



Have Rating Agencies Become More Conservative? Implications for Capital Structure and Debt Pricing

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In the wake of the financial crisis, rating agencies have come under increasing scrutiny. They have been accused of peddling to the companies and institutions that issue the securities they rate, because the issuers pay their fees in most instances. According to some observers, this conflict of interest led the agencies to relax their standards, leading to ratings that were too generous relative to the default risk of the securities. Given that many financial institutions made capital allocation decisions based on these ratings, and ultimately failed, rating agencies have, in fact, been accused of causing the crisis (see, for example, Partnoy (2009)).

In this paper, we study the changes in the standards applied by rating agencies over time, and the consequences of these changes for corporate behavior and debt pricing. We examine corporate debt ratings, not the ratings of mortgage backed securities or collateralized debt obligations. For corporate debt ratings, we find no evidence that rating agencies have reduced their standards. On the contrary, we find that rating agencies have become more conservative over time. This phenomenon was first documented by Blume, Lim, and MacKinlay (1998) over the period 1978-1995. We show that this trend has continued until at least 2009. This increased conservatism is not only important statistically, but is also large economically. For example, a firm with a AAA rating in 1985 would only qualify for

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a AA- rating by 2009, holding all the determinants of the ratings constant, while a firm with a BBB rating in 1985 would have lost its investment grade rating 20 years later.

After establishing that rating standards have tightened over time, we study the implications of this increased conservatism. It is entirely possible that the increased stringency applied by rating agencies is warranted given changes in the macroeconomic environment and their effects on default risk. If this were the case, we should not observe a change in default rates over time for firms with the same credit rating. On the other hand, if the increased conservatism is unwarranted and does not represent increased default risk, we should see a decline in defaults by rating category. This is indeed what we observe; studying default rates across Moody's ratings categories, we find a significant decline in defaults over our sample period for both investment grade and non-investment grade issuers.

Next, we investigate the impact of this increased ratings conservatism on corporate behavior. In particular, we focus on (i) capital structure, (ii) the decision to access the public bond market, and (iii) cash holdings, growth and investment.

With respect to capital structure, we argue that if the change in ratings standards over time is deemed unwarranted by companies, then those companies that suffered the most from increased conservatism should issue less debt and have lower leverage over time. To examine this implication, we employ the ratings model estimated over the period 1985-1996 to predict ratings over the period 1997-2009, and compute the difference between the firm's actual and predicted rating as our measure of conservatism. We find that this difference explains capital structure decisions: if actual ratings are below predicted ratings by one notch (where a notch is a one-step change in the rating, say from BBB to BBB-), firms' debt issuances as a fraction of assets decrease by 8 percent relative to the sample average of 2.6%. Such firms then end up with lower leverage.

Turning to the decision to access the public bond market, we first show that, holding firm characteristics constant, the likelihood of obtaining a bond rating has declined over time. Of course, this observation, by itself, does not establish that conservatism is causing firms to opt out of the bond market. To provide more direct evidence that conservatism impacts firms' decisions to obtain a rating, we examine whether firms that would have suffered the most from ratings

conservatism are less likely to access the public bond market. We find strong evidence that this is the case.

We also report that firms affected more by conservatism hold more cash and experience slower growth. The impact on various measures of investment is modest, except for the level of cash acquisitions, for which we find a substantial negative impact of conservatism.

In the final set of analyses, we turn our attention to the impact of conservatism on debt pricing. If conservatism is deemed unwarranted, we would expect it to be reflected in debt spreads. To study this, we estimate regression models of debt yield spreads for the firms in our sample over the period 1997-2009. Not surprisingly, debt yields increase as actual bond ratings worsen. Interestingly, however, our measure of conservatism (the difference between actual and predicted issuer ratings using the 1985-1996 model) also matters for bond yields: firms whose ratings were affected more by increased ratings conservatism have lower spreads, holding the actual rating constant. Of course, if capital markets completely undid the ratings conservatism effect, firms would have little need to take it into account in their financing decisions. We find that this is not the case; capital markets only partially internalize the increased ratings stringency. Our spread results are also inconsistent with the interpretation that ratings were too lenient to begin with and that this leniency was rectified over time; if this were the case, then predicted ratings based on the old, supposedly lenient, model should not affect debt pricing once the actual bond rating has been controlled for.

Overall, our evidence is consistent with the view that the increased conservatism of rating agencies is not deemed to be fully warranted, as reflected in default rates, capital structure decisions, and debt pricing. These findings are in sharp contrast to the work on the ratings of asset-backed securities, which suggests that the ratings have become more inflated over time (see, for example, Pagano and Volpin (2010)). Both the work on ratings inflation and our work on conservatism suggest that there may be problems in the way credit ratings are assigned, which require further investigation.²

² Opp, Opp, and Harris (2013) demonstrate that differences in regulatory reliance on ratings across various instruments and differences in the complexity of instruments can explain why there was rating inflation in structured products, but not in corporate ratings. Thus, while their model cannot explain the increased conservatism reported in this paper, it can explain why some securities are more subject to rating inflation than traditional corporate bonds.

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