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Ruin Probabilities for Stochastic Flows of Financial Contracts

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Abstract

In this thesis, ruin probabilities connected with stochastic flows of financial contracts are studied. We show that the model can be embedded in the specific variant of Sparre Andersen model and the corresponding ruin probabilities connected with stochastic flows of financial contracts considered in the thesis can be interpreted as a ruin probability for the corresponding Sparre Andersen model. Cramér-Lundberg type bounds are obtained for ruin probabilities and explicit equations are given for computing of the adjustment parameter. Finally, results of numerical studies are presented to illustrate the theoretical results.

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