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Nota di contenuto	Dynamic Copula Methods in Finance; Contents; Preface; 1 Correlation Risk in Finance; 1.1 Correlation Risk in Pricing and Risk Management; 1.2 Implied vs Realized Correlation; 1.3 Bottom-up vs Top-down Models; 1.4 Copula Functions; 1.5 Spatial and Temporal Dependence; 1.6 Long-range Dependence; 1.7 Multivariate GARCH Models; 1.8 Copulas and Convolution; 2 Copula Functions: The State of the Art; 2.1 Copula Functions: The Basic Recipe; 2.2 Market Co-movements; 2.3 Delta Hedging Multivariate Digital Products; 2.4 Linear Correlation; 2.5 Rank Correlation; 2.6 Multivariate Spearman's Rho 2.7 Survival Copulas and Radial Symmetry 2.8 Copula Volume and Survival Copulas; 2.9 Tail Dependence; 2.10 Long/Short Correlation; 2.11 Families of Copulas; 2.11.1 Elliptical Copulas; 2.11.2 Archimedean Copulas; 2.12 Kendall Function; 2.13 Exchangeability; 2.14 Hierarchical

Copulas; 2.15 Conditional Probability and Factor Copulas; 2.16 Copula Density and Vine Copulas; 2.17 Dynamic Copulas; 2.17.1 Conditional Copulas; 2.17.2 Pseudo-copulas; 3 Copula Functions and Asset Price Dynamics; 3.1 The Dynamics of Speculative Prices; 3.2 Copulas and Markov Processes: The DNO approach
 3.2.1 The * and Product Operators 3.2.2 Product Operators and Markov Processes; 3.2.3 Self-similar Copulas; 3.2.4 Simulating Markov Chains with Copulas; 3.3 Time-changed Brownian Copulas; 3.3.1 CEV Clock Brownian Copulas; 3.3.2 VG Clock Brownian Copulas; 3.4 Copulas and Martingale Processes; 3.4.1 C-Convolution; 3.4.2 Markov Processes with Independent Increments; 3.4.3 Markov Processes with Dependent Increments; 3.4.4 Extracting Dependent Increments in Markov Processes; 3.4.5 Martingale Processes; 3.5 Multivariate Processes; 3.5.1 Multivariate Markov Processes
 3.5.2 Granger Causality and the Martingale Condition 4 Copula-based Econometrics of Dynamic Processes; 4.1 Dynamic Copula Quantile Regressions; 4.2 Copula-based Markov Processes: Non-linear Quantile Autoregression; 4.3 Copula-based Markov Processes: Semi-parametric Estimation; 4.4 Copula-based Markov Processes: Non-parametric Estimation; 4.5 Copula-based Markov Processes: Mixing Properties; 4.6 Persistence and Long Memory; 4.7 C-convolution-based Markov Processes: The Likelihood Function; 5 Multivariate Equity Products; 5.1 Multivariate Equity Products
 5.1.1 European Multivariate Equity Derivatives 5.1.2 Path-dependent Equity Derivatives; 5.2 Recursions of Running Maxima and Minima; 5.3 The Memory Feature; 5.4 Risk-neutral Pricing Restrictions; 5.5 Time-changed Brownian Copulas; 5.6 Variance Swaps; 5.7 Semi-parametric Pricing of Path-dependent Derivatives; 5.8 The Multivariate Pricing Setting; 5.9 H-Condition and Granger Causality; 5.10 Multivariate Pricing Recursion; 5.11 Hedging Multivariate Equity Derivatives; 5.12 Correlation Swaps; 5.13 The Term Structure of Multivariate Equity Derivatives; 5.13.1 Altiplanos; 5.13.2 Everest
 5.13.3 Spread Options

Sommario/riassunto

The latest tools and techniques for pricing and risk management. This book introduces readers to the use of copula functions to represent the dynamics of financial assets and risk factors, integrated temporal and cross-section applications. The first part of the book will briefly introduce the standard the theory of copula functions, before examining the link between copulas and Markov processes. It will then introduce new techniques to design Markov processes that are suited to represent the dynamics of market risk factors and their co-movement, providing techniques to both e
