

## **Abstract**

The objective of this study is to analyze the stability of the credit ratings of synthetic Collateralized Debt Obligation (CDOs). The reason for this study is the poor performance of the CDOs during the subprime crisis, and the lack of accuracy of the ratings provided by the Credit Rating Agencies (CRA). This study is focused on synthetic CDOs for two reasons. First, because synthetic CDOs played an important role during the subprime crisis since they became the speculators favourite instruments to take one-way bets. And second, because synthetic CDOs were normally traded over the counter, which means they lack the transparency that is typical of products, traded in regulated exchanges.

Traditionally, the ratings provided by the CRAs are based on a single-point estimator that does not include an assessment of the estimation error. For this reason, this study analyzes the stability of the credit ratings, with the estimation of confidence intervals and sensitivity analysis for the different parameters involved. This study considers Moody's methodology, one of the CRA with higher market share that uses the expected loss concept. In the analysis of this work, it was considered the information available for investors before the subprime crisis. The cases of study considered are common synthetic CDOs available in the global credit risk market.

This study concludes that the use of a single-point estimator as a measure of credit risk for synthetic CDOs is inadequate. The estimated confidence intervals for the expected loss have usually more than one rating, namely they have a significant measurement error. Finally this study suggests how important is that future regulation based on credit ratings move beyond the single-point estimators.