

Recursive methods for evaluating expected penalty at ruin in finite time

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Abstract

In this presentation we consider the finite-time ruin problem for the classical risk model. The joint distribution of the ruin in finite time, the surplus immediately before ruin and the deficit at ruin is studied. The recursive method for computing the finite-time ruin probability proposed by Stanford and Stroinski (1994) is adopted to evaluate the expected penalty due at the moment of the ruin, which may depend on the deficit at and the surplus before the time of ruin.