
TAEHAN BAE, University of Regina

Valuing Retail Credit Tranches under Conditional Dependence

Under the single-factor structural credit risk modeling framework, we consider the double mixtures to model a general dependence structure beyond the typical conditional independence assumption between the entities in a homogeneous credit pool. For a large portfolio, the fair spread of a structured retail credit tranche is expressed in terms of the sums of single integrals which can be easily computed by a numerical method. We discuss the behaviors of tranche spreads by the level of dependence under four double mixture models, Gaussian-ICM, t -ICM, Gaussian-Beta and t -Beta, and calibrate these models to market data.