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Sommario/riassunto

This open access book collects expert contributions on actuarial modelling and related topics, from machine learning to legal aspects, and reflects on possible insurance designs during an epidemic/pandemic. Starting by considering the impulse given by COVID-19 to the insurance industry and to actuarial research, the text covers compartment models, mortality changes during a pandemic, risk-sharing in the presence of low probability events, group testing, compositional data analysis for detecting data inconsistencies, behaviouristic aspects in fighting a pandemic, and insurers' legal problems, amongst others. Concluding with an essay by a practicing actuary on the applicability of the methods proposed, this interdisciplinary book is aimed at actuaries as well as readers with a background in mathematics, economics, statistics, finance, epidemiology, or sociology.