

How Issuer Default Risk Affects Basket Credit Linked Note Coupon Rate

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Abstract

This work incorporates issuer default risk into basket credit linked note (BCLN) pricing. Under the standard market model of the one factor Gaussian copula, the effect of issuer default risk on the fair BCLN coupon rate is discussed. The analysis results demonstrate that issuer default risk increases the fair coupon rate. However, contradicting the common conception that a negative default correlation between the reference entities and the issuer reduces the possibility of double loss and favors the BCLN holder, thus reducing BCLN coupon rate, the analysis results reveal that the negative default correlation disfavors the BCLN holder. Furthermore, the coupon rate increases as the default correlation approaches negative one. The proposed framework effectively reflects issuer default risk in the fair BCLN coupon rate.

Keywords: Basket credit linked note, issuer default risk, default correlation, factor copula, Monte Carlo simulation, financial crisis.