Albrecher, Hansjörg; Boxma, Onno J.; Ivanovs, Jevgenijs
**On simple ruin expressions in dependent Sparre Andersen risk models.** (English)
Zbl 1286.91063
J. Appl. Probab. 51, No. 1, 293-296 (2014).

Summary: In this note we provide a simple alternative probabilistic derivation of an explicit formula of *I. K. M. Kwan* and *H. Yang* ["Ruin probability in a threshold insurance risk model", Belg. Actuar. Bull. 7, 41–49 (2007), `http://www.belgianactuarialbulletin.be/browse.php?issue=77-8`] for the probability of ruin in a risk model with a certain dependence between general claim interoccurrence times and subsequent claim sizes of conditionally exponential type. The approach puts the type of formula in a general context, illustrating the potential for similar simple ruin probability expressions in more general risk models with dependence.

**MSC:**

91B30 Risk theory, insurance (MSC2010)
60K20 Applications of Markov renewal processes (reliability, queueing networks, etc.)



**Keywords:**

Sparre Andersen risk model; ruin probability; Markov additive process

**Full Text:** DOI Euclid

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