

A Methodology for Estimating Credit Ratings and the Cost of Debt for Business Units and Privately-held Companies

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Abstract

The cost of capital literature contains ample discussions of cost of equity estimation, but little attention is given to the cost of debt. In this paper, we develop a methodology for estimating the market cost of debt for business units and privately-held companies. Better cost of debt estimates should result in more accurate WACC estimates. Therefore, we should be able to make better capital budgeting decisions and create a better alignment between executive compensation and shareholder value creation. The first step in our methodology is the development of a credit rating model for business units and privately-held companies. We collected corporate credit rating grades from Standard & Poor's and Moody's and accounting information for a sample of 627 American companies. We ran a stepwise ordered logit model to select the variables that better explain agency credit ratings. We found that the most important variables in determining credit ratings are size, financial leverage, operating performance and volatility. The model classified correctly 58.14% of the sample in the appropriate rating class, 19.3% in the immediately higher category, and 19.3% in the immediately lower neighbor. Only 3.26% of the sample was classified in a rating grade distant from the right category. Using as an input the Business Unit's or Privately-held Company's accounting variables and running the credit rating model, we are able to classify the Business Unit or Privately-held Company in a rating category. The second step is to attribute a cost of debt to the estimated rating according to its maturity. We do so by using the Bloomberg industrial corporate yield curve by rating category. These yield curves are updated daily, so our cost of debt can be constantly updated.