

Bias-corrected estimation in distortion risk premiums for heavy-tailed losses

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Abstract

Recently Necir and Meraghni (2009) proposed an asymptotically normal estimator for distortion risk premiums when losses follow heavy-tailed distributions. In this paper, we propose a bias-corrected estimator of this class of risk premiums and establish its asymptotic normality. Our considerations are based on the high quantile estimator given by Matthys and Beirlant 2003.

Keywords : Bias reduction; High quantiles; Hill estimator; L-statistics; Order statistics; Risk Measure; Second order regular variation, Tail index.

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