Modern Actuarial Risk Theory: Using R

Rob Kaas, Marc Goovaerts, Jan Dhaene, Michel Denuit
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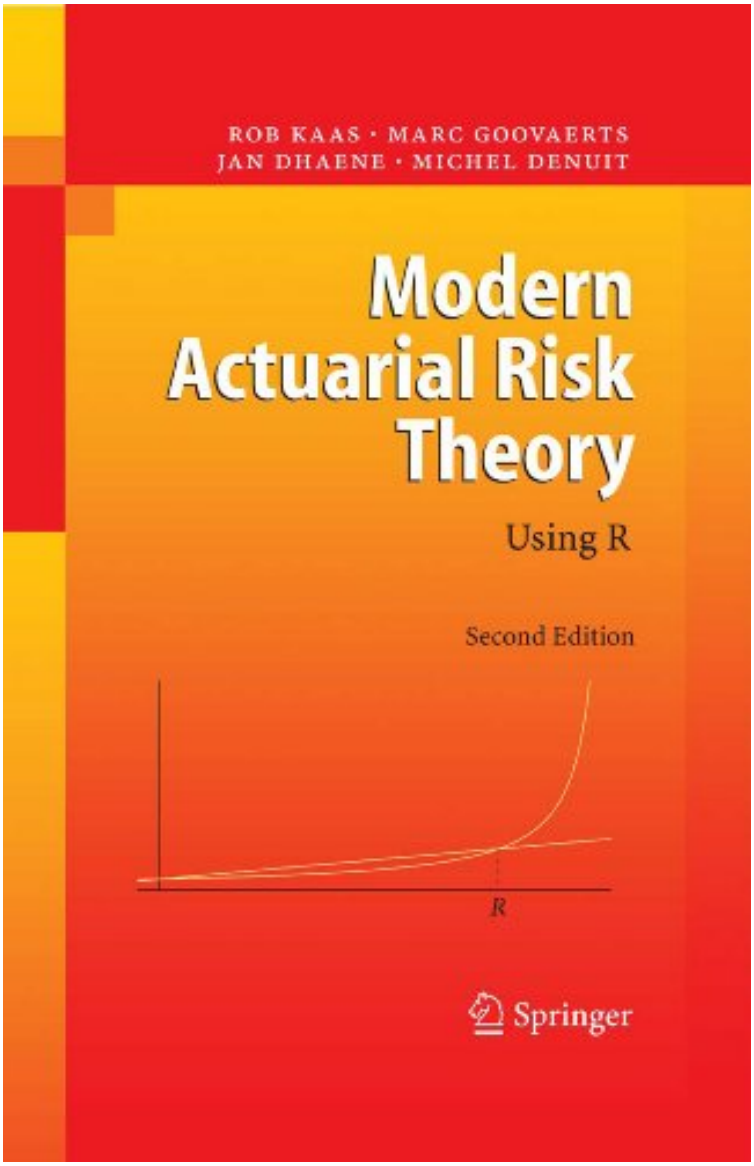

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Rob Kaas, Marc Goovaerts, Jan Dhaene, Michel Denuit : Modern Actuarial Risk Theory: Using R before purchasing it in order to gage whether or not it would be worth my time, and all praised Modern Actuarial Risk Theory: Using R:

0 of 0 people found the following review helpful. Good ReferenceBy Antonio Cecilio Miranda TejeidaThis was my reference book back when I was at school, I believe that most of te code in the book will show you how many statistical techniques (like fitting distributions) are implemente in many R packages such as fitdistrplus, it has solid explanations on both theoretical and practical aspects, it covers superficially the use of glm in insurance (for more

detailed use of GLM check Non-Life Insurance Pricing with GLM) and it cover basics of ruin theory.1 of 1 people found the following review helpful. as if the writers were in a great hurry or really did not proofreadBy R. JohnsonThe book is NOT well structured, and the text is definitely not well written.The material is too dense with various strange statements that are incomprehensible,as if the writers were in a great hurry or really did not proofread , not even once.Notation is dropped around like free pies, it is so easy to get confused when moving from section to section.I do not recommend this book at all.0 of 0 people found the following review helpful. Great TextBy Robert L McPhersonThis is a great text, full of examples in addition to clear explanations of theory. It is very helpful to have the R code to see the implementation of the mechanics behind the formulas.

Modern Actuarial Risk Theory contains what every actuary needs to know about non-life insurance mathematics. It starts with the standard material like utility theory, individual and collective model and basic ruin theory. Other topics are risk measures and premium principles, bonus-malus systems, ordering of risks and credibility theory. It also contains some chapters about Generalized Linear Models, applied to rating and IBNR problems. As to the level of the mathematics, the book would fit in a bachelors or masters program in quantitative economics or mathematical statistics. This second and much expanded edition emphasizes the implementation of these techniques through the use of R. This free but incredibly powerful software is rapidly developing into the de facto standard for statistical computation, not just in academic circles but also in practice. With R, one can do simulations, find maximum likelihood estimators, compute distributions by inverting transforms, and much more.

From the reviews of the second edition:"The book gives a comprehensive survey of non-life insurance mathematics. hellip; Originally written for use with the actuarial science programs at the Universities of Amsterdam and Leuven, it is now in use at many other universities as well as for the non-academic actuarial education program organized by the Dutch Actuarial Society. The methods presented can not only be used in non-life insurance, but also in other branches of actuarial science, as well as in actuarial practice." (Pavel Stoynov, Zentralblatt MATH, Vol. 1148, 2008)ldquo;This book gives an introduction to non-life insurance mathematics. hellip; Throughout the book, the software R is used for the implementation of the techniques presented. One finds also many exercises with hints for their solution in an appendix.rdquo; (F. Hofbauer, Monatshefte fuuml;r Mathematik, Vol. 161 (1), August, 2010)From the Back CoverModern Actuarial Risk Theory contains what every actuary needs to know about non-lifenbsp;insurance mathematics. It starts with the standard material like utility theory, individual and collective model and basic ruin theory. Other topics are risk measures and premium principles, bonus-malus systems, ordering of risks and credibility theory. It also contains some chapters about Generalized Linear Models, applied to rating and IBNR problems. As to the level of the mathematics, the book would fit in a bachelors or masters program in quantitative economics or mathematical statistics. This second and much expanded edition emphasizes the implementation of these techniques through the use of R. This free but incredibly powerful software is rapidly developing into the de facto standard for statistical computation, not just in academic circles but also in practice. With R, one can do simulations, find maximum likelihood estimators, compute distributions by inverting transforms, and much more. nbsp;About the AuthorMichel Denuit - Michel Denuit is Professor of Statistics and Actuarial Science at the Universite catholique de Louvain, Belgium. His major fields of research are risk theory and stochastic inequalities. He (co-)authored numerous articles appeared in applied and theoretical journals and served as member of the editorial board for several journals (including Insurance: Mathematics and Economics). He is a section editor on Wiley's Encyclopedia of Actuarial Science. Jan Dhaene, Faculty of Economics and Applied Economics KULeuven, Belgium. Marc Goovaerts, Professor of Actuarial Science (Non-life Insurance) at University of Amsterdam (The Netherlands) and Catholique University of Leuven (Belgium) Rob Kaas, Professor of Actuarial Science (Actuarial Statistics), U. Amsterdam, The Netherlands.Michel Denuit - Professor, Institute of Actuarial Science, UCL, Belgium. Michel Denuit is Professor of Statistics and Actuarial Science at the Universite Catholique de Louvain, Belgium. His major fields of research are risk theory and stochastic inequalities. He has (co-)authored numerous articles that have appeared in applied and theoretical journals and served as member of the editorial board for several journals (including Insurance: Mathematics and Economics). He is a section editor on Wiley's Encyclopedia of Actuarial Science, and is the author of two previous books, one of them with Wiley. Xavier Marechal - Universite Catholique de Louvain, Belgium CEO of Reacfin, Belgium. Sandra Pitrebois - Universite Catholique de Louvain, Belgium Secura Belgian Re, Brussels. Jean-Francois Walhin - Universite Catholique de Louvain, Belgium Secura Belgian Re, Brussels