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Structured debt ratings: Evidence on conflicts of interest ☆

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ABSTRACT

We test if issuers of asset- and mortgage-backed securities receive rating favors from agencies with which they maintain strong business relationships. Controlling for issuer fixed effects and a large set of credit risk determinants, we show that agencies publish better ratings for those issuers that provide them with more bilateral securitization business. Such rating favors are larger for very complex structured debt deals and for deals issued during the credit boom period. Our analysis is based on a new deal-level rating statistic that accounts for the full distribution of tranche ratings below the AAA cut-off point of a structured debt deal.

1. Introduction

In 2007 and 2008, credit rating agencies (CRAs) downgraded thousands of structured debt securities simultaneously by up to ten rating notches (Benmelech and Dlugosz, 2009; Ashcraft, GoldsmithPinkham, and Vickery, 2010). The large share of initially AAA-rated securities made market participants and regulators wonder if many ratings issued before 2007 had not been excessively favorable (e.g., Financial Stability Forum, 2008). In their lawsuit against the CRA Standard & Poor's (S&P), the US Department of Justice claims that S&P's concerns for their commercial relationships with issuers were an important source of the observed "inflation" of credit ratings. In this paper we analyze these alleged incentive problems and find that strong bilateral relationship ties between issuers and CRAs are indeed associated with rating favors.

Compared to the corporate bond market, the structured debt market is highly concentrated with few issuers repeatedly interacting with the same CRAs (Frenkel, 2014). The possibility that an issuer terminates its business relationship and takes rating and consulting business to a competitor constitutes a considerable threat to a CRA. CRAs could, therefore, cater rating favors to key clients to preserve or establish strong business ties. To examine this hypothesis, we compute the annual securitization business

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shared between a given issuer and each of the three major CRAs. As a proxy for bilateral relationship ties, the *Shared business* features considerable heterogeneity across CRA-issuer pairs. For example, over the period 1999 to 2011, Bank of America provides S&P with 76% more securitization business than Fitch, whereas Royal Bank of Scotland provides S&P and Fitch with roughly the same rating volume. Importantly, such heterogeneity enables us to control for unobserved issuer fixed effects such as issuer reputation or securitization expertise, which could impact credit ratings.

Cross-sectional variation in the credit risk of structured debt securities should correlate with credit ratings and could also be systematically correlated with different issuer types. Failure to control for credit risk can wrongly attribute rating favors to issuers with access to better collateral pools or higher levels of credit enhancement. We use a comprehensive new data set with information on collateral delinquency, type, and origin, liquidity reserves, bond insurance, and overcollateralization to control for differences in credit risk as much as possible.[2] As important credit risk proxies like collateral delinquency are only measured at the collateral pool or deal level, we do not analyze the tranches into which securitization deals are structured individually but conduct our analysis at the deal level.

For the deal-level analysis the tranche ratings of a structured debt deal need to be summarized into one deal-level rating statistic. Since credit ratings have an ordinal interpretation, we cannot simply define a size-weighted average but first need to translate the ratings into cardinal values. For each credit rating, we estimate the average yield spread of all tranches with this credit rating. This *Rating-implied spread* reflects the nonlinear relation between credit ratings and bond yields and is a cardinal measure. In a second step, we compute our *Deal rating* as the sum of the *Rating-implied spreads* weighted by the relative size of each deal tranche so that its units can be interpreted as a yield spread. Better tranche ratings translate into a lower *Deal rating* value.

Our sample comprises the credit ratings of more than 6,500 mortgage- and asset-backed securities (MBS and ABS) published by Moody's, S&P, and Fitch between 1999 and 2011. Based on the corresponding 1,404 deal-CRA pairs, we find that the *Shared business* represents an economically and statistically significant determinant of *Deal ratings* after controlling for credit risk and issuer fixed effects. An increase of the shared business volume between a given CRA and issuer by one standard deviation corresponds to an improvement (decrease) of the *Deal rating* by 41% relative to the sample average. CRAs publish better credit ratings for issuers with whom they maintain strong relationship ties. We interpret such preferential treatment for some issuers as a relative rating favor. The resulting loss of ratings accuracy is likely to foster mispricing, reduce market liquidity as observed during the financial crisis (Pagano and Volpin, 2010), and impede rating-contingent regulation (Efing, 2013).[3]

We also test what kind of deals issuers with strong relationship ties receive better ratings than other issuers. First, rating favors should be more pronounced for very complex products because regulators and investors might find it relatively harder to identify these rating favors and to discipline CRAs. Furthermore, deal complexity also makes information acquisition more expensive for CRAs themselves so that they might be more inclined to simply publish a favorable credit rating rather than spend resources on the production of accurate credit risk information. Consistent with this prediction, we find that issuers that share more business with a CRA receive particularly pronounced rating favors for complex deals structured into numerous tranches.

Second, incentives to cater rating favors should vary over the credit cycle. During credit booms when default probabilities and the reputational costs to ratings inflation are lower, CRAs are predicted to succumb more easily to the pressure of publishing inflated ratings for a key client. While the conflict of interests is important throughout the entire sample period, we find that relative rating favors are indeed more pronounced during the boom years 2004–2006.

Finally, we analyze differences across CRAs and asset classes and show that our results are not driven by a single agency or asset class. All three CRAs cater statistically significant rating favors to issuers with strong relationship ties and do so across asset classes. Yet, we find that S&P and Fitch tend to provide the largest relative rating favors for their key clients.

The papers closest to our contribution are He, Qian, and Strahan (2011, 2012). The authors take a "market valuation approach" by showing that investors require higher bond yields for MBS sold by issuers with a large market share, which is consistent with a risk premium for rating favors. Our approach differs in three ways. First, identification in this paper does not rely on market assessments of credit risk but directly compares ratings to a large set of credit risk controls. Second, we do not proxy conflicts of interest with the simple market share of an issuer but rather its *bilateral* business shared with a given CRA. This *Shared business* should be a better proxy for the varying relationships between CRAs and issuers and features more time variation than the issuers' overall market share. Third, our analysis is at the deal-level and not at the tranche-level so that we need to be less concerned about how the complex deal structures allocate credit risk to individual tranches.

Our paper is closely related to Hau, Langfield, and Marques-Ibanez (2013) who also compute the securitization business shared between a given issuer and a CRA. However, the authors do not relate this relationship proxy to structured debt ratings but show that a larger *Shared* (*securitization*) *business* correlates with more favorable corporate ratings of banks. Further papers on rating

[2] In unreported regressions we also control for excess spreads, constant prepayment rates, and credit default swaps of issuers. Our key results remain qualitatively unchanged.

[3] According to Hunt (2009), ratings played a role in at least 44 rules of the Securities and Exchange Commission (SEC) as of June 2008. Also, quasi-regulatory constraints often rely on the quality of credit ratings (Cantor, Gwilym, and Thomas, 2007).