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A ruin model with dependence between claim sizes and claim intervals. (English)

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Summary: We consider a generalization of the classical ruin model to a dependent setting, where the distribution of the time between two claim occurrences depends on the previous claim size. Exact analytical expressions for the Laplace transform of the ruin function are derived. The results are illustrated by several examples.

MSC:

91B30 Risk theory, insurance (MSC2010)

Keywords:

Ruin model; Dependence; Ruin probability; Laplace transform

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