

1. Record Nr.	UNISA996213775103316
Autore	Glau Kathrin
Titolo	Innovations in Quantitative Risk Management [[electronic resource]] : TU München, September 2013 // edited by Kathrin Glau, Matthias Scherer, Rudi Zagst
Pubbl/distr/stampa	Cham, : Springer Nature, 2015 Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	9783319091143 (ebook) 9783319091136 (hardback)
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (xi, 438 pages) : illustrations; digital, PDF file(s)
Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1009 ; ; 99
Disciplina	658.155
Soggetti	Economics, Mathematical Game theory Finance Actuarial science Quantitative Finance Game Theory, Economics, Social and Behav. Sciences Finance, general Actuarial Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I Markets, Regulation, and Model Risk -- A Random Holding Period Approach for Liquidity-Inclusive Risk Management -- Regulatory Developments in Risk Management: Restoring Confidence in Internal Models -- Model Risk in Incomplete Markets with Jumps -- Part II Financial Engineering -- Bid-Ask Spread for Exotic Options Under Conic Finance -- Derivative Pricing Under the Possibility of Long Memory in the supOU Stochastic Volatility Model -- A Two-Sided BNS Model for Multicurrency FX Markets -- Modeling the Price of Natural Gas with Temperature and Oil Price as Exogenous Factors -- Copula-Specific Credit Portfolio Modeling -- Implied Recovery Rates—Auctions and Models -- Upside and Downside Risk Exposures of Currency Carry Trades via Tail Dependence -- Part III Insurance Risk and Asset

Management -- Participating Life Insurance Contracts Under Risk Based Solvency Frameworks: How to Increase Capital Efficiency by Product Design -- Reducing Surrender Incentives Through Fee Structure in Variable Annuities -- A Variational Approach for Mean-Variance-Optimal Deterministic Consumption and Investment -- Risk Control in Asset Management: Motives and Concepts -- Worst-Case Scenario Portfolio Optimization Given the Probability of a Crash -- Improving Optimal Terminal Value Replicating Portfolios -- Part IV Computational Methods for Risk Management -- Risk and Computation -- Extreme Value Importance Sampling for Rare Event Risk Measurement -- A Note on the Numerical Evaluation of the Hartman–Watson Density and Distribution Function -- Computation of Copulas by Fourier Methods -- Part V Dependence Modelling -- Goodness-of-fit Tests for Archimedean Copulas in High Dimensions -- Duality in Risk Aggregation -- Some Consequences of the Markov Kernel Perspective of Copulas -- Copula Representations for Invariant Dependence Functions -- Nonparametric Copula Density Estimation Using a Petrov–Galerkin Projection.

Sommario/riassunto

Quantitative models are omnipresent –but often controversially discussed– in today's risk management practice. New regulations, innovative financial products, and advances in valuation techniques provide a continuous flow of challenging problems for financial engineers and risk managers alike. Designing a sound stochastic model requires finding a careful balance between parsimonious model assumptions, mathematical viability, and interpretability of the output. Moreover, data requirements and the end-user training are to be considered as well. The KPMG Center of Excellence in Risk Management conference Risk Management Reloaded and this proceedings volume contribute to bridging the gap between academia –providing methodological advances– and practice –having a firm understanding of the economic conditions in which a given model is used. Discussed fields of application range from asset management, credit risk, and energy to risk management issues in insurance. Methodologically, dependence modeling, multiple-curve interest rate-models, and model risk are addressed. Finally, regulatory developments and possible limits of mathematical modeling are discussed.
