

MATHEMATICAL METHODS AND INVERSE DISTRIBUTION CALIBRATION FORMULAS FOR THE INDUSTRIAL ENTERPRISES

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The collateralized debt obligations (CDO) and credit default swaps (CDS) are appreciated, and also their estimation problem solving functional characteristics are considered. Mass defaults are possible at any influencing default condition national measures, such, as industrial sector condition, the branch or regional factor [1]. It is determined that the portfolio of synthetic debt tools is made of the given parameters. The single-name manufacturer tranches inverse distribution estimation methods are considered. The task of a loss derivative tranches mathematical estimation is solved. Late defaults raise the equity tranches payment required sums with high spreads, early defaults reduce [2]. The inverse distribution multiparametric model includes the various mixed distributions. The secondary market obligation tranche parts are evaluated. The computing experiments on modeling of the industrial materials manufacturers credit default derivatives parameters are carried out both with the generated samples and with the real data. As opposed to earlier multiparameter models these methods and formulae allow to simulate simultaneously tail dependence and various boundary areas distributions. For an estimation task some copulas were used simultaneously to receive GH-copula cause of borders and tails independence [3]. The results verification is done and they have shown high efficiency.

References

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