

## Material Changes in EJR's Global Fund Methodology and Non-Redmaster Model

Board Approved September 29, 2020

- I. The material changes to the methodology are as follows:
  - The types of fund transactions the methodology addresses are expanded to include (but not limited to) closed end funds, money market funds and prime funds.
  - Scope expanded to address money market funds, prime funds, and other short-term funds (collectively, "ST Funds").
  - Short term funds may have special considerations regarding asset/liability management and liquidity. An evaluation may be needed regarding the Fund's ability to meet liquidity demands from cashflow or asset sales.
  - EJR identifies items which might impact the final rating including asset/liability management, liquidity considerations, characteristics of assets held, and leverage.
  - In cases where the expected total return on the fund assets is less than the debt costs for the fund, then generally a Loan to Value approach will be employed (see EJR's Main Methodology, "Collateral, Security and Other Support"), but with any shortfall reducing the value of the assets or alternatively, increasing the expected debt level.
  - Additionally, if using a simple Loan-to-Value (LTV) approach (addressed in EJR's core Methodology), indicates a greater level of credit quality, EJR will typically primarily use the LTV approach.
  - When employing a Loan-to-Value analysis, EJR reserves the right to adjust the value based on volatility, marketability, and general liquidity of the assets from which value is derived.
  
- II. The material changes to the model are as follows:
  1. Loan to Value rating methodology change
    - The LTV rating module in the model has been expanded to be used for all asset classes, providing the LTV rating conditions are met.
    - The inclusion of the LTV also adjusts its weighting in determining the implied rating.
    - The sum of capital is used to calculate cumulative LTV instead of using realized collateral when the sum of capital is larger than the realized collateral.

- Formula changes are applied to the requisite cells to address the above items.
2. Asset/Liability Management and Liquidity
    - To provide for a more robust analysis of funds for short term funds, the model now contains a module to evaluate asset liability management.
  3. Notching rating methodology change
    - Additional calculations are included to determine the adjusted implied notched rating. The intent of this change is to better-reflect the credit quality of the right side of the balance sheet. For example, previously, we utilized a simple notching from the senior unsecured rating. In our opinion an additive approach is more accurate whereby the weighted average rating for the right side of the balance sheet adds up to or totals the left side of the balance sheet.
  4. Facilitate Testing via Python
    - While the operative model is MS Excel-based VBA code, a new section has been incorporated which calls the model coded in Python to serve as independent check of the MS Excel results.
    - This may allow for analysts and testers to easily compare the MS Excel rating results to Python generated implied rating results.

The primary driver of the aforementioned changes were to properly cover the scope of transactions to be addressed by the methodology, and where expected total return on the fund assets is less than the debt costs, or the fund is lowly leveraged, provide an alternative analysis that focuses on the value of the fund's assets relative to the capital structure by employing an LTV weighted analysis.

We expect that these changes will have a material impact on no more than 10% of the outstanding ratings on funds.

Other non-material changes to both the methodology and model were made that have no impact on determining ratings.