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Erlang risk models and finite time ruin problems. (English) Zbl 1277.91081
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Summary: We consider the joint density of the time of ruin and deficit at ruin in the Erlang(n) risk model. We give a general formula for this joint density and illustrate how the components of this formula can be found in the special case when $n = 2$. We then show how the formula can be implemented numerically for a general value of n . We also discuss how the ideas extend to the generalised Erlang(n) risk model.

MSC:

91B30 Risk theory, insurance (MSC2010)
60K10 Applications of renewal theory (reliability, demand theory, etc.)

Cited in 6 Documents

Keywords:

Erlang risk models; time of ruin; deficit at ruin; joint distribution

Full Text: [DOI](#)

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