Farkas, Julia; **Hashorva, Enkelejd**
Tail approximation for reinsurance portfolios of Gaussian-like risks. (English) Zbl 1398.62294
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Summary: We consider two different portfolios of proportional reinsurance of the same pool of risks. This contribution is concerned with Gaussian-like risks, which means that for large values the survival function of such risks is, up to a multiplier, the same as that of a standard Gaussian risk. We establish the tail asymptotic behavior of the total loss of each of the reinsurance portfolios and determine also the relation between randomly scaled Gaussian-like portfolios and unscaled ones. Further, we show that jointly two portfolios of Gaussian-like risks exhibit asymptotic independence and their weak tail dependence coefficient is nonnegative.

MSC:

62P05	Applications of statistics to actuarial sciences and financial mathematics
91B30	Risk theory, insurance (MSC2010)
62G20	Asymptotic properties of nonparametric inference
62G32	Statistics of extreme values; tail inference

Cited in **7** Documents

Keywords:

Gaussian-like risks; proportional reinsurance; asymptotic independence; weak tail dependence coefficient

Full Text: DOI arXiv

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paper as accurately as possible without claiming the completeness or perfect precision of the matching.