

# Contents

<b>Can Personal Dependency Paths Help to Estimate Life Expectancy Free of Dependency?</b> . . . . .	1
Irene Albarrán, Pablo Alonso, Ana Arribas-Gil, and Aurea Grané	
<b>Evaluation of Volatility Forecasts in a VaR Framework</b> . . . . .	7
Alessandra Amendola and Vincenzo Candila	
<b>Optimal Cut-Off Points for Multiple Causes of Business Failure Models</b>	11
Alessandra Amendola and Marialuisa Restaino	
<b>Maximum Empirical Likelihood Inference for Outliers in Autoregressive Time Series</b> . . . . .	17
Roberto Baragona, Francesco Battaglia, and Domenico Cucina	
<b>The Role of Fund Size and Returns to Scale in the Performance of Mutual Funds</b> . . . . .	21
Antonella Basso and Stefania Funari	
<b>A Robustness Analysis of Least-Squares Monte Carlo for R&amp;D Real Options Valuation</b> . . . . .	27
Marta Biancardi and Giovanni Villani	
<b>The Common Pool Problem of Intergovernmental Interactions and Fiscal Discipline: A Stackelberg Approach</b> . . . . .	31
Giovanna Bimonte and Pietro Spennati	
<b>Evaluating Correlations in European Government Bond Spreads</b> . . . .	35
Simona Boffelli and Giovanni Urga	
<b>Probability of Default: A Modern Calibration Approach</b> . . . . .	41
Stefano Bonini and Giuliana Caivano	
<b>Development of a LGD Model Basel2 Compliant: A Case Study</b> . . . .	45
Stefano Bonini and Giuliana Caivano	

<b>Modelling the Latent Components of Personal Happiness . . . . .</b>	<b>49</b>
Stefania Capecchi and Domenico Piccolo	
<b>Measuring the Impact of Behavioural Choices on the Market Prices . .</b>	<b>53</b>
Massimiliano Caporin, Luca Corazzini, and Michele Costola	
<b>A Note on Natural Risk Statistics, OWA Operators and Generalized Gini Functions . . . . .</b>	<b>57</b>
Marta Cardin	
<b>The Estimation of Standard Deviation of Premium Risk Under Solvency 2 . . . . .</b>	<b>61</b>
Rocco Roberto Cerchiara and Vittorio Magatti	
<b>The Solvency Capital Requirement Management for an Insurance Company . . . . .</b>	<b>65</b>
Marianosaria Coppola and Valeria D'Amato	
<b>Direct Multi-Step Estimation and Time Series Classification . . . . .</b>	<b>69</b>
Marcella Corduas	
<b>Alternative Assessments of the Longevity Trends . . . . .</b>	<b>73</b>
Valeria D'Amato, Steven Haberman, Gabriella Piscopo, and Maria Russolillo	
<b>Combinatorial Nonlinear Goal Programming for ESG Portfolio Optimization and Dynamic Hedge Management . . . . .</b>	<b>77</b>
Gordon H. Dash Jr. and Nina Kajiji	
<b>On the Geometric Brownian Motion with Alternating Trend . . . . .</b>	<b>81</b>
Antonio Di Crescenzo, Barbara Martinucci, and Shelemyahu Zacks	
<b>Empirical Evidences on Predictive Accuracy of Survival Models . . . .</b>	<b>87</b>
Emilia Di Lorenzo, Michele La Rocca, Albina Orlando, Cira Perna, and Marilena Sibillo	
<b>RedEST<sup>TM</sup>, a Risk Measure in a Pareto-Lévy Stable Framework with Clustering . . . . .</b>	<b>91</b>
Riccardo Donati and Marco Corazza	
<b>Run-Off Error in the Outstanding Claims Reserves Evaluation . . . . .</b>	<b>95</b>
Nicolino Ettore D'Ortona and Giuseppe Melisi	
<b>Trajectory Based Market Models. Arbitrage and Pricing Intervals . . .</b>	<b>99</b>
Sebastian Ferrando, Alfredo Gonzalez, Ivan Degano, and Massoome Rahsepar	
<b>A Statistical Test for the Heston Model . . . . .</b>	<b>105</b>
Gianna Figà-Talamanca	
<b>Threshold Random Walk Structures in Finance . . . . .</b>	<b>109</b>
Francesco Giordano, Marcella Niglio, and Cosimo Damiano Vitale	

<b>Stochastic Mortality Models. Application to CR Mortality Data . . . . .</b>	<b>113</b>
Ján Gogola	
<b>Risk Adjusted Dynamic Hedging Strategies . . . . .</b>	<b>117</b>
Martin Harcek	
<b>Pricing and Hedging Variable Annuities . . . . .</b>	<b>121</b>
Abdou Kélani and François Quittard-Pinon	
<b>Monetary Risk Functionals on Orlicz Spaces Produced by Set-Valued Risk Maps and Random Measures . . . . .</b>	<b>125</b>
Dimitrios G. Konstantinides and Christos E. Kountzakis	
<b>A Probability Inequality Related to Mardia's Kurtosis . . . . .</b>	<b>129</b>
Nicola Loperfido	
<b>Integrating Industrial and Financial Analysis into a Rating Methodology for Corporate Risk Detection: The Case of the Vicenza Manufacturing Firms . . . . .</b>	<b>133</b>
Guido Max Mantovani, Giancarlo Coro, Paolo Gurisatti, and Mattia Mestroni	
<b>Risk Measurement Using the Mixed Tempered Stable Distribution . . .</b>	<b>137</b>
Lorenzo Mercuri and Edit Rroji	
<b>Corporate Finance... What Else? The Case of the Productive Chain Networks in North-East Italy and the Scaffolding Finance Adopted by Their Leader . . . . .</b>	<b>141</b>
Mattia Mestroni, Elisabetta Basilico, and Guido Max Mantovani	
<b>BEKK Element-by-Element Estimation of a Volatility Matrix. A Portfolio Simulation . . . . .</b>	<b>145</b>
Alessia Naccarato and Andrea Pierini	
<b>The Effects of Curvature and Elevation of the Probability Weighting Function on Options Prices . . . . .</b>	<b>149</b>
Martina Nardon and Paolo Pianca	
<b>A Multivariate Approach to Project the Long Run Relationship Between Mortality Indices for Canadian Provinces . . . . .</b>	<b>153</b>
Achille Ntamjokouen, Steven Haberman, and Giorgio Consigli	
<b>Measuring and Managing the Longevity Risk: An Empirical Evidence From the Italian Pension Market . . . . .</b>	<b>163</b>
Albina Orlando, Giovanna di Lorenzo, and Massimiliano Politano	
<b>Pricing and Hedging Basket Options Under Shifted Asymmetric Jump-Diffusion Processes . . . . .</b>	<b>167</b>
Tommaso Paletta, Arturo Leccadito, and Radu Tunaru	

<b>On a Data Mining Framework for the Identification of Frequent Pattern Trends . . . . .</b>	<b>173</b>
Marina Resta	
<b>Risk Processes with Normal Inverse Gaussian Claims and Premiums . .</b>	<b>177</b>
Dean Teneng and Kalev Pärna	
<b>A Portfolio Model for the Risk Management in Public Pension . . . . .</b>	<b>183</b>
Tadashi Uratani	
<b>Black Scholes Option Sensitivity Using High Order Greeks . . . . .</b>	<b>187</b>
Yves Rakotondratsimba	

Mathematical and Statistical Methods for Actuarial  
Sciences and Finance

Perna, C.; Sibillo, M. (Eds.)

2014, X, 190 p. 26 illus., 7 illus. in color., Hardcover

ISBN: 978-3-319-05013-3