Record Nr. UNINA9910254294003321 Autore Willmot Gordon E Titolo Surplus Analysis of Sparre Andersen Insurance Risk Processes / / by Gordon E. Willmot, Jae-Kyung Woo Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-71362-0 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (VIII, 225 p. 3 illus.) Collana Springer Actuarial, , 2523-3262 368.01 Disciplina Soggetti Actuarial science Statistics **Actuarial Sciences** Statistical Theory and Methods Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. 1 Introduction -- 2 Technical Preparation -- 3 Gerber-Shiu Analysis in Nota di contenuto the Classical Poisson Risk Model -- 4 Gerber-Shiu Analysis in the Dependent Sparre Andersen Model -- 5 Models Involving Erlang Components -- 6 The Time of Ruin in the Classical Poisson Risk Model -- 7 Related Risk Models -- 8 Other Topics -- References -- Index. Sommario/riassunto This carefully written monograph covers the Sparre Andersen process in an actuarial context using the renewal process as the model for claim counts. A unified reference on Sparre Andersen (renewal risk) processes is included, often missing from existing literature. The authors explore recent results and analyse various risk theoretic quantities associated with the event of ruin, including the time of ruin and the deficit of ruin. Particular attention is given to the explicit identification of defective renewal equation components, which are needed to analyse various risk theoretic quantities and are also relevant in other subject areas of applied probability such as dams and storage processes, as well as queuing theory. Aimed at researchers interested in risk/ruin theory and related areas, this work will also appeal to graduate students in classical and modern risk theory and Gerber-Shiu

analysis.