Reinsurance of large claims

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Abstract: The large claims reinsurance treaties ECOMOR and LCR are well known not to be very popular. They have been largely neglected by most reinsurers because of their technical complexity. In this paper, we derive some new mathematical results connected to distributional problems of these reinsurance forms. Perhaps these results can reopen the discussion on the usefulness of including the largest claims in the decision making procedure. Apart from asymptotic estimates for the tail of the distribution of the ECOMOR-quantity, we find its weak laws. We also deal with the weak laws of the LCR-quantity. Finally, we illustrate the outcomes with a number of simulations.

Keywords: Asymptotic behavior; Extreme value theory; Heavy-tailed distribution; Reinsurance treaty; ECOMOR; LCR

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