



# Information effect of entry into credit ratings market: The case of insurers' ratings<sup>☆</sup>

Neil A. Doherty<sup>a</sup>, Anastasia V. Kartasheva<sup>a,\*</sup>, Richard D. Phillips<sup>b</sup>

<sup>a</sup> Insurance and Risk Management Department, Wharton School of the University of Pennsylvania, USA

<sup>b</sup> Department of Risk Management and Insurance, Robinson College of Business, Georgia State University, USA

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## ABSTRACT

The paper analyzes the effect of competition between credit rating agencies (CRAs) on the information content of ratings. We show that a monopolistic CRA pools sellers into multiple rating classes and has partial market coverage. This provides an opportunity for market entry. The entrant designs a rating scale distinct from that of the incumbent. It targets higher-than-average companies in each rating grade of the incumbent's rating scale and employs more stringent rating standards. We use Standard and Poor's (S&P) entry into the market for insurance ratings previously covered by a monopolist, A.M. Best, to empirically test the impact of entry on the information content of ratings. The empirical analysis reveals that S&P required higher standards to assign a rating similar to the one assigned by A.M. Best and that higher-than-average quality insurers in each rating category of A.M. Best chose to receive a second rating from S&P.

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## 1. Introduction

Significant debate exists regarding the role that competition should play in the market for credit ratings.

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\* Corresponding author.

E-mail addresses: [doherty@wharton.upenn.edu](mailto:doherty@wharton.upenn.edu) (N.A. Doherty), [karta@wharton.upenn.edu](mailto:karta@wharton.upenn.edu) (A.V. Kartasheva), [rphillips@gsu.edu](mailto:rphillips@gsu.edu) (R.D. Phillips).

Representatives from the credit rating agencies (CRAs) themselves argue that reducing barriers to entry would eventually lead to reduced disclosure of information as the new entrants engage in "race to the bottom" strategies in order to sell their services. Testimony by Mr. Raymond W. McDaniel, chairman and CEO of Moody's Corporation, before the US Securities and Exchange Commission (SEC) illustrates this line of reasoning:

Considering the unique dynamics of our market, historically new market entrants and marginal participants have sought to make their products more attractive to issuers by offering higher ratings than do more established market participants. Some new entrants might be inclined to try to compete in this manner because of the ease with which such a strategy could be implemented and the short-term benefits that might accrue to the entrant as a result. Therefore, Moody's believes that the usefulness of credit ratings

in the aggregate for market efficiency, transparency and investor protection would decline in the event that more Nationally Recognized Statistical Rating Organizations (“NRSROs”) are established and rating levels become a more important element of competition within the industry.<sup>1</sup> (McDaniel, 2002)

Critics, on the other hand, argue that the lack of competition may be one of the factors that contributed to the inability of the CRAs to provide accurate and timely information in the recent credit crisis and to support the adoption of rules that promote competition (SEC, 2011). Recent regulatory changes have favored this point of view—most notably when Congress passed the “Credit Rating Agency Duopoly Relief Act” in 2006 that clarified the process of obtaining NRSRO status. Though market concentration remains very high, several new CRAs have recently obtained NRSRO status.<sup>2</sup>

Although Congress has already moved in the direction of encouraging entry in the market for credit ratings, little theoretical or empirical research exists that would be helpful in this debate. We seek to address this shortcoming by theoretically and empirically analyzing how the entry of a new CRA affects the informational content of ratings. We begin by examining the information disclosure of a monopoly CRA. Our analysis suggests that it is optimal for the agency to pool information into letter grades, which results in the clustering of companies and issuers into fairly broad rating classes—a result consistent with common practice. Pooling of information, however, generates an opportunity for a new agency to offer additional ratings. Thus, the second objective is to analyze the entry strategy of a new CRA. If a company or an issuer decides to pay for a rating by a new CRA, it suggests that the entrant uses a different rating scale and/or that its rating contains additional information.<sup>3</sup> The third objective is to provide evidence of the effect of entry on the information content of the ratings of insurance companies. The insurance industry provides a unique natural experiment as it was served by the monopoly rating agency, the A.M. Best Company, for several decades until it experienced the entry of Standard & Poor’s (S&P) at the end of the 1980s. We show that S&P enters by

differentiating its rating scale from A.M. Best’s scale. Also, we find that, consistent with our theory, A.M. Best reacted to entry by disclosing more information.

Optimal information disclosure was first addressed by Lizzeri (1999) who showed that when all parties are risk neutral, a monopoly CRA’s optimal disclosure strategy is to pool all companies into one rate class. Surprisingly, all sellers pay to be rated in spite of the fact that a seller does not have to obtain a rating, and de facto the CRA discloses no information. At the same time, entry of a new CRA results in full disclosure of information.

Lizzeri’s results contrast with practice. For example, as a monopolist CRA in the insurance industry for many decades, A.M. Best had multiple rating categories and did not have complete market coverage. Moreover, in most settings, multiple CRAs are in competition. In 2000, A.M. Best covered 94.7% of the insurance companies, while S&P’s coverage was 27.5%. We present a model that explains these phenomena and addresses the impact of new entry.

We depart from Lizzeri by suggesting that buyers value the precision of information contained in ratings. Because rating-based guidelines are widely used in the conduct of business activities, buyers are ready to pay a higher price for a good with less ambiguous quality.<sup>4</sup> We consider a model where sellers have private information about the quality of a good, which they cannot communicate credibly to buyers. A CRA can learn what a seller’s quality is, but it has discretion in how this information is communicated to buyers. The evaluation of a seller is reached in two stages. In the first stage, a CRA designs a rating system that consists of a disclosure policy and the fee for its services. In the second stage, privately informed sellers decide whether to demand a rating from the CRA. Once the CRA evaluates the sellers who solicited a rating, buyers form a belief about each seller based on that seller’s decision to be rated and, possibly, the seller’s rating.

We derive four main results. First, when buyers care about the precision of information, Lizzeri’s single rating result holds only as a special case. The optimal rating scale derived from the model resembles the interval disclosure rule actually employed by the major CRAs. Pooling the lowest rated seller with better types has two countervailing effects: the expected quality in the eyes of buyers increases, while the precision of information goes down. For a low value of information precision, the first effect dominates, and full pooling is optimal for the CRA. As the value of precision increases, the trade-off between the two effects defines the boundary of the lowest rating. The model results in multiple equilibrium disclosure policies for rated sellers of higher quality. However, in all equilibria, the payoff of rated sellers is non-decreasing in quality. Also, as the value of information precision goes to infinity, the optimal disclosure of a monopoly CRA converges to full disclosure. Hence, the CRA’s incentives

<sup>1</sup> Primarily for the purposes of safety and soundness regulation, regulated investors including banks, thrifts, insurance companies, pension funds, and so on are required to follow rules that, in part, restrict their investments to carry ratings issued only by an NRSRO. Thus, NRSRO status is viewed by many as regulatory approval of the rating agency. See White (2002) for background and discussion. Recent Dodd–Frank regulation is likely to change this approach.

<sup>2</sup> The Herfindahl–Hirschmann Index (HHI) for all NRSRO ratings outstanding is 3,495, which is equivalent to 2.86 equally sized firms. The current total number of NRSROs is ten, including A.M. Best, DBRS, Fitch, Japan Credit Rating Agency, Moody’s Investors Service, Rating and Investment Information, Standard & Poor’s, Egan-Jones, LACE, and Realpoint (SEC, 2011).

<sup>3</sup> Although the focus for this paper is to investigate the entry strategy of a new CRA, we also developed a simplified extension of our model to analyze the equilibrium rating systems of the incumbent and the entrant CRAs in a Stackelberg setting to account for the incumbent’s reaction to entry. The extension shows the results derived in the paper are robust in the Stackelberg game. See supplementary section available online from the authors.

<sup>4</sup> For example, in a survey of 200 plan sponsors and investment managers in the U.S. and Europe (Cantor, Gwilym, and Thomas, 2007), 60% of fund managers and 47% of plan sponsors report that CRAs should put more emphasis on the accuracy of ratings.

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