Moody's Analytics

RISKCALC FAQ

RiskCalc™ Transfer Pricing: Recommended EDF Mode and Mapping

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Abstract

This FAQ applies to the Moody's Analytics RiskCalc™ model and is intended for clients that are trying to decide what type of mapping and EDF mode to use when they undertake a transfer pricing analysis. It answers the following two questions: What type of EDF™ does Moody's Analytics recommend for transfer pricing? What type of mapping should be used in this case, static mapping or dynamic mapping?

EDF Modes and Mappings

RiskCalc EDF credit metrics can be calculated in two different modes: Financial Statement Only (FSO) and Credit Cycle Adjusted (CCA). FSO mode calculates an obligor's probability of default based purely on the information found in the company's financial statements and industry information. CCA mode incorporates the current position of the credit cycle in addition to financial statement information. Most RiskCalc models use an industry-specific signal from Moody's Analytics Public Firm model to capture the credit cycle position in a particular country and industry sector. Some models also combine the industry-specific signal with additional macroeconomic variables to arrive at the credit cycle adjustment.

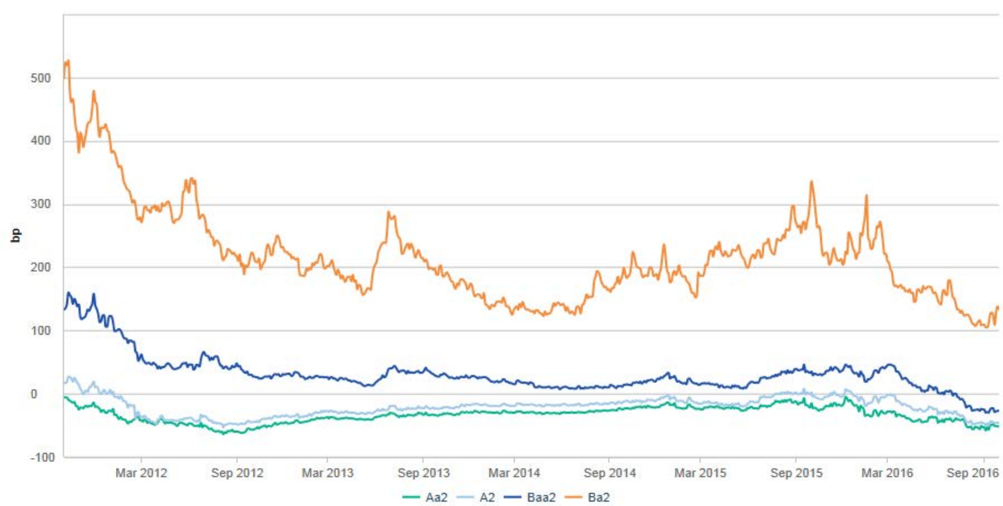
Moody's Analytics RiskCalc suite of models offers users a static mapping to convert EDF to an implied rating. In addition, RiskCalc United States models and the RiskCalc North America Large Firm model provide a second way to convert EDF to an implied rating, called dynamic mapping. Static mapping is derived based on the long history of defaults from Moody's Investor Services and does not change over time. Dynamic mapping on the other hand provides a rating based on the public companies with comparable EDF level at the time specified by current date and is updated quarterly. The RiskCalc user interface displays what type of mapping is used. Static Mapping ratings have a .edf extension (e.g. Baa.edf) and Dynamic Mapping ratings have a .dyn extension (e.g. Baa.dyn).

RiskCalc in Transfer Pricing

RiskCalc models are used by tax practitioners as a foundation to the transfer pricing process to establish the credit assessment of the related party. Once the credit rating is established, an appropriate market implied credit spread is applied on top of a risk-free rate to determine arms-length interest rate on an intercompany loan. The answer to the question of whether RiskCalc FSO EDF or CCA EDF, dynamic mapping or static mapping should be used in transfer pricing depends on how the clients intend to map the EDF-implied rating to the interest rate or spread.

Many clients use a lookup table as shown in Figure 1, extracted from Moody's Market Implied Rating product, which maps MIS agency ratings to spreads over time. The spreads by rating in this table change significantly over time. To come up with EDF-implied ratings that mimics agency ratings, we recommend using CCA EDF and dynamic mapping. When CCA EDF or dynamic mapping is not available, client can use FSO EDF and static mapping. In both cases, the implied ratings are relatively stable over time, similar to the behavior of agency ratings.

Figure 1 Bonds Over LIBOR – Median Spreads by Rating from Moody's Market Implied Rating Product, 1 Year Maturity



It is also important to note that if a country model is applied as a proxy to another country, Moody's Analytics recommends to use RiskCalc in FSO mode. Since a CCA EDF is specific to the country model, it behaves differently when mapped to a different country.

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