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Nota di contenuto	1.1. Clearing and settlement -- 1.2. About Risk -- 1.3. Credit and Counterparty Risk -- 1.4. Settlement Risk -- 1.5. Market Risk -- 1.6. Model Risk -- 2.1. Pricing via Arbitrage -- 2.2. Martingales -- 2.3. The Central Limit Theorem -- 2.4. A simple Random Walk -- 2.5. The Binomial model -- 2.6. Modern pricing theory based on risk-neutral valuation -- 2.7. More on Binomial models -- 2.8. Finite difference methods -- 2.9. Value-at-Risk - VaR -- 3.1. Introduction -- 3.2. A binomial model -- 3.3. Finite Probability Spaces -- 3.4. Properties of normal and log-normal distributions -- 3.5. The Itô Lemma -- 3.6. Stochastic integration -- 4.1. Classifications of Partial Differential Equations -- 4.2. Parabolic PDE's -- 4.3. The Black-Scholes-Merton model -- 4.4. Volatility -- 4.5. Parity relations -- 4.6. A practical guide to pricing -- 4.7. Currency options and the Garman-Kohlhagen model -- 4.8. Options on commodities -- 4.9. Black-Scholes and stochastic volatility -- 4.10. The Black-Scholes formulas -- 4.11. American versus

European options -- 4.12. Analytical pricing formulas for American options -- 4.13. Poisson processes and jump diffusion -- 5.1. Martingale representation -- 5.2. Girsanov transformation -- 5.3. Securities paying dividends -- 5.4. Hedging -- 6.1. Contract for Difference - CFD -- 6.2. Binary options/ Digital options -- 6.3. Barrier options – Knock-out and Knock-in Options -- 6.4. Lookback Options -- 6.5. Asian Options -- 6.6. Chooser Options -- 6.7. Forward Options -- 6.8. Compound Options - Options on Options -- 6.9. Multi-Asset Options -- 6.10. Basket Options -- 6.11. Correlation Options -- 6.12. Exchange Options -- 6.13. Currency-Linked Options -- 6.14. Pay-Later Options -- 6.15. Extensible Options -- 6.16. Quantos -- 6.17. Structured products -- 6.18. Summary of exotic instruments -- 6.19. Something about weather derivatives -- 7.1. Introduction to deflators -- 8.1. Introduction -- 8.2. Strategies -- 8.3. A decreasing markets -- 8.4. An increasing market -- 8.5. Neutral markets -- 8.6. Volatile Markets -- 8.7. Using market indexes in pricing -- 8.8. Price direction matrix -- 8.9. Strategy matrix -- Appendix: Some source code.

Sommario/riassunto

This book provides an introduction to the valuation of financial instruments on equity markets. Written from the perspective of trading, risk management and quantitative research functions and written by a practitioner with many years' experience in markets and in academia, it provides a valuable learning tool for students and new entrants to these markets. Coverage includes: Trading and sources of risk, including credit and counterparty risk, market and model risks, settlement and Herstatt risks. Numerical methods including discrete-time methods, finite different methods, binomial models and Monte Carlo simulations. ·Probability theory and stochastic processes from the financial modeling perspective, including probability spaces, sigma algebras, measures and filtrations. ·Continuous time models such as Black-Scholes-Merton; Delta-hedging and Delta-Gamma-hedging; general diffusion models and how to solve Partial Differential Equation using the Feynmann-Kac representation. ·The trading, structuring and hedging several kinds of exotic options, including: Binary/Digital options; Barrier options; Lookbacks; Asian options; Chooses; Forward options; Ratchets; Compounded options; Basket options; Exchange and Currency-linked options; Pay later options and Quantos. ·A detailed explanation of how to construct synthetic instruments and strategies for different market conditions, discussing more than 30 different option strategies. With source code for many of the models featured in the book provided and extensive examples and illustrations throughout, this book provides a comprehensive introduction to this topic and will prove an invaluable learning tool and reference for anyone studying or working in this field. .
