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Ruin problems and dual events

David C.M. Dickson

Centre for Actuarial Studies, Department of Economics, University of Melbourne, Parkville, Vict. 3052, Australia

Alfredo Egídio dos Reis

Department of Actuarial Mathematics and Statistics, Heriot-Watt University, Edinburgh EH14 4AS, United Kingdom

Abstract

Dickson (1992) uses dual events to explain results relating to the distribution of the surplus immediately prior to ruin in the classical surplus process. In this paper we show that dual events can be used to explain other results in ruin theory. In particular we prove and explain the relationship between the density of the surplus immediately prior to ruin, and the joint density of the surplus immediately prior to ruin and the severity of ruin.

Keywords

- Probability of Ruin
- Surplus Prior to Ruin
- Severity of Ruin
- Dual Events