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2.2 No Butterfly Spread Arbitrage Condition
2.3 Sticky True Delta Rule;
2.4 SVI Fit; Chapter 3 Implied Distributions; 3-1 Butterfly Spreads and the Implied Distribution; 3-2 European Payoff Pricing and Replication; 3-3 Pricing Methods for European Payoffs; 3-4 Greeks; References; Problems; 3.1 Overhedging Concave Payoffs; 3.2 Perfect Hedging with Puts and Calls; 3.3 Implied Distribution and Exotic Pricing; 3.4 Conditional Pricing; 3.5 Path-Dependent Payoff; 3.6 Delta; Chapter 4 Local Volatility and Beyond; 4-1 Local Volatility Trees; 4-2 Local Volatility in Continuous Time
4-3 Calculating Local Volatilities
4-3.1 Dupire's Equation; 4-3.2 From Implied Volatility to Local Volatility; 4-3.3 Hedging with Local Volatility; 4-4 Stochastic Volatility; 4-4.1 Hedging Theory; 4-4.2 Connection with Local Volatility; 4-4.3 Monte Carlo Method; 4-4.4 Pricing and Hedging Forward Start Options; 4-4.5 A Word on Stochastic Volatility Models with Jumps; References; Problems; 4.1 From Implied to Local Volatility; 4.2 Market Price of Volatility Risk; 4.3 Local Volatility Pricing; Appendix 4.A: Derivation of Dupire's Equation; Chapter 5 Volatility Derivatives; 5-1 Volatility Trading
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6-3 Correlation Average

Sommario/riassunto

"In Advanced Equity Derivatives: Volatility and Correlation, Sebastien Bossu reviews and explains the advanced concepts used for pricing and hedging equity exotic derivatives. Designed for financial modelers, option traders and sophisticated investors, the content covers the most important theoretical and practical extensions of the Black-Scholes model. Each chapter includes numerous illustrations and a short selection of problems, covering key topics such as implied volatility surface models, pricing with implied distributions, local volatility models, volatility derivatives, correlation measures, correlation trading, local correlation models and stochastic correlation. Volatility and correlation are remarkably connected through the author's proxy formula which he discovered in 2004, and shares in the book. He also reveals a new derivation using linear algebra (included in Chapter 6), and the proxy formula is then exploited in the following chapters for correlation trading and correlation modeling. The author has a dual professional and academic background, making Advanced Equity Derivatives: Volatility and Correlation the perfect reference for quantitative researchers and mathematically savvy finance professionals looking to acquire an in-depth understanding of equity exotic derivatives pricing and hedging"--
