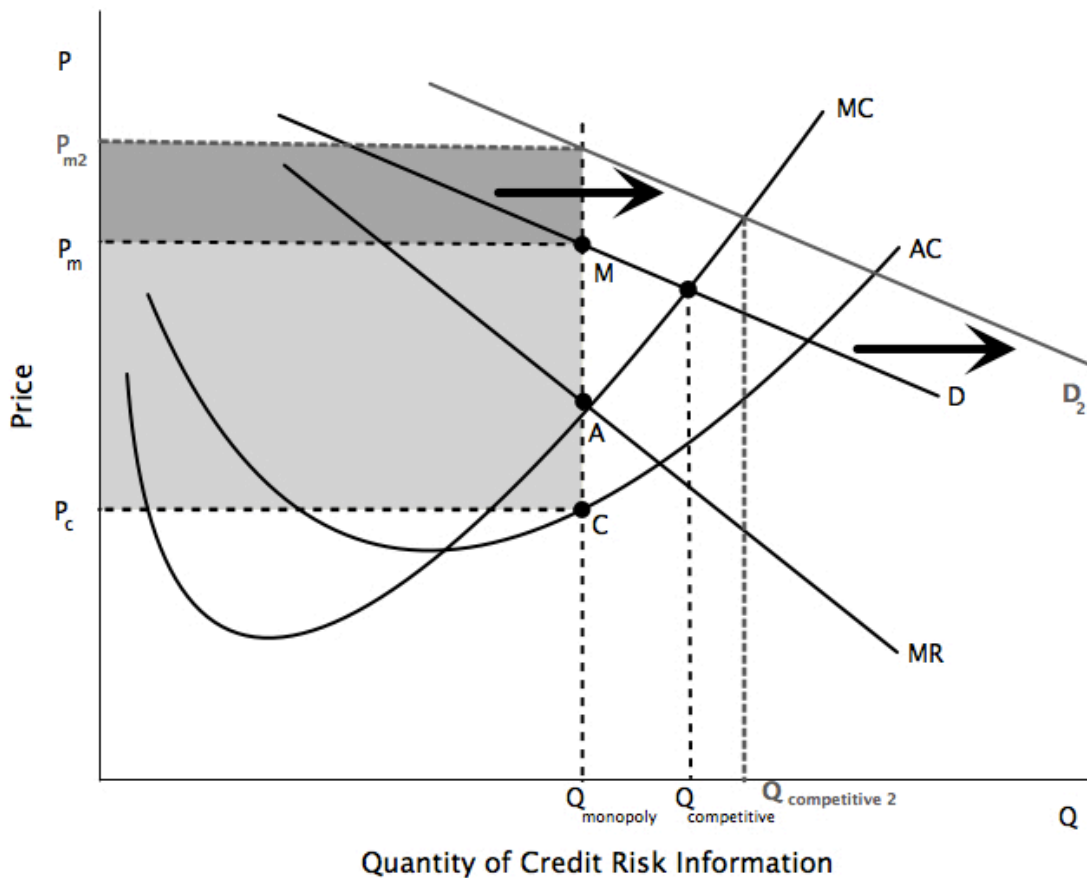
#### **Inflated Demand**

Regulatory reliance on credit ratings, specifically NRSRO CRA ratings, suggests regulation may have artificially boosted demand for these ratings. Table 3 shows a selection of regulations mentioning NRSRO CRAs. Regulations would likely increase the demand for high NRSRO credit ratings (ratings' contractual role), rather than increase the demand for credit ratings with high informational value (ratings' valuation role), because preferential regulatory treatment was bestowed on high NRSRO credit ratings rather than ratings with high informational value (see Figure 3). We would expect prices to rise above competitive levels, and the quantity of information supplied to remain below the competitive level.

### **Regulatory Impact: Evidence**

Regulations referencing NRSRO CRAs created a de facto oligopoly in the ratings market and regulation requiring or incentivizing investors to purchase highly rated products inflated and captured demand for

**Figure 3**  
**Lessons from a Monopoly Model: Shifting Demand**



Source: Figure constructed by authors.

Note: The figure demonstrates higher prices and lower quantity (or lower quality) of credit risk information with oligopolistic conditions compared with a competitive market. A shift in demand increases the difference between competitive and oligopolistic results. The shaded boxes represent economic profits gained via oligopolistic market power. The lighter shaded box represents economic profits before demand shifts; the darker shaded box represents additional economic profits after demand shifts.

high NRSRO ratings (even if those ratings did not provide substantial informational value). They also failed to incentivize investors to seek out ratings on the basis of high informational value so they would invest in high quality products. Instead, the regulations incentivized investors to seek out high NRSRO ratings in efforts to obtain regulatory privilege. This, in turn, reduced competition, increased prices, resulted in methodological complacency in credit risk modeling innovation, and reduced investor due diligence. The following section details evidence

of barriers to entry, high profits, restricted output, inflated market demand, and investor due diligence.

#### Overview

One of the great strengths of markets is to convey a tremendous amount of information in a relatively simple and efficient manner via the price mechanism. In markets with relatively uniform goods and commonly shared knowledge, the price mechanism is indeed quite powerful. In markets with more heterogeneous goods and imperfect or

**One of the great strengths of markets is to convey a tremendous amount of information in a relatively simple and efficient manner via the price mechanism.**



**Some investors are legally required, and others incentivized, to invest in the Nationally Recognized Statistical Rating Organization's credit rating agency products.**

asymmetric information, nonprice mechanisms often evolve in order to avoid Akerlof's familiar "lemons problem," or adverse selection, in which some markets risk being dominated by the sellers of shoddy goods.<sup>30</sup>

In markets where quality is revealed post-purchase, producers may be able to commit to providing high-quality goods by establishing a reputation for doing so. In essence, reputation posts a "bond" that will be forfeit if producers disappoint or cheat. That bond can take the form of a brand name or corporate goodwill, and the value of many corporations depends heavily upon intangibles such as these.

Goodwill, while reducing the information asymmetries, can also end up as a barrier to entry. Without a track record, how does one compete with incumbent firms? One possibility is for those with a strong reputation in one line of business to expand into another.

Given that the quality of credit analysis by a rating agency will likely not be discovered for months or years after the initial analysis, this would appear a market likely to be dominated by a handful of firms with significant reputations. And indeed, even before the advent of extensive federal financial regulation, the market for credit ratings was so dominated.

Regulation is often offered as a method for ensuring the provision of a minimum quality. While making no claims as to the actual quality provided, the SEC's involvement in the market for credit ratings has been an attempt to institute minimum quality standards. However, minimum quality standards can also restrict competition, increase concentration, and reduce consumer welfare, and do not necessarily guarantee the sought-after minimum quality. Whether they do so, or whether they improve competition and consumer welfare, is ultimately an empirical question, although theory can guide the interpretation of relevant data.

When imposing minimum quality standards on an industry already characterized by high concentration and strong reputations, the standards' net impact can be

evaluated by two metrics. First, minimum quality standards should reduce the value of incumbent firms' reputational capital (goodwill). If all new entrants need to do to meet the new standard, then they should not have to build reputational capital in order to be competitive. For this reason, observed market concentration should also fall with the decrease in incumbent goodwill. If concentration and incumbent reputational capital increase with the imposition of quality standards, then such standards are likely welfare-decreasing. We will come back to measures of concentration and goodwill as we examine the market for credit ratings.

### **Inflated Market Demand for NRSRO CRA Ratings**

Regulatory wording alone demonstrates how regulations arguably drove additional business to the NRSRO CRAs than would have otherwise been the case (see Table 3). Some investors are legally required, and others incentivized, to invest in NRSRO CRA-rated products. If demand were not inflated, we would expect reduced relative informational value of ratings to be associated with lower demand. Yet if the greater value from NRSRO CRA ratings came from gaining access to the regulatory license or to preferential regulatory treatment, then we would expect the relative informational value to matter less.

In fact, many people do question the informational value of these ratings.<sup>31</sup> Some have argued that credit spreads could substitute for credit ratings, suggesting that NRSRO CRA ratings may not provide substantial additional information.<sup>32</sup> Moreover, advances in information technology and the increasing interconnectedness of society may indeed have reduced the relative informational value of ratings compared with their value in the past.<sup>33</sup>

Some believe credit ratings are "lagging indicators of credit quality."<sup>34</sup> As James Van Horne concludes, "[w]hile the assignment of a rating for a new issue is current, changes in ratings of existing bond issues tend to lag

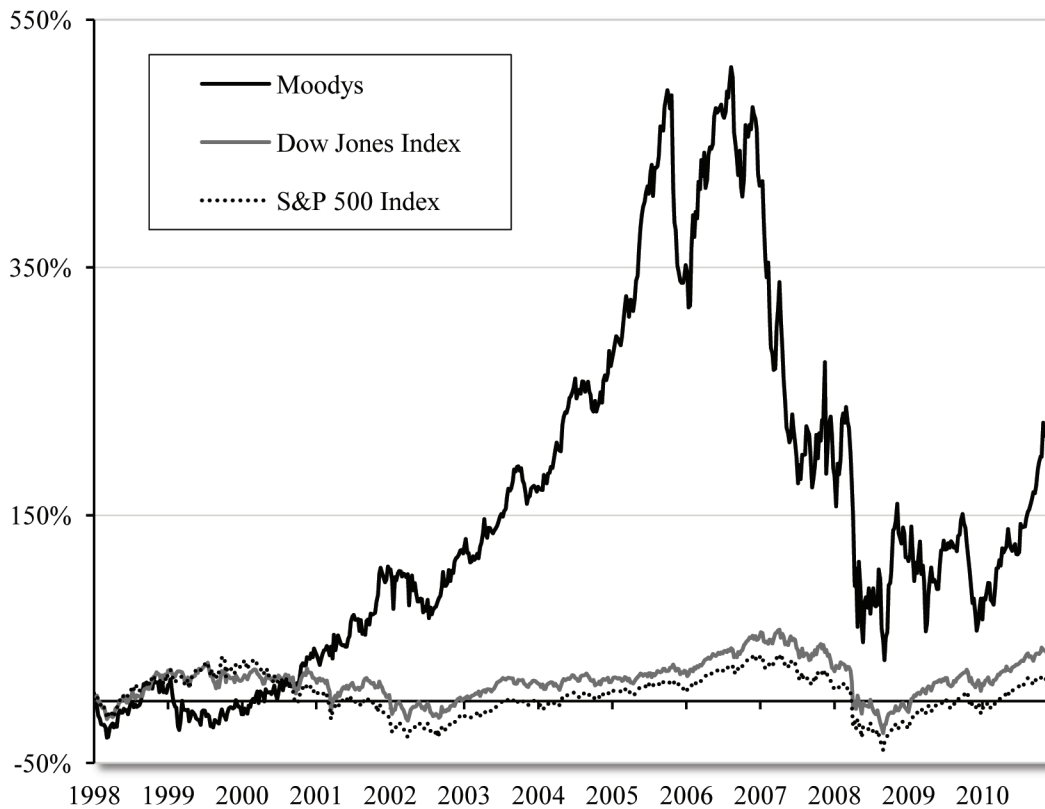
behind the events that prompt the change.”<sup>35</sup> Packer and Cantor also find evidence to suggest that agencies lag behind the market when agencies initiate a ratings change.<sup>36</sup> Moreover, credit ratings have proved themselves to be quite inaccurate at times, such as with WorldCom, Enron, Parmalat, and the 2008 financial crisis.<sup>37</sup> While a few misses are to be expected under any market structure, the fact that the rating agencies uniformly failed to forecast a major decline in the housing market illustrates that the system is subject to more than just a few random errors. Bruce Lehmann at Columbia Business School argued that he has “never known a portfolio manager who goes by the ratings.”<sup>38</sup> A 2002 survey by the Association of Financial Professionals found only 29 percent of professionals believe rating changes to be accurate.<sup>39</sup>

In sum, it is not clear how ratings continue to offer significant additional information if they lag behind alternative indicators, and are, in some cases, underestimating the ultimate risk of default. One would expect their value in the marketplace to decline following the bankruptcies of WorldCom and Enron. One would also expect the demand for credit ratings to decline or at least remain fairly constant, at least among the prominent NRSRO CRAs (as well as the NRSRO CRAs’ values).

Nevertheless, NRSRO CRAs’ fees and profitability have soared, especially from 2002 to 2008.<sup>40</sup> It is estimated that the average rate of return for credit rating agencies was slightly over 42 percent from 1995 to 2000, with operating margins as high as 54 percent in 2006.<sup>41</sup> Figure 4 demonstrates Moody’s skyrocketing

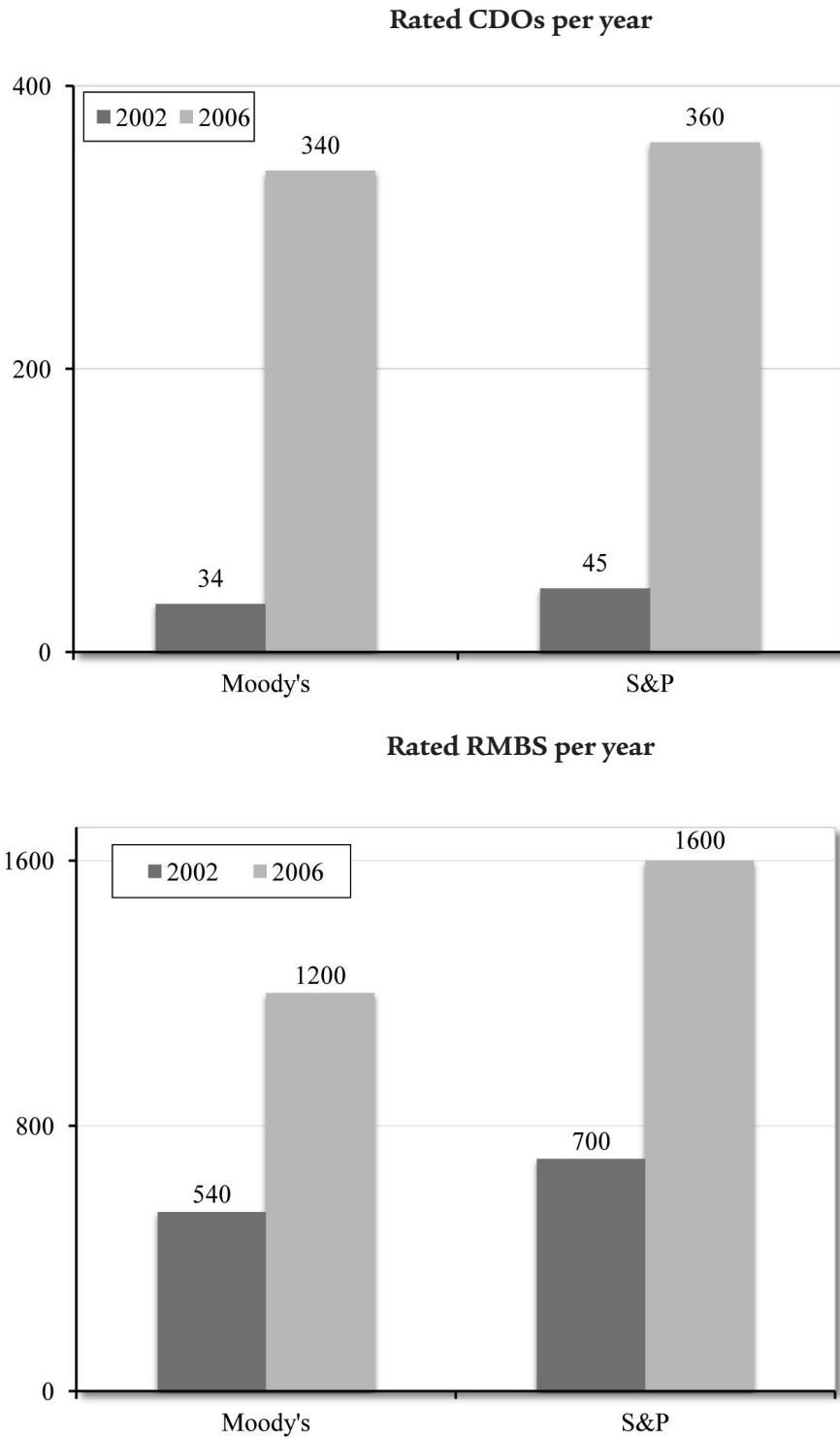
**While a few misses are to be expected, the rating agencies uniformly failed to forecast a major decline in the housing market, illustrating that the system is subject to more than just a few random errors.**

**Figure 4**  
**Historical Stock Prices 1998–2011: Moody’s vs. Dow Jones and S&P 500 Indices**



Source: Compiled by the authors from Google Finance, Historical Data, <http://www.google.com/finance/historical?q=NYSE:MCO>; and Yahoo Finance, Historical Data, <http://finance.yahoo.com/q/hp?s=MCO+Historical+Prices>.

**Figure 5**  
**Moody's and S&P Rated Residential Mortgage-Backed Securities (RMBS) and Collateralized Debt Obligations (CDOs) in 2002 and 2006**



Source: Carl Levin and Tom Coburn, *Wall Street and the Financial Crisis: Anatomy of a Financial Collapse*, Permanent Subcommittee on Investigations (Washington: United States Senate, 2011), <http://www.ft.com/cms/fc7d55c8-661a-11e0-9d40-00144feab49a.pdf>.

stock price in contrast to the Dow Jones and S&P 500 indices. Figure 5 shows the jump in the number of rated Residential Mortgage-Backed Securities and Collateralized Debt Obligations (CDOs) between 2002 and 2006 for both Moody's and S&P. Figure 6 demonstrates several jumps in Moody's goodwill between 1999 and 2010. Together, Figures 4–6 demonstrate that at least several NRSRO CRAs continued to be highly valued as companies and they continued to rate more products. This is surprising, because if a product is becoming less valuable in the marketplace, investors would most likely turn to other sources of risk assessment.

Even those who argue that credit ratings continue to have significant additional informational value should expect that reputational values would have at least been tainted throughout the crises of WorldCom, Enron, and the 2008 financial crisis. Yet if only informational value and reputational factors matter, we cannot explain the evidence in Figures 4–6.

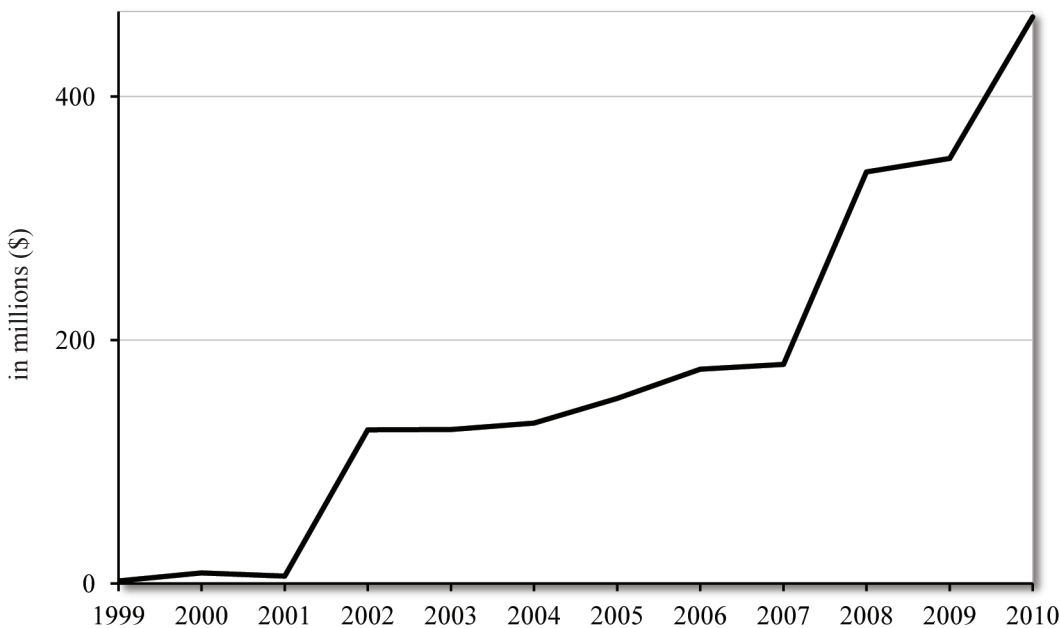
Instead, a more likely explanation is one described by Langohr and Langohr, who argue that “the regulatory uses of ratings . . . created a captive demand for credit ratings per se by market participants.”<sup>42</sup> If investors demanded credit ratings in efforts to meet regulatory requirements and to obtain preferential regulatory treatment, rather than to obtain informational value, then it is not surprising that demand for NRSRO CRAs' ratings remained high during this time period, as preferential treatment for NRSRO-rated investments continued.

#### Investor Due Diligence

Regulations that were intended to incentivize investors to make better decisions instead incentivized them to prioritize high credit ratings over quality investments. Since regulators used credit ratings as a proxy for credit quality, it is understandable that rules were implemented to incentivize high ratings. Nevertheless, regulators could not ensure that high credit ratings did indeed

**Regulations that were intended to incentivize investors to make better decisions instead incentivized them to prioritize high credit ratings over quality investments.**

**Figure 6**  
**Moody's Goodwill from Balance Sheet**



Source: Moody's Annual Reports.

Note: Goodwill is found on the company's balance sheet by stating the difference between its purchase price and the sum of the fair value of net identifiable assets, and could possibly be driven by reputation.

**Credit ratings  
often lag behind  
market indicators  
by as much as six  
months.**

represent high investment quality. The rules incentivized firms to hold riskier assets within a single credit rating. Instead of due diligence, or seeking out accurate information on investment quality, investors were incentivized (or required) to focus on purchasing instruments with high NRSRO ratings. Investors faced a choice: they could prioritize pursuing regulatory privilege by purchasing investments with high NRSRO credit ratings, or they could seek high informational quality. They chose the former.

This explains why demand for NRSRO CRAs did not seem to decline after high, yet inaccurate, ratings were issued for WorldCom and Enron months, if not days, before their announced bankruptcies. Figures 4, 5, and 6 show how NRSRO CRAs seemed to continue to be rewarded with increasing stock prices, more business, and higher goodwill.

**Conflict of Interest**

It is possible that the 1973 regulatory changes, instituting the NRSRO designations, may have played a role in incentivizing NRSRO CRAs to switch their business models from investor-pays to issuer-pays. It is easy to understand how an issuer-pays business model is prone to conflicts of interest.<sup>43</sup> This model raises concerns about incentives for CRAs to issue inflated ratings to promote their business with clients.<sup>44</sup> In theory, CRAs could gain short-term profit by overstating issuer or investment quality, but this would come at the expense of long-term reputational loss to their respective firms.<sup>45</sup> Although reputational concerns may constrain NRSRO CRAs from engaging in overt catering to issuers, their increased market power may have allowed them to at least marginally construct higher ratings. Also, NRSRO ratings still offer regulatory benefits regardless of whether investors or issuers purchase them.

CRAs have assured regulators they manage conflict-of-interest problems, for instance, by separating compensation from revenue. Also, the SEC has written regula-

tions to try and manage conflict-of-interest problems by prohibiting coercive actions and anti-competitive behavior.<sup>46</sup> Nevertheless, evidence continues to mount demonstrating that non-NRSROs tend to respond more quickly to information changes in the market, and that NRSRO CRAs do tend to lag in reporting downgrades.<sup>47</sup> Moreover, other empirical research finds that credit rating adjustments tend to adjust in favor of slightly higher ratings, and that ratings often lag behind market indicators by as much as six months.<sup>48</sup> Han Xia finds evidence to suggest that the issuer-pays rating model contributes to CRAs' incentives to issue inflated ratings.<sup>49</sup>

Alternative explanations do exist for the business model change. Rather than captive demand, photocopying may have reduced the profitability of rating subscription services, as investors would share information.<sup>50</sup> Langohr and Langohr argue that the increase in market-based financing in the 1970s made it difficult for CRAs to meet demand with subscription-based services.<sup>51</sup> Another explanation is that the early 1970s liquidity crisis, subsequent to the 1970 Penn Central default in commercial paper, motivated issuers to assure investors of quality ratings.

Although these explanations may very well be partially correct, it still remains unclear why the market would continue to tolerate a conflict of interest between NRSRO CRAs and issuers, especially after Moody's, S&P, and Fitch had rated Enron investment grade four days before the company declared bankruptcy.<sup>52</sup> It also remains unclear why investors would continue to trust the subjective opinions of CRAs, who contend they manage conflict of interest (which can result in lower quality ratings) or that they believe the SEC's regulations are capable of preventing conflict of interest. CRAs' management of conflict of interest was also challenged in 2011, when the Permanent Subcommittee on Investigations found that Moody's and UBS executives met to discuss when to start downgrading and the problems it would cause.<sup>53</sup>



The evidence demonstrates continued NRSRO CRA profitability, despite their failure to detect problems in WorldCom, Parmalat, Enron, and mortgage-backed securities, as well as potential conflict-of-interest problems. Thus, if reputation is not the most important factor driving profitability, it suggests that regulations creating captive demand for NRSRO ratings may fill that role instead. The incentives to obtain regulatory privilege may explain the shift in market power from investors to the NRSRO CRAs.

### Oligopoly

**Barriers to entry: few firms.** We have argued that regulations bolstered market demand for NRSRO CRAs and potentially perpetuated an investor-pays business model. These problems may have been mitigated had there been greater competitive threat from additional firms or new entrants. New firms may have acted as whistleblowers, which may have resulted in greater methodological innovation in the marketplace. However, regulations stipulating that regulatory preference only be afforded to those using NRSRO-designated CRA ratings created barriers to entry for non-NRSROs CRAs, because NRSRO CRAs' ability to essentially sell "regulatory licenses" gave them a significant market advantage over potential new entrants.

Interestingly, the SEC did not prevent non-NRSRO CRAs from issuing ratings, but instead excluded them from offering regulatory privilege. The NRSRO-designated CRAs' ability to offer regulatory privilege was a barrier to entry to a very important and profitable area of the marketplace. Thus, Table 3 provides several examples for how barriers to entry were constructed in the CRA marketplace.

Besides a cursory overview of regulatory uses of NRSRO CRAs, additional evidence points to barriers to entry: namely, sustained high profits and high market concentration with few firms. As explained earlier, the NRSRO CRA market has experienced increased profitability. Economic theory sug-

gests that new firms would enter the market to capture some of the increased profits. However, the SEC did not often grant new NRSRO designations, so increasing profitability for only a few firms continued.

The Herfindahl-Hirschman Index (HHI) is a quantitative measure of industry concentration that accounts for both the number of firms in the industry and each firm's market share. Specifically, the measure takes into account NRSRO revenues, the number of entities issuing NRSRO-rated debt securities, and the dollar amount of new U.S.-issued asset-backed securities. An HHI index lower than 1,000 is considered a competitive market. Most of the HHI indices in Table 4, 5, and 6 are instead over 3,000, demonstrating high market concentration. By the middle of the decade, 80 percent of rated issues were rated by only Moody's and S&P, and 14 percent rated by Fitch.<sup>54</sup> Although sustained profits should have attracted more firms to the market, it did not, and high market concentration remained. This suggests there are either regulatory or natural barriers to entry.

It is possible that the CRA industry tends toward natural concentration because of network and reputation effects. Lawrence White explains how a few CRAs benefit from a "network effect" because many users desire consistency across ratings categories and tend to use the same rating agency to achieve this goal.<sup>55</sup> Reputation effects may result from the time it takes for a CRA to develop investor trust. This would suggest early CRA entrants have an advantage that continues even as new incumbents enter the market. For this reason, Langohr and Langohr argue that "a small number of CRAs with the highest reputation for quality and independence will always dominate" independent of regulations.<sup>56</sup>

Nevertheless, the dominant NRSRO CRAs did not prove their quality ratings during the WorldCom and Enron collapses or the 2008 financial crisis. Nor do their conflicts of interest instill confidence in their independence and role as objective evaluator of credit risk. Moreover, if early entrant CRAs fail to produce consistently accurate ratings, it does

**Regulations stipulating that regulatory preference only be afforded to those credit rating agencies designated by the Nationally Recognized Statistical Rating Organizations created barriers to entry.**

**The process to obtain the Nationally Recognized Statistical Rating Organization designation was opaque, without clear and consistent rules.**

**Table 4**  
**Herfindahl-Hirschman Index Based on Dollar Value of Newly Issued U.S. Asset-based Securities, January 2004–June 2010**

Asset Class	2004	2005	2006	2007	2008	2009	2010 <sup>a</sup>
All U.S. asset-backed securities	3444	3375	3469	3398	3396	2973	2809
U.S. Commercial Mortgage-Backed Securities	3224	3222	3359	3212	3751	2916	2804
U.S. Traditional Asset-Backed Securities	3374	3338	3314	3280	3305	3262	3046
U.S. Prime Residential-Mortgage Backed Securities	3677	3672	3542	3376	3148	3222	4145
U.S. Nonprime Residential-Mortgage Backed Securities	3390	3177	3344	3515	3531	10000 <sup>b</sup>	6009
U.S. Collateralized Debt Obligations	3772	3944	4173	4253	4846	3795	5561

Source: Securities and Exchange Commission, *Action Needed to Improve Rating Agencies Registration Program and Performance-Related Disclosures* (Washington: United States Government Accountability Office, 2010).

<sup>a</sup> The HHIs for 2010 are based on data through June 30, 2010.

<sup>b</sup> Only one deal was issued in 2009, and it was rated by a single NRSRO.

**Table 5**  
**Herfindahl-Hirschman Index for Nationally Recognized Statistical Rating Organizations Based on Total Revenues, 2006–2009**

	2006	2007	2008	2009
All asset classes	3617	3511	3333	3324
Annual Percentage Change (%)		-2.93	-5.08	-0.27

Source: Securities and Exchange Commission, *Action Needed to Improve Rating Agencies Registration Program and Performance-Related Disclosures* (Washington: United States Government Accountability Office, 2010).

not follow that the few dominant CRAs will be the *same* firms over time.

Since reputation alone need not explain CRAs' small number and continued success, it suggests that the small number of existing firms is not solely the product of natural barriers to entry, but instead also regulatory barriers to entry: namely the NRSRO designation.

**Non-NRSRO.** Considering the perspective of non-NRSRO CRAs provides additional evidence that the small number of

firms in the industry is not the result of natural barriers to entry. Non-NRSRO CRAs believed the SEC restricted their entry and prevented them from capturing increasing economic profits.<sup>57</sup> Typically, these firms waited 2–7 years to receive a status determination.<sup>58</sup> The process to obtain NRSRO designation was opaque, without clear and consistent rules. Figure 7 shows NRSRO CRAs as of 2010, the number of years they produced credit ratings, and when they received recognition as NRSROs.

**Table 6**  
**Herfindahl-Hirschman Index for Nationally Recognized Statistical Rating Organizations Based on Number of Issuers Rated, 2006–2009**

Asset Class	2006	2007	2008	2009
Corporate Issuers	3069	2625	2596	2483
Financial Institutions	2773	2555	2550	2452
Insurance Companies	3353	3066	2826	2749
Issuers of Government Securities	3822	3820	3846	3889
Issuers of Asset-backed Securities	3602	3561	3553	3493

Source: Securities and Exchange Commission, *Action Needed to Improve Rating Agencies Registration Program and Performance-Related Disclosures* (Washington: United States Government Accountability Office, 2010).

Sean Egan, CEO of Egan-Jones, testifying before the Senate Committee on Banking, Housing, and Urban Affairs, stated that the “ratings industry is suffering from a state that is hard to characterize as anything other than dysfunctional.”<sup>59</sup> He contended that the industry suffered from a lack of competition under the old NRSRO system—a “partner monopoly” as he called it. Egan-Jones had been quicker to downgrade ratings for WorldCom, Enron, and the Ford Motor Company than the dominant NRSRO companies, yet Egan-Jones had been excluded from the NRSRO designations while existing NRSRO CRAs retained their designations.<sup>60</sup> Egan-Jones had applied for NRSRO status in 1998; however, it only received the designation in 2007—nine years later. Egan-Jones argued the application process was exclusive and categorically unfair. It believed it had proven to have more accurate ratings, superior risk assessment models, and reduced conflict-of-interest problems since the company used a subscriber-based business model.

Dominion Bond Rating Service was founded in 1976, but did not receive the NRSRO designation until February 2003, despite its application three years earlier. Dominion also argued that recognition from the SEC would help it expand in the U.S. credit rating market and put it on a level

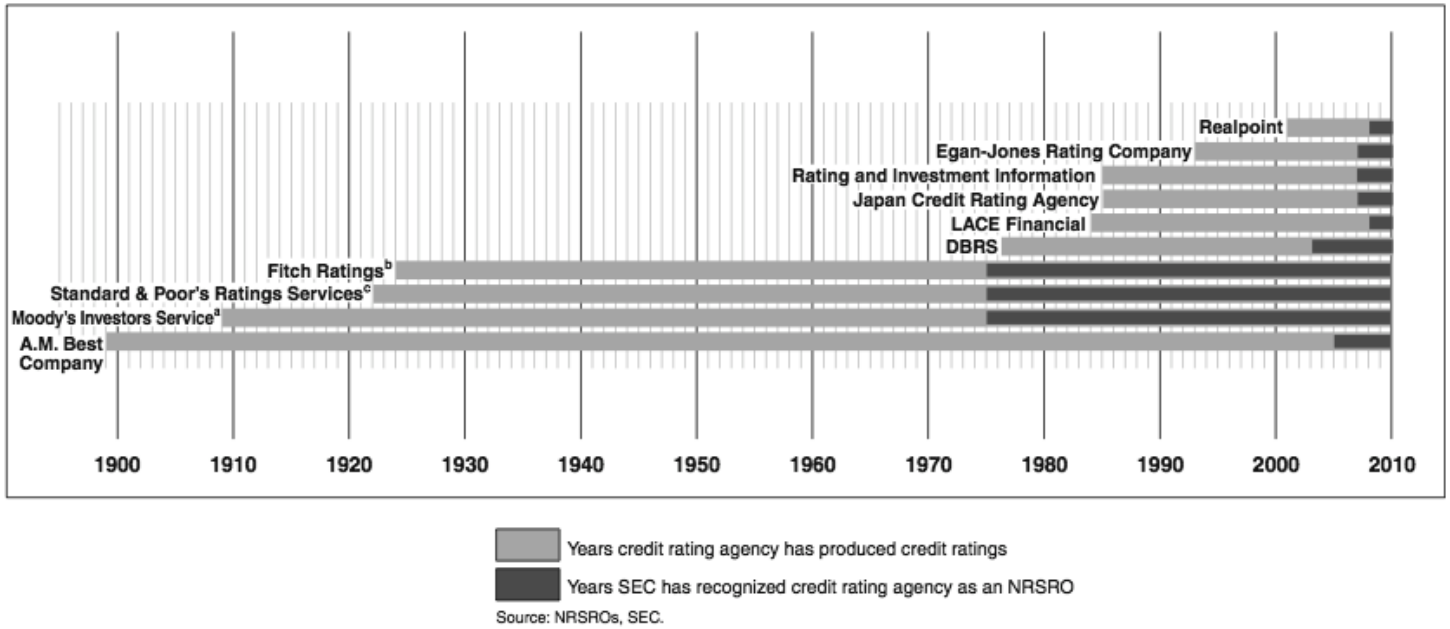
playing field with its competitors.<sup>61</sup> Larry Mayewski, Chief Rating Officer at AM Best, a CRA specializing in the insurance industry, pointed out “there are still companies that would like to see us with the NRSRO designation before they’ll do business with us.”<sup>62</sup>

These accounts from non-NRSRO CRAs demonstrate the importance of the NRSRO designation for CRAs’ ability to compete in the marketplace. Since the NRSRO designation is a regulatory product, it could be argued that regulatory, rather than natural barriers to entry, structure the CRA market.

**Competition and market power.** Popular accounts of the market for credit ratings generally overlook two important interrelated considerations in the study of market power. The first is that in concentrated markets (particularly those where products are homogeneous), fewer firms can actually reduce prices and, hence, profits. Market dynamics characterized by two firms with nearly identical products could, under plausible assumptions, result in a Bertrand outcome, where profits converge to zero because any firm could capture the entire market by simply lowering its price below that of its rival(s). The only stable Nash equilibrium<sup>63</sup> in a Bertrand<sup>64</sup> duopoly is zero profits for all firms. The power of the Bertrand model is not in disproving the existence of duopoly rents, but in proving that the exis-

**The only stable Nash equilibrium in a Bertrand duopoly is zero profits for all firms.**

**Figure 7**  
**Credit Rating History of Current Nationally Recognized Statistical Rating Organizations**



Source: Securities and Exchange Commission, *Action Needed to Improve Rating Agencies Registration Program and Performance-Related Disclosures* (Washington: United States Government Accountability Office, 2010).

tence of such rents is dependent upon more than just the number of sellers.<sup>65</sup>

The second issue is a basic confusion about market power. In the standard conflict-of-interest narrative, rating agencies are “corrupted” by the fact that they are paid for the ratings by the debt issuer. Obviously any issuer would prefer a higher rating, so competition forces the raters to lower their standards and sell inflated ratings. For this outcome to hold, market power would have to be on the side of the issuer, not the rating agency. In addition, this narrative never explains why raters would only compete on quality and not price. Once the raters only sell the highest rating, then the agency selling the highest at the cheaper price should capture the market, hence there are very strong incentives for price competition in the conflict-of-interest model, yet in the real world we witness substantial profits on the part of the largest agencies, indicating that we are not in a Bertrand equilibrium or any-

thing like it. It is more likely that the rating agencies possess market power because of various regulatory requirements, rather than the market power being possessed by the issuers.

**Restricted output: quality information and complacency in methodology.** Regulatory barriers to entry reduce competition in the CRA marketplace. Without competitive threat, the CRAs may have had reduced incentives to innovate more sophisticated rating methodologies to keep up with the changes in structured finance. If this were the case, we would expect NRSRO CRAs to have restricted, or the organizational structure in the marketplace to have limited, the quantity or quality of information in the marketplace about credit risk relative to an open market industry. Or, as John Coffee explains, the “lack of competition is important [because] . . . it permits these nominal competitors to shirk, engaging in less effort and research than if there were true active competition.”<sup>66</sup>



Also, had there been more NRSRO CRAs, it may have increased the likelihood that at least one of them would have innovated methodologies better able to measure and detect credit risk.

To be clear, NRSRO CRAs did not restrict the output of the number of credit ratings; on the contrary, they had strong incentives to rate as many as possible. According to the oligopoly model shown in Figure 5, with lower competitive threat, NRSRO CRAs restricted the quantity of information production supplied to the market—in contrast to what would have been supplied under a market regime. In addition, conflicts of interest between NRSRO CRAs and issuers, likely maintained by inflated/captive demand, also disincentivized NRSRO CRAs from information production. The CRAs often worked with issuers to structure financial products that would obtain higher ratings rather than focusing on instrument quality. This incentivized NRSRO CRA methodologies that would formulate more highly rated instruments rather than detecting increased credit risks in more sophisticated and complicated financial products.

This perception of NRSRO CRAs' methodological complacency was found in a 2002 survey by the Association for Financial Professionals. According to the survey, 40 percent of individuals working for companies with rated debt thought rating changes were timely, 29 percent found them to be accurate, and 22 percent believed the ratings favored the interest of investors.<sup>67</sup>

Another important issue with rating methodologies is that two bonds could have the same rating but vastly different returns. This overlooks the risk-return tradeoff and suggests that an Aa investment with a 12 percent return is just as safe as an Aa investment with a 6 percent return. Rating firms argue that their ratings are “relative measures of risk” and that’s why “the assignment of ratings in the same categories to entities and obligations may not fully reflect small differences in the degree of risk.”<sup>68</sup> However, there seemed to be a significant difference in risk when Moody’s

Baa-rated CDOs had a default probability of 20 percent while their Baa-rated corporate bonds had a default probability of only 2 percent.<sup>69</sup> In other words, CDOs’ debts with the same rating were ten times as risky as similarly rated corporate debts.<sup>70</sup>

Bo Becker and Todd Milbourn argue that increased competition within this regulatory framework actually reduces methodological efficacy. In a regulatory regime in which the existing firms enjoy captive and inflated demand—which in turn helps bolster a lucrative issuer-pays business model—adding an additional NRSRO actually may not improve the quality of ratings.<sup>71</sup> As NRSRO CRAs seek to meet the needs of their clients, which are primarily issuers, Becker and Milbourn find that the ratings agencies do marginally inflate their ratings and allow ratings’ quality to decline.<sup>72</sup> This demonstrates the importance of not merely opening up the NRSRO market to more competition, but also addressing the issues of captive/inflated demand, which spur conflict-of-interest problems. Opening up the NRSRO market without addressing inflated demand may not sufficiently incentivize NRSRO CRAs to innovate better methodologies to measure credit risk.

## Regulatory Regime Models

So far, we have analyzed the problems resulting from SEC regulations creating a de facto oligopoly of NRSRO-designated credit rating agencies and a captive market demand for NRSRO CRAs’ ratings. Our findings also suggest that markets may have been better served with a different regulatory framework. We will now examine alternative regulatory scenarios including an *open access regime*, a *licensing regime*, and a *licensing regime with captive demand*.

### Open Access

Not all industry-specific regulatory frameworks are created by government. To the contrary, there are copious examples of industry

**Opening up the Nationally Recognized Statistical Rating Organization market without addressing inflated demand may not sufficiently incentivize those credit rating agencies to innovate better methodologies to measure credit risk.**



**Without preferential regulatory treatment for particular investments, investors would seek out credit risk analysis and expertise based on reputational factors.**

self-regulation, in which companies and industries learn and standardize best practices for their industry based on the incentives faced. An *open access regime* is an industry-specific regulatory framework not stipulated by the state. According to Langohr and Langohr: “[N]o government or regulatory body distorts the market outcomes of natural supply and demand conditions. These conditions would not be distorted through the use of selected agencies’ ratings in regulations nor through licensing mechanisms.”<sup>73</sup>

Under these conditions, there would not be NRSRO designations, and regulations would neither require nor incentivize investors to hold certain kinds of investments.

In this scenario, investors would still face information asymmetries between their risk preferences and financial instruments’ risk offerings. Since investors care about the probability of default, as well as the value of investment return, they would conduct their own due diligence about investments’ risk. To do this, they would likely seek outside opinion about financial products and their associated credit risks. This advice might take the form of risk categories calculated by credit rating firms, or it might include a conglomerate of market-based measures for credit risk, possibly including credit spreads. Since investors would be the primary demander of credit risk information, financial innovation would likely search for new methodologies and technologies to meet investor demand. Without preferential regulatory treatment for particular investments, investors would seek out credit risk analysis and expertise based on reputational factors, rather than exogenous designations like the NRSRO. Most likely, investors would trust the credit risk analysis of those with incentives independent of those selling the investments (investor-pays, not issuer-pays). This would devolve the responsibility for due diligence to individual and group investors.

If those providing credit risk analysis decided they could increase profits by selling ratings directly to issuers, they would need to somehow prove to investors that con-

flicts of interest would not dominate their ratings. If credit risk analysts cheated by giving in to conflicts of interest, if investors became uncomfortable with the clear conflict-of-interest problems, or if investors lost confidence in the analyses’ informational value, investor demand for issuer-paid credit risk analysis would decrease. Consequently, issuers would have less reason to purchase analysis from credit risk analysts.

As issuer demand declined, credit risk analysts would either have to change their business model to issuer-pays or lose market share to competitors. Moreover, competitor analysts would have incentive to offer a business model not entrenched with conflicted interests to capture investor demand. But competitor analysts might also have an incentive to develop new methodologies to determine credit risk. Investors would have an incentive to shop around for more valuable sources of credit risk information.

It might be that reputational and network effects create an environment such that only a few credit analysts emerge. Or it might be that investor-pays/subscriber-based models are not extraordinarily profitable, and thus only a few credit analysts are attracted to the market. If this were the case, the *competitive threat would still remain* to provide an incentive for credit analysts to maintain quality risk assessment models and innovate new methodologies to keep up with financial innovations. Credit risk firms might even offer greater transparency to persuade investors to purchase their risk analysis.

The overall effect of an open regime on the market would be little to no cheating in analysis, few conflicts of interests, and incentives for analysts to innovate to increase the informational value of their credit analysis. The result would be more accurate credit risk analyses. With increased accuracy in credit risk analysis, issuers would have an increased incentive to offer higher quality investments. Investors’ primary incentive would be to create a portfolio representative of their risk preferences, rather than to obtain preferential regulatory treatment.

## Licensing Regime

Under a licensing regime, the state would stipulate that credit risk analysis be used to either require or incentivize investors to purchase high quality financial instruments. This assumes that the state knows how to define high quality credit risk analysis, and also assumes that credit risk analysts produce accurate analyses. In order to comply with the state or obtain benefits from the state, investors would seek to purchase highly rated investments.

Suppose, at first, that credit risk analysts sell their analysis to investors. In contrast to the open market regime, where investors care most about risk analysis quality, investors under a licensing regime would care about *two* things: risk analysis quality and obtaining a high rating. Investors would benefit from obtaining accurate ratings because they would be more likely to achieve a portfolio they desire, and by obtaining high ratings they would be eligible for state-bestowed benefits.

Now suppose credit risk analysts determined they could increase profits by selling ratings directly to issuers. They would need to prove to investors that conflicts of interest would not dominate their ratings. If credit risk analysts cheated by giving in to conflicts of interest, if investors became uncomfortable with the clear conflict-of-interest problems, or if investors lost confidence in the analyses' informational value, demand for issuer-paid credit risk analysis would *not* necessarily decrease, since investors value both high ratings and risk analysis quality. If credit risk analysts cheated by inflating ratings sold to issuers, it would decrease their reputational value among investors, but the inflated ratings would still make their investments eligible for state-bestowed benefits. Thus, the net impact of cheating on demand would depend on the negative impact of cheating compared with the value of state-bestowed benefits. If investors became uncomfortable with the clear conflict-of-interest problems, the net impact on demand would also depend on neg-

ative impact of concerns compared with the value of state-bestowed benefits. If investors lost confidence in the analyses' informational value, then the net impact on demand would also depend on the cost of unhelpful ratings or the extent to which the ratings are uninformative compared with the value of state-bestowed benefits.

As long as credit risk analysts could keep the costs of cheating, conflicts of interest, and low informational value below the benefit of investors obtaining state-bestowed benefits, then this business model would likely continue.

However, if the costs of cheating, conflicts of interest, or low informational value exceeded the value of state-bestowed benefits, then investors would not value analysts' credit risk analyses. In turn, issuers would have less incentive to purchase analysis on behalf of investors. Then credit risk firms would either have to reduce cheating and conflicts of interests, improve their analyses' informational value, or begin selling analyses directly to investors. If not, they could lose market share to a competitor.

It might be that reputational and network effects create an environment in which only a few credit analysts emerge. Or it might be that investor-pays/subscriber-based models are not extraordinarily profitable, and thus only few credit analysts are attracted to the market. If this were the case, then some competitive threat would still exist and could still provide an incentive to maintain quality risk assessment models, but it would also depend on the relative costs and benefits of obtaining a high quality rating to obtain state-bestowed benefits.

Some competition for investor business would remain. Since, in some cases, investors would demand higher quality products and products would be rated more accurately, issuers would have some increased incentive to offer higher quality products.

The overall effect on the marketplace would be some cheating in ratings, with conflicts of interests and less informational value associated with credit analysis com-

**It might be that reputational and network effects create an environment in which only a few credit analysts emerge.**

**Investors would benefit from obtaining accurate ratings because they would be more likely to achieve a portfolio they desire.**

pared with an open market regime. However, competitive threat would reduce incentives to cheat and increase incentives to improve informational value. Credit risk analysis would not likely be as accurate as that under an open market regime, but it would tend towards accuracy. Issuers would have less incentive to offer high quality ratings than they would under an open market regime, but they would tend towards offering a higher quality analysis.

### **Designated Licensing Regime**

Under a designated licensing regime, the state would stipulate that credit risk analysis be used to either require or incentivize investors to purchase high quality financial instruments from issuers. In addition, the state would also stipulate, or “designate,” whose credit risk analyses would be eligible to be used to meet requirements or incentives when purchasing financial instruments. This assumes that the state knows how to define high quality risk analysis and also assumes that credit risk analysts produce accurate analyses. It further assumes that the state knows whose credit risk analysis is the best and thus should be eligible to meet state requirements or incentives. In addition, it also assumes that the firms’ whose credit analysis is best today will continue to be the best in the future.

In order to comply with the state or obtain benefits from the state, investors would seek to purchase highly rated investments from designated firms. Under this regulatory framework, investors want both credit rating analyses to be accurate so that they obtain the portfolios they desire, but they also want to obtain high ratings from designated credit analysts.

Suppose, at first, credit risk analysts sell their analyses to investors. In contrast to the open market regime where investors care most about risk analysis quality, and in contrast to a licensing regime where investors care most about risk analysis quality and obtaining high ratings, investors under a designated licensing regime care about

*three* things: risk analysis quality, obtaining high ratings, and obtaining high ratings only from designated firms. Investors would benefit from obtaining accurate ratings because they would be more likely to achieve a portfolio they desire, and by obtaining high ratings only from designated credit risk analysts, they would be eligible for state-bestowed benefits.

Now suppose credit risk analysts determined they could increase profits by selling ratings directly to issuers. They would need to prove to investors that conflicts of interests with issuers, especially among analysts with reduced competition, would not impact their ratings. If credit risk analysts cheated by giving into conflicts of interest, if investors became uncomfortable with the clear conflict-of-interest problems, or if investors lost confidence in the analyses’ informational value, demand for issuer-paid credit risk analysis would *not* necessarily decrease, since investors value both high ratings from designated firms and risk analysis quality. Under this regime, credit risk analysts have fewer competitors because the state only designated a few of the analysts. If credit risk analysts cheated by inflating ratings sold to issuers, it would decrease their reputational value among investors, but the designated inflated ratings would still make their investments eligible for state-bestowed benefits. Analysts would also be able to get away with more cheating because of less threat of competition in the marketplace. Thus, the net impact of cheating on demand would depend on the negative impact of cheating compared with the value of state-bestowed benefits. If investors became uncomfortable with the clear conflict-of-interest problems, the net impact on demand would also depend on the negative impact of concerns compared with the value of state-bestowed benefits. If investors lost confidence in the analyses’ informational value, then the net impact on demand would also depend on the cost of unhelpful ratings or the extent to which the ratings are uninformative compared with the value of state-bestowed benefits.

As long as credit risk analysts could keep the costs of cheating, conflicts of interest, and low informational value below the benefits of investors' obtaining state-bestowed benefits, then this business model would likely continue.

However, if the costs of cheating, conflicts of interest, or low informational value in any combination exceeded the value of state-bestowed benefits, then investors would not value credit risk analysts' analyses. In turn, issuers would have less incentive to purchase analyses on behalf of investors. Then credit risk firms would either have to reduce cheating and conflicts of interest, improve their analyses' informational value, or begin selling analyses directly to investors. If not, they could lose their market share to a competitor. However, since the market is much less competitive, they retain some market power over how much cheating and conflicts of interest will be tolerated, as well as over informational value of ratings. Credit risk analysts would still have some incentive to increase the quality of ratings through reduced cheating and reduced conflicts of interest, or to improve their methodologies to provide value-added to investors. However, this incentive would be mitigated because there would be less threat of competition in the marketplace.

If the analysts still could not bolster demand, then they might have to change their business model to an investor-pays model or lose their market share to competitors. However, with reduced competition in the marketplace, they may be able to continue the issuer-pays business model.

Although reputational and network effects may contribute to a smaller number of credit risk analysts, the special designations given to particular credit risk analysts also significantly contribute to the concentrated market and reduced competition. Some competitive threat would remain in the marketplace and provide incentive for credit risk analysts to maintain quality risk assessment models, but it would also depend on the degree of market power the designated ana-

lysts maintained, as well as the relative costs and benefits of purchasing high ratings to obtain state-bestowed benefits from designated firms.

Since credit risk analysts have greater market power than in the previous models, issuers will recognize that there is less competitive threat, with less incentive for the credit risk analysts to rate financial instruments as accurately as possible. As such, there may be less reason to only offer the highest quality products.

The overall effect of designated credit analysts on the marketplace would be more cheating in ratings, greater conflicts of interest, limited competition, and less incentive to improve informational value than in a licensing or open regime. Credit risk analysis would not be as accurate as it would be under a licensed or open market regime. In turn, issuers would have less incentive to offer high quality products.

## Reforms Not To Pursue

Some have argued that problems related to credit rating agencies result from the SEC passing off its responsibility to private companies. But requiring the SEC to conduct valuations of credit risk would not deal with the problem of inflated and captive demand. Moreover, it is unlikely that the SEC is equipped or could ever become equipped, without major market stifling, to handle credit risk valuation on its own. For example, a 2002 Senate study found that SEC officials had managed to review only 16 percent of the 15,000 annual company reports submitted in the previous fiscal year, and they had not reviewed Enron in a decade.<sup>74</sup>

Some contend that holding CRAs liable for their ratings would force them not to cheat and to innovate better ratings methodologies. First, holding CRAs liable for ratings does not address the problems of inflated demand or reduced competition. Second, CRAs argue they are a "part of the media" since they are financial publishers.<sup>75</sup> For this

**Holding credit rating agencies liable for ratings does not address the problems of inflated demand or reduced competition.**



**Another risk from subjecting rating agencies to liability is that, in order to protect themselves, the agencies would utilize “consensus forecasts” of key economic variables. Yet the consensus could be dangerously off.**

reason, they argue that the First Amendment applies to them and protects their speech. Third, it remains true that they do not have a federal mandate, as NRSRO CRA analysts contended at a Senate panel in the wake of Enron’s collapse: “S&P operates with no governmental mandate, subpoena power, or any other official authority. It simply has a right, as part of the media, to express its opinion in the form of letters and symbols.”<sup>76</sup> Moreover, since actual credit risk is nearly impossible to know and CRAs are limited by issuers’ financial disclosure, it would be difficult to prove in court that CRAs purposefully inflated credit ratings.

Another risk from subjecting rating agencies to liability for either their statements or processes is that, in order to protect themselves, the agencies would adopt a “reasonable man” approach. For instance, if the agencies used government forecasts of house prices in their mortgage default models, then it is likely that any court would deem such assumptions “reasonable”; after all, these are the assumptions that regulators rely upon. If such assumptions are, however, grossly in error, as were the housing price forecasts used by various federal agencies, then the value of information created by the rating agencies would also be reduced, if not compromised. A reasonable-man approach would also encourage rating agencies to utilize “consensus forecasts” of key economic variables. Yet the consensus could be dangerously off. The economic forecasting profession does not exactly have a great record at predicting turning points, and it also missed the decline in house prices. A system of liability would likely destroy whatever additional information the rating agencies bring to the market, as the agencies would face tremendous pressure to simply mimic widely held beliefs, which themselves would already be priced into the market.

Others have advocated restricting the practice of “notching.” CRAs engage in punitive notching if they compel issuers to purchase more products by threatening to notch down other rated financial instruments.

When or if notching does occur, it is anti-competitive; however, prohibiting notching also ignores the problem of inflated demand and reduced competition. Moreover, CRAs would have less ability to compel issuers to buy their products if they had less oligopolistic market power.<sup>77</sup>

Another proposal has been to ban financial instruments that are determined to be too complex for adequate risk assessment. This also neglects the core problems of inflated demand and the de facto NRSRO CRA oligopoly. It further assumes that financial regulators and lawmakers have the knowledge necessary to determine which instruments are “too complex.”<sup>78</sup> Finally, it overlooks the significant opportunity costs associated with preventing innovation in financial markets.

### **Recent Development in CRA Regulatory Reform**

In the wake of Enron, the 2002 Sarbanes-Oxley Act required the SEC to reexamine the “role and function of rating agencies in the operation of the securities market” and to specifically address potential barriers to entry.<sup>79</sup> In 2003, the SEC sought comments on whether NRSRO credit ratings should continue to be used for regulatory purposes. According to the SEC, most of the 46 comments responding to the 2003 Concept Release supported continuing the NRSRO designation and expressed concern that “eliminating the NRSRO concept would be disruptive to capital markets.”<sup>80</sup> However, it is worth noting the SEC’s primary citation for those in favor of keeping the NRSRO designation was a “Letter from Leo C. O’Neill, President, Standard & Poor’s, to Jonathan G. Katz, Secretary, Commission (July 28, 2003).”<sup>81</sup> The SEC mentioned that only four commenters supported elimination of the concept, and cited professors Frank Partnoy of the University of San Diego School of Law and Lawrence J. White of NYU’s Stern School of Business.<sup>82</sup> From these comments, the SEC attempted to clarify the process of identifying NRSROs with a proposed definition:<sup>83</sup>



- i. issues publicly available credit ratings that are current assessments of the creditworthiness of obligors with respect to specific securities or money market instruments;
- ii. is generally accepted in the financial markets as an issuer of credible and reliable ratings, including ratings for a particular industry or geographic segment, by the predominant users of securities ratings; and
- iii. uses systematic procedures designed to ensure credible and reliable ratings, manage potential conflicts of interest, and prevent the misuse of nonpublic information, and has sufficient financial resources to ensure compliance with those procedures.

The non-NRSRO CRA community expressed concern that these proposed reforms would, in fact, strengthen incumbent power in the market rather than reduce barriers to entry. First, the proposed rules would require CRAs to provide public credit ratings, although this would be essentially offering their products free of charge for subscriber-based CRAs. The rule clearly catered to the firms that used an issuer-pays business model rather than a subscriber-pays model. Second, the requirement for CRAs to be “generally accepted” created something like a chicken-and-egg problem for new firms. As Banking, Housing, and Urban Affairs Committee Chairman Sen. Richard Shelby put it, “to receive the license a firm must be nationally recognized, but it cannot become nationally recognized without first having the license.”<sup>84</sup> As Lawrence White argues, in order to be “generally accepted” it would require ratings be linked “to the views of the predominant users of securities ratings.”<sup>85</sup> Ultimately, the SEC did not move forward with these proposals.

In 2005, the House considered legislation to reduce barriers to entry in the CRA market, and on September 29, 2006, President Bush signed the Credit Rating Agency Act of 2006. A primary result of the legislation

was to reduce arbitrary SEC power to designate NRSROs and instead set timelines for SEC response. Under the 2006 law, any credit rating firm issuing ratings for at least three years could apply to the SEC to receive the NRSRO designation. The SEC would need to render a decision or set a timeline for evaluation within 90 days, and make a final decision within 120 days. The rules also aimed to avoid bolstering a particular business model, whether subscriber-pays or issuer-pays. The law ensured that neither the SEC nor the state could regulate credit ratings’ content, procedures, or methodologies, and prohibited NRSROs from allowing conflicts of interest to impact rating integrity or “conditioning ratings . . . on an issuer’s purchasing other services from the NRSRO.”<sup>86</sup>

Despite these attempts to reduce barriers to entry in the CRA marketplace, Langohr and Langohr argue that this merely “replaced one form of controlled access to [the CRA market] with another” by replacing the opaque NRSRO subjective recognition system with an objective recognition system.<sup>87</sup> They argue that these “objective” measures still used criteria that systematically favor incumbent firms while continuing to disadvantage competitors. Still, there is evidence that some ratings markets did experience reduced concentration, as demonstrated in Table 4.

Barriers to entry alone were not solely responsible for problems in market structure. Instead, regulatory dependence on NRSRO ratings also led to distorted incentives and outcomes. As a result, policymakers have considered reducing the role of NRSRO ratings in regulation.

### **The Dodd-Frank Act**

While each financial crisis seems to have a cycle of complaints about failures among the rating agencies, previous legislative responses, such as the Sarbanes-Oxley Act, have relied mostly on further study rather than wholesale reform of the ratings process. The Dodd-Frank Act attempts to address the quality of ratings via a variety of

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**The primary focus of Dodd-Frank's changes to the regulation of rating agencies is in attempting to "insulate" the agencies from various perceived conflicts of interest.**

mechanisms. The most extensive of these are found in Section 932.

The primary focus of Dodd-Frank's changes to the regulation of rating agencies is in attempting to "insulate" the agencies from various perceived conflicts of interest. For instance, Dodd-Frank requires improved "internal controls" for the ratings process, separating the sales and marketing functions of the agencies from the ratings process, increasing the number of independent directors on the agencies' boards of directors, and increasing the responsibilities of the ratings agencies' boards. Many of these features mirror the expanded corporate governance requirements for auditors imposed by the Sarbanes-Oxley Act. This should not be too surprising, as it was the same congressional staffers who drafted the similar sections in both acts. What is surprising is the expectation that such provisions would work any better in improving credit ratings than they did, or failed to do, in improving the quality of financial audits.

The quest for board independence is a repeated theme in corporate governance reforms. As mentioned, the Sarbanes-Oxley Act increased the number of independent board members for auditors, with similar provisions covering rating agencies in the Dodd-Frank Act. These repeated attempts at independence, however, find little support in the academic literature. In the case of banks during the financial crisis, some researchers find that greater board independence is actually associated with worse outcomes.<sup>88</sup> Dodd-Frank further muddies the waters by allowing some of the "independent" board members to be users of ratings. This ignores the fact that investors in rated securities have their own incentives to avoid downgrades. Instead of reducing conflicts of interests, Dodd-Frank may very well simply be substituting one conflict of interest for another.

One of the Dodd-Frank rating agency reforms has already had tremendous negative impact on our capital markets—so much so that the SEC has effectively voided the provision. This Section, 939G, repeals SEC rule

436(g), which had exempted NRSROs from being deemed part of a security's registration statement for the purposes of securities fraud. Rule 436(g) had protected NRSROs from liability under Section 11 of the 1933 Securities Act. This protection actually increased the flow and quality of information received by investors by encouraging the use of ratings in offering statements. Dodd-Frank's repeal of Rule 436(g) effectively shut down the new offerings market for asset-backed securities and corporate debt. It was only the issuance of a "no-action" letter from the SEC to Ford Motor Credit Company that allowed this market to function. However, this no-action letter is temporarily in effect, leaving considerable uncertainty as to how our debt markets will function in the absence of Rule 436(g), at least until such time the markets evolve beyond the regular use of credit ratings.

The Dodd-Frank Act, like the Sarbanes-Oxley Act before it, attempts to remedy regulatory failures with the increased use of private litigation. Section 933 expands the potential legal liability of rating agencies in three ways. First, it established a private right of action under Section 18 of the 1934 Securities Act for any material misstatements contained in reports to the SEC. Second, it established liability for errors in factual assumptions used in a ratings methodology. An example would be the range of forecasted house prices over the life of a mortgage-backed security. Third, and last, there is established legal liability under Section 21E of the 1934 Securities Act for misstatements in any forward-looking statements made by the rating agencies. Of course, one defense to these charges would be to adopt a reasonable-man approach to ratings methodology and predictions. Basing ratings on consensus, or even government forecasts of key economic variables, would likely provide some shield to liability. Providing a consensus viewpoint could, however, greatly reduce the informational value provided by ratings. Increased liability could easily make rating agencies risk-averse and less likely to offer unconven-

tional points of view. Agencies could also be subject to suit by investors “harmed” by the downgrade of assets which they hold. Until these provisions are tested in the courts, their ultimate impact on ratings’ quality will remain unknown. It is likely, however, that the increased incentives for risk aversion will greatly reduce the value of ratings to our capital markets, with potential harm to both price discovery and liquidity.

Other provisions of Dodd-Frank are also likely to reduce the utility of rating agencies, with detrimental impacts on our capital markets. For instance, Section 939B eliminates the rating agencies exemption from Regulation FD, which covers the “fair disclosure” of information. Regulation FD prohibits senior executives of public companies who regularly communicate with the public from making selective disclosure of non-public informational material to select persons. Prior to Dodd-Frank, the rating agencies were exempted, with the understanding that the ratings process would be better informed if the rating agencies had occasional access to nonpublic information. Section 939B has the potential to reduce the flow of information between public companies and the rating agencies, with the result that ratings become less informed.

Not all of the credit rating provisions of Dodd-Frank are harmful or misguided. In fact, the law takes a serious step toward reducing the regulatory reliance on the rating agencies. Section 939A of Dodd-Frank requires all federal agencies to review their existing regulations and to provide alternative standards of credit risk. Although the federal bank regulators have, as of the publication of this paper, requested public comments as to possible alternatives, these same regulators have moved slowly on Section 939A and have shown a general resistance to abandoning their reliance on the rating agencies. While Section 939A has the potential to address some of the central flaws discussed in this paper, it also leaves considerable discretion to the very same regulators who instituted those flaws. For

Section 939A to have real impact, however, it may well take the continued involvement of Congress.

Overall, the Dodd-Frank Act is a mixed bag when it comes to the credit rating agencies. Some provisions have a real potential for reform, but their success is also contingent on the same regulatory process that created the problems. Unfortunately other more concrete provisions of Dodd-Frank have already had a significant negative impact on our capital markets. A repeal of these latter provisions, particularly Sections 932, 933, 939B, and 939G, would protect the positive capital market functions of the rating agencies. Section 939A, which attempts to reduce regulatory reliance on the rating agencies, should be retained, but may be in need of strengthening.

#### **Proposal for Reform**

The open-market regime provides results closest to the regulatory ideal and best serves the public good. It calibrates incentives in such a way that issuers, investors, and credit rating agencies have an incentive to promote the public good while seeking their own self-interest. The benefits likely achieved in the open-market regime include higher quality investment instruments, higher quality ratings, increased methodological innovation, and investor focus on informational value rather than regulatory privilege.

To achieve open-market regime benefits would require ending regulatory reliance on credit rating agencies. It would also require repealing the Nationally Recognized Statistical Rating Organization (NRSRO) designation and allowing competition in the marketplace of credit rating firms. Market participants may still use credit ratings to evaluate credit risk, but they should also be free to innovate their credit-risk evaluations. Ultimately, these reforms will help reduce CRA oligopolistic power and reduce artificial demand for credit ratings.

To the extent that this is not politically feasible, or that policymakers worry that capital controls are required to prevent system-

**Overall, the Dodd-Frank Act is a mixed bag when it comes to the credit rating agencies.**

**One contributor to the financial crisis was a significant reduction in due diligence on the part of investors, regulators, financial institutions, borrowers, and politicians.**

atic bank runs, regulators should strongly consider eliminating references to NRSRO credit ratings as often as possible. Moreover, when ratings are required, they could be used to calculate net capital at the time of purchase, rather than over time. Also, regulators may consider innovations in credit risk analysis, or market-based measures such as credit spreads or market implied ratings, in evaluating credit risk. In addition, many of these measures of credit risk can be used by investors themselves, promoting investor due diligence in investment decisions.

## Conclusion

A variety of factors contributed to the worldwide financial crisis of 2008. One of those was the mistaken belief that risky assets, such as mortgage-backed securities and sovereign debt, were actually risk-free. This perception facilitated both the massive levels of leverage and excessive degrees of asset concentration witnessed within our financial system. In all likelihood, such leverage and asset concentration would not have occurred had the assets in question not been blessed by the CRAs, or had financial regulators not embedded the use of ratings into the fabric of prudential regulation.

A lack of competition, in part the result of regulatory barriers, along with mandated usage by many financial market participants has resulted in a dysfunctional credit ratings industry. Entrenched market power has led to the predictable result that ratings agencies would reduce the quality of their services. Unfortunately, their services were significant components in our financial regulatory system. This reduction in ratings quality also resulted in a reduction in the efficacy of financial regulation.

Increased competition alone, however, will be insufficient to address the failings in the ratings market. In order to move toward a functioning, competitive ratings market, the users of ratings, particularly investors, must be free to reject the use of ratings. In

fact, increased competition, coupled with a continued “gate-keeping” role for CRAs, is just as likely to increase financial fragility as reduce it. To the extent that rating agencies are performing police power functions of the state, those functions should be transferred back to the state.

One contributor to the financial crisis was a significant reduction in due diligence on the part of investors, regulators, financial institutions, borrowers, and politicians. To some extent this reduction was facilitated by a belief that rating agencies could provide such due diligence on behalf of other market participants. Reducing the central role of rating agencies in financial regulation would undoubtedly increase the due diligence cost of other market participants. It would, however, greatly increase the quality and quantity of monitoring of financial risk by market participants.

Ultimately, both taxpayers and financial market participants would be better served by rating agencies that were subject to competitive market pressures. Such pressures would most effectively be brought to bear by a reduction in regulatory barriers to entry and the removal of artificial demand due to various compliance requirements placed upon other market participants, such as banks, insurance companies, and mutual funds.

## Notes

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Light," *Financial Times* (London), December 9, 2002.

63. A "Nash equilibrium" is a position in a game or interaction involving two or more actors, in which no actor has anything to gain by changing only his own strategy unilaterally. Since there is no unilateral action by either actor that would improve their respective positions, the implication is that such an outcome will produce a stable equilibrium.

64. A Bertrand duopoly is one in which a duopoly is sufficient to drive prices down to marginal cost and produces a result consistent with that found under perfect competition. While the Bertrand model is conditioned upon a number of simplifying assumptions, it does describe a situation where even a few competitors (a highly concentrated market) can mirror outcomes found under perfect competition.

65. First articulated in Joseph Bertrand, review of "Theorie Mathematique de la Richesse Sociale and of Recherches sur les Principes Mathematiques de la Theorie des Richesses" by Léon Walras, *Journal des savants* 67 (1883): 499-508.

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