G.E. WILLMOT and X. SHELDON LIN (2000): *Lundberg Approximations for Compound Distributions with Insurance Applications*. Springer Lecture Notes in Statistics, 156. ISBN 0 387 95135 0.

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In its broadest interpretation, one can say that Lundberg approximations yield exponential inequalities and first order asymptotic expansions for compound distributions. Typical applications include ruin estimation in risk theory and approximations for the total claim amount over a given period of time. Similar problems occur in dam theory, queueing theory and reliability. The present text mainly uses techniques from the latter field to augment the classical insurance results. The various chapters typically start with some general results on the relevant topic; these results are then exemplified under specific distributional assumptions. Though the original Lundberg approximations were established for short-tailed distributions (as claim size, say), also the long-tailed case (like the Pareto) is discussed.

The text is well written; proofs and examples are given very much in detail. Consequently, the text can be used to augment a course on risk theory for instance through the discussion of specific examples

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