Journal of Economic Behavior & Organization 105 (2014) 17–29

Contents lists available at ScienceDirect

Journal of Economic Behavior & Organization

journal homepage: www.elsevier.com/locate/jebo

Ratings as regulatory stamps☆

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ARTICLE INFO

Article history:
Received 30 December 2013
Accepted 14 April 2014
Available online 28 April 2014

JEL classification:
G24
G28
L14

Keywords:
Credit rating agencies
Rating-contingent regulation
Ratings accuracy
Risk transfer
Strategic rating inflation

ABSTRACT

This paper analyzes the implications of the regulatory benefits that the investors derive from holding highly rated securities for a credit rating agency's (CRA) rating policy. The CRA's endogenous rating fee is shown to be decreasing in the accuracy of the rating. The CRA provides a rating only when the investors' regulatory benefit exceeds a minimum threshold. The regulatory reliance on ratings unambiguously reduces rating quality. Strategic rating inflation is more likely for complex financial securities with high fixed evaluation costs, and regulatory reliance on ratings expands the class of assets where rating inflation can occur. The ratings solicited by issuers who are more exposed to negative balance sheet shocks are more likely to be inaccurately optimistic.

1. Introduction

Following the financial crisis of 2007–2009, a significant policy debate has focused on the role that the credit rating agencies (CRAs) have played in the crisis. During the years leading to the crisis, the CRAs have been an instrumental part of the so called "originate-to-distribute" lending model. It has been widely argued that by providing favorable ratings, the CRAs have enabled the lending institutions to disseminate bad credit risk by structuring and selling financial securities based on low quality loan pools. For example, the Financial Crisis Inquiry Commission's final report (2011) concludes that "this crisis could not have happened without the rating agencies." According to the conventional story in the popular financial press, most investors, especially those who invested in complex financial securities were too naive to understand the complex nature of these securities, and were fooled by the favorable ratings issued by the CRAs. Some recent empirical research on the credit rating industry and earlier scholarship in the financial regulation literature, however, paint a more comprehensive picture than a simple "investors' naivety" explanation. These studies emphasize the role that rating-contingent regulation has played in creating the demand for these highly rated securities, despite the ratings providing little, if any, information on security valuations. According to Weber and Darbellay (2008), as ratings by the private rating agencies have gained acceptance as a measure of credit worthiness, the regulators of financial institutions have increasingly used ratings to simplify the task of prudential oversight. For example, in the U.S. the credit ratings have been incorporated into hundreds

☆ I would like to thank Utku Unver, James Lake and especially Marcus Opp for many insightful comments. This paper also benefited from seminar participants at Boston College Department of Economics and Texas Economic Theory Camp (2013) organized at Texas A&M University. All errors are my responsibility.

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http://dx.doi.org/10.1016/j.jebo.2014.04.022
0167-2681/

of rules, releases and regulations in various areas, including pension, banking, insurance and real estate finance regulation.[1] Partnoy (2006) argues that the regulators in the U.S. have fundamentally changed the nature of the "product" that the CRAs sell: credit ratings have become valuable not only because of the information they contain about credit worthiness, but foremost due to the regulatory privileges that they provide to investors who purchase these highly rated securities. On the empirical side, recent work by Stanton and Wallace (2012) focuses on the regulatory changes implemented in January 2002 which mandated the reduction of risk based capital requirements for AA and AAA-rated commercial mortgage-backed securities (CMBS) by 80%.[2] They show that this dramatic regulatory shift was accompanied by a sizable decrease in the yields of AA and AAA-rated CMBS relative to the yields of AA and AAA-rated corporate bonds which did not experience any regulatory change. Furthermore, subsequent to the regulatory shift there was a large increase in the overall proportion of CMBS rated AA or above.[3] Stanton and Wallace (2012) conclude that these price and ratings differentials cannot be explained by market wide shifts in the risk perception of these securities, but are entirely consistent with the higher risk-based capital savings to regulated institutions who are the primary investors in those securities.[4] In short, rather than being naive, most investors who were buying the highly rated complex securities seem to be sophisticated institutions that were well aware of the regulatory benefits high ratings provided, and they paid a premium for these "regulatory benefits".[5]

This excessive regulatory reliance on ratings in financial regulation prior to the crisis suggests an alternative explanation for the decline in rating standards prior to the financial crisis: the rating agencies might have effectively catered to the demands of sophisticated investors for regulatory arbitrage. The proposed elimination of rating contingent regulation in the Dodd-Frank Act of 2010 also aims to restore the role of CRAs as information intermediaries rather than being the providers of "regulatory stamps". Therefore, a better understanding of the implications of rating contingent regulation for the information content of ratings across different asset classes and issuer characteristics is warranted.

This paper develops a simple model where favorable ratings are valued by fully rational investors due to the regulatory benefits that they provide. The model considers an issuer (seller) who owns a loan portfolio that can be thought of as a mortgage pool. The loan portfolio can default with a certain probability that depends on its unknown quality, which can be either good or bad. To exclusively restrict attention to the rating's regulatory benefit channel, I assume that the issuer has no ex ante private information on the loan portfolio quality and shares the same prior as all other agents. The issuer's motivation to sell the loan portfolio arises due to the incentives to eliminate a potential default cost. In particular, in case of portfolio default the issuer is assumed to suffer a monetary loss which creates the incentives to transfer risk by selling the loan portfolio.[6] The issuer seeks to obtain a favorable rating from a CRA to be able to sell the loan portfolio. A key feature of the model is that, due to the regulatory reliance on ratings, the investors who can buy the loan portfolio are willing to pay a "regulatory premium" if a security has a favorable rating.

Before the issuer decides whether to solicit a rating or not, the CRA adopts a costly rating technology that determines the accuracy of its information signal on the loan portfolio quality, adopts a disclosure rule that determines whether it strategically inflates ratings and also sets its fee for the rating.[7] The CRA's incentives for providing informative ratings stem from reputational considerations: the CRA incurs a loss if the loan portfolio defaults subsequent to the CRA providing a good rating. In this framework, I analyze how the regulatory premium for a favorable rating affects the CRA's fee structure and rating policy. The main results are as follows:

- The CRA's endogenous rating fee is driven by the regulatory premium that the investors are willing to pay for a good rating and the issuer's private default cost. Interestingly, the fee for a good rating is decreasing in the rating's accuracy. Furthermore, the CRA does not provide a rating unless the regulatory premium exceeds a minimum threshold.
- The CRA provides informative ratings only when the regulatory premium is within an intermediate range and the CRA's fixed information acquisition cost is below an endogenous threshold. Above this fixed information acquisition cost threshold, the CRA strategically inflates rating and only provides good ratings with no information content.
- The informativeness of ratings unambiguously decreases in the rating's regulatory premium and the issuer's default cost. Strategic rating inflation is more likely for complex financial securities with high fixed evaluation costs and those securities issued by institutions with high default costs. The regulatory reliance on ratings expands the class of assets where rating inflation can occur, since the threshold complexity above which rating inflation occurs decreases in the regulatory premium for a good rating.

[1] See Partnoy (2006) for an earlier assessment of this "regulatory outsourcing".

[2] Weber and Darbellay (2008) also argue that within the Basel II framework that explicitly relies on credit ratings to determine regulatory compliance rules, the investors get a regulatory advantage if they hold highly rated positions that allow them to reduce their capital requirements.

[3] Stanton and Wallace (2012) reports that by 2007, about 95% of all outstanding CMBS were rated AA or above.

[4] In recent empirical work, Bongaerts et al. (2012) find evidence that issuers seek for multiple ratings not because additional ratings provide more information on creditworthiness, but primarily because of regulatory compliance restrictions on investors.

[5] Consistent with these observations, the International Organization of Securities Commissions' (IOSCO) "Subprime Crisis Report" in May (2008) explicitly states that "A credit rating today is considered a seal of approval giving rise to favorable regulatory treatment."

[6] It is well understood in the literature that securitization and loan sales allow to transfer the credit risk of lenders that primarily originate loans to particular classes of borrowers or geographical areas thus limiting concentrated risk exposure on their balance sheets (see Parlour and Plantin, 2008).

[7] Accordingly, the CRA may decline to provide a rating, provide truthful ratings based on its signal or disclose ratings with an upward bias (strategic rating inflation).