Financial Derivatives Theory Concepts And Problems Epub

HOWE YADIRA

Discrete Asset Pricing PHI Learning Pvt. Ltd.
This book helps students, researchers and quantitative finance practitioners to understand both basic and advanced topics in the valuation and modeling of financial and commodity derivatives, their institutional framework and risk management. It provides an overview of the new regulatory requirements such as Basel III, the Fundamental Review of the Trading Book (FRTB), Interest Rate Risk of the Banking Book (IRRBB), or the Internal Capital Assessment Process (ICAAP). The reader will also find a detailed treatment of counterparty credit risk, stochastic volatility estimation methods such as MCMC and Particle Filters, and the concepts of model-free volatility, VIX index definition and the related volatility trading. The book can also be used as a teaching material for university derivatives and financial engineering courses.
FINANCIAL DERIVATIVES World Scientific
This is the second edition of the book on Commodity and Financial Derivatives. It provides an in-depth analysis of the underlying concepts of the different types of commodity and financial derivatives, namely, forwards, futures, options and swaps. It explains the trading processes of the derivatives and highlights their uses. Beginning with an overview of the subject, the text discusses in detail the forwards emphasizing the currency forward. It presents the different types of futures—commodity futures, currency futures, stock futures, index futures, interest rate futures—and the different types of options—stock options and currency options. The text continues to explain the option pricing models. It concludes with a chapter on financial swaps, which describes the operational modalities of currency swaps and interest rate swaps. The Indian context and environment are highlighted while explaining the trading processes of the different types of derivatives to familiarize the reader with the Indian derivatives market. The text is supported by illustrative examples, diagrams, tables and review questions to reinforce the understanding of the subject matter. The textbook is primarily intended for the postgraduate students of finance, commerce and management. It will also be useful to all those who are engaged in derivatives trading and who facilitate derivatives trading. New to the second edition A large number of numerical examples and exercises are added to the various chapters to help the users understand the practical application of derivatives in hedging risk in diverse situations.
Introduction To Derivative Securities, Financial Markets, And Risk Management, An (Second Edition) John Wiley & Sons
Although most universities now have an undergraduate derivatives course, many instructors were, and still are, in desperate need of a book with coverage that is both adequate and accessible - as most textbooks on financial derivatives are either too basic or too advanced for undergraduate students.Understanding Derivatives: Theory and Practice, Preliminary Edition, provides a broad introduction to the options, futures, swaps and interest rate options markets, and also provides the intuition needed to understand the fundamental mathematics of pricing. In addition, coverage of innovative derivative products such as exotic options, weather derivatives, catastrophe futures and volatility spreads has not been neglected. We cover these concepts - without delving into their pricing or valuation - and conclude with a contemporary issues chapter that discusses the latest developments in the field.This book presents a good balance of theory and practice. It is important for a student of the derivatives market to

understand how arbitrage arguments lead to rational option pricing, why the cost of carry is crucial to futures pricing, and how a swap dealer determines the fixed rate on an interest rate swap. These are enjoyable topics to learn about, and motivated finance students can find them fascinating. At the same time, it is equally important to understand how the end-user makes intelligent use of these products as risk management tools. Additionally, a variety of application examples are included from the perspective of both the speculator and the hedger.

A Course in Derivative Securities Wiley

A step-by-step explanation of the mathematical models used to price derivatives. For this second edition, Salih Neftci has expanded one chapter, added six new ones, and inserted chapter-concluding exercises. He does not assume that the reader has a thorough mathematical background. His explanations of financial calculus seek to be simple and perceptive.

Valuation and Computation John Wiley & Sons

This book explores the mathematics that underpins pricing models for derivative securities such as options, futures and swaps in modern markets. Models built upon the famous Black-Scholes theory require sophisticated mathematical tools drawn from modern stochastic calculus. However, many of the underlying ideas can be explained more simply within a discrete-time framework. This is developed extensively in this substantially revised second edition to motivate the technically more demanding continuous-time theory.

From Statistical Physics to Risk Management World Scientific Publishing Company

A road map for implementing quantitative financialmodels Financial Derivative and Energy Market Valuation bringsthe application of financial models to a higher level by helpingreaders capture the true behavior of energy markets and relatedfinancial derivatives. The book provides readers with a range ofstatistical and quantitative techniques and demonstrates how toimplement the presented concepts and methods in Matlab®. Featuring an unparalleled level of detail, this unique workprovides the underlying theory and various advanced topics withoutrequiring a prior high-level understanding of mathematics orfinance. In addition to a self-contained treatment of appliedtopics such as modern Fourier-based analysis and affine transforms,Financial Derivative and Energy Market Valuation also: • Provides the derivation, numerical implementation, anddocumentation of the corresponding Matlab for each topic • Extends seminal works developed over the last four decadesto derive and utilize present-day financial models • Shows how to use applied methods such as fast Fouriertransforms to generate statistical distributions for optionpricing • Includes all Matlab code for readers wishing to replicatethe figures found throughout the book Thorough, practical, and easy to use, Financial Derivativeand Energy Market Valuation is a first-rate guide for readerswho want to learn how to use advanced numerical methods toimplement and apply state-of-the-art financial models. The book isalso ideal for graduate-level courses in quantitative finance,mathematical finance, and financial engineering.

Security Analysis, Portfolio Management, and Financial Derivatives FINANCIAL DERIVATIVESTHEORY, CONCEPTS AND PROBLEMS

Targeting readers with backgrounds in economics, Intermediate Financial Theory, Third Edition includes new material on the asset pricing implications of behavioral finance perspectives, recent developments in portfolio choice, derivatives-risk neutral pricing research, and implications of the 2008 financial crisis. Each chapter concludes with questions, and for the first time a freely accessible website presents complementary and supplementary material for every chapter. Known for its rigor and intuition, Intermediate Financial Theory is perfect for those who need basic training in financial theory and those looking for a user-friendly introduction to advanced theory. Completely updated edition of classic textbook that fills a gap between MBA- and PhD-level texts Focuses on clear explanations of key concepts and requires limited mathematical prerequisites Online solutions manual available Updates include new structure emphasizing the distinction between the equilibrium and the arbitrage perspectives on valuation and pricing, and a new chapter on asset management for the long-term investor

A Comprehensive Treatment in Discrete Time Morgan & Claypool Publishers

This is a short book on the fundamental concepts of the no-arbitrage theory of pricing financial derivatives. Its scope is limited to the general discrete setting of models for which the set of possible states is finite and so is the set of possible trading times--this includes the popular binomial tree model. This setting has the advantage of being fairly general while not requiring a sophisticated understanding of analysis at the graduate level. Topics include understanding the several variants of "arbitrage," the fundamental theorems of asset pricing in terms of martingale measures, and applications to forwards and futures. The authors' motivation is to present the material in a way that clarifies as much as possible why the often confusing basic facts are true. Therefore the ideas are organized from a mathematical point of view with the emphasis on understanding exactly what is under the hood and how it works. Every effort is made to include complete explanations and proofs, and the reader is encouraged to work through the exercises throughout the book. The intended audience is students and other readers who have an undergraduate background in mathematics, including exposure to linear algebra, some advanced calculus, and basic probability. The book has been used in earlier forms with students in the MS program in Financial Mathematics at Florida State University, and is a suitable text for students at that level. Students who seek a second look at these topics may also find this book useful. Table of Contents: Overture: Single-Period Models / The General Discrete Model / The Fundamental Theorems of Asset Pricing / Forwards and Futures / Incomplete Markets

Derivatives World Scientific

"Deals with pricing and hedging financial derivatives.... Computational methods are introduced and the text contains the Excel VBA routines corresponding to the formulas and procedures described in the book. This is valuable since computer simulation can help readers understand the theory....The book...succeeds in presenting intuitively advanced derivative modelling... it provides a useful bridge between introductory books and the more advanced literature." --MATHEMATICAL REVIEWS

The Mathematics of Derivatives Securities with Applications in MATLAB CRC Press

Everything you need to get a grip on the complex world of derivatives Written by the internationally respected academic/finance professional author team of Sebastien Bossu and Philipe Henrotte, An Introduction to Equity Derivatives is the fully updated and expanded second edition of the popular Finance and Derivatives. It covers all of the fundamentals of quantitative finance clearly and concisely without going into unnecessary technical detail. Designed for both new practitioners and students, it requires no prior background in finance and features twelve chapters of gradually increasing difficulty, beginning with basic principles of interest rate and discounting, and ending with advanced concepts in derivatives, volatility trading, and exotic products. Each chapter includes numerous illustrations and exercises accompanied by the relevant financial theory. Topics covered include present value, arbitrage pricing, portfolio theory, derivates pricing, delta-hedging, the Black-Scholes model, and more. An excellent resource for finance professionals and investors looking to acquire an understanding of financial derivatives theory and practice Completely revised and updated with new chapters, including coverage of cutting-edge concepts in volatility trading and exotic products An accompanying website is available which contains additional resources including powerpoint slides and spreadsheets. Visit www.introeqd.com for details.

Pricing, Applications, and Mathematics World Scientific

Quantitative Finance is expanding rapidly. One of the aspects of the recent financial crisis is that, given the complexity of financial products, the demand for people with high numeracy skills is likely to grow and this means more recognition will be given to Quantitative Finance in existing and new course structures worldwide. Evidence has suggested that many holders of complex financial securities before the financial crisis did not have in-house experts or rely on a third-party in order to assess the risk exposure of their investments. Therefore, this experience shows the need for better understanding of risk associate with complex financial securities in the future. The Mathematics of Derivative Securities with Applications in MATLAB provides readers with an introduction to probability theory, stochastic calculus and stochastic processes, followed by discussion on the application of that knowledge to solve complex financial problems such as pricing and hedging exotic options, pricing American derivatives, pricing and hedging under stochastic volatility and an introduction to interest rates modelling. The book begins with an overview of MATLAB and the various components that will be used alongside it throughout the textbook. Following this, the first part of the book is an in depth introduction to Probability theory, Stochastic Processes and Ito Calculus and Ito Integral. This is essential to fully understand some of the mathematical concepts used in the following part of the book. The second part focuses on financial engineering and guides the reader through the fundamental theorem of asset pricing using the Black and Scholes Economy and Formula, Options Pricing through European and American style options, summaries of Exotic Options, Stochastic Volatility Models and Interest rate Modelling. Topics covered in this part are explained using MATLAB codes showing how the theoretical models are used practically. Authored from an academic’s perspective, the book discusses complex analytical issues and intricate financial instruments in a way that it is accessible to postgraduate students with or without a previous background in probability theory and finance. It is written to be the ideal primary reference book or a perfect companion to other related works. The book uses clear and detailed mathematical explanation accompanied by examples involving real case scenarios throughout and provides MATLAB codes for a variety of topics.

An Introduction to Equity Derivatives Academic Press

FINANCIAL DERIVATIVESTHEORY, CONCEPTS AND PROBLEMSPHI Learning Pvt. Ltd.

Lectures on Financial Mathematics John Wiley & Sons

An introduction to the mathematical theory and financial models developed and used on Wall Street Providing both a theoretical and practical approach to the underlying mathematical theory behind financial models, Measure, Probability, and Mathematical Finance: A Problem-Oriented Approach presents important concepts and results in measure theory, probability theory, stochastic processes, and stochastic calculus. Measure theory is indispensable to the rigorous development of probability theory and is also necessary to properly address martingale measures, the change of numeraire theory, and LIBOR market models. In addition, probability theory is presented to facilitate the development of stochastic processes, including martingales and Brownian motions, while stochastic processes and stochastic calculus are discussed to model asset prices and develop derivative pricing models. The authors promote a problem-solving approach when applying mathematics in real-world situations, and readers are encouraged to address theorems and problems with mathematical rigor. In addition, Measure, Probability, and Mathematical Finance features: A comprehensive list of concepts and theorems from measure theory, probability theory, stochastic processes, and stochastic calculus Over 500 problems with hints and select solutions to reinforce basic concepts and important theorems Classic derivative pricing models in mathematical finance that have been developed and published since the seminal work of Black and Scholes Measure, Probability, and Mathematical Finance: A Problem-Oriented Approach is an ideal textbook for introductory quantitative courses in business, economics, and mathematical finance at the upper-undergraduate and graduate levels. The book is also a useful reference for readers who need to build their mathematical skills in order to better understand the mathematical theory of derivative pricing models.

Financial Derivatives: Text & Cases Academic Press

This book analyzes in depth all major derivatives debacles of the last half century including the multi-billion losses and/or bankruptcy of Metallgesellschaft (1994), Barings Bank (1995), Long Term Capital Management (1998), Amaranth (2006), Société Générale (2008) , AIG (2008) and JP Morgan-Chase (2012). It unlocks the secrets of derivatives by telling the stories of institutions which played in the derivative market and lost big. For some of these unfortunate organizations it was daring but flawed financial engineering which brought them havoc. For others it was unbridled speculation perpetrated by rogue traders whose unchecked fraud brought their house down. Should derivatives be feared "as financial weapons of mass destruction" or hailed as financial innovations which through efficient risk transfer are truly adding to the Wealth of Nations? By presenting a factual analysis of how the malpractice of derivatives played havoc with derivative end-user and dealer institutions, a case is made for vigilance not only to market and counter-party risk but also operational risk in their use for risk management and proprietary trading. Clear and recurring lessons across the different stories in this volume call not only for a tighter but also "smarter" control system of derivatives trading and should be of immediate interest to financial managers, bankers, traders, auditors and regulators who are directly or indirectly exposed to financial derivatives. The book groups cases by derivative category, starting with the simplest and building up to the most complex — namely, Forwards, Futures, Options and Swaps in that order, with applications in commodities, foreign exchange, stock indices and interest rates. Each chapter deals with one derivative debacle, providing a rigorous and comprehensive but non-technical elucidation of what happened. What is new in the second edition? A new chapter on JP Morgan-Chase's London Whale, an in-depth discussion of credit-default swaps, and an update of the revamped regulatory framework with Basel 2.5 and Basel III against the backdrop of the Euro crisis, along with a revised and expanded discussion of the AIG debacle. Contents:Derivatives and the Wealth of NationsForwards:Showa Shell Sekiyu K KCitibank's Forex LossesBank Negara MalaysiaFutures:Amaranth Advisors LLCMetallgesellschaftSumitomoOptions: Allied LyonsAllied Irish BanksBaringsSociété GénéraleSwaps:Procter & GambleGibson Greeting CardsOrange

CountyLong-Term Capital ManagementAIGJP Morgan Chase London WhaleFrom Theory to Malpractice: Lessons Learned Readership: Economists; undergraduates and graduates majoring in finance, economics and business administration; professionals, financial managers and CPAs in the financial service industry. Key Features:Includes simple graphs or numerical illustrations to enhance readers' understanding of the complex world of derivatives and financial engineering step-by-step, story-by-storyUses actual case studies to introduce college students, finance professionals and general readers to the world of high finance which shapes their day-to-day livesDemystifies the mysterious world of financial derivativesBrings alive difficult concepts by profiling the protagonists in each debacle and the corporate setting within which the derivative debacle unfoldedProvides a glossary of key concepts to discuss the respective derivatives product, how it is valued, trading strategies, and the workings of the market where it is tradedKeywords:Derivatives;Debacles;Options;Swaps;Futures;Forwards;Financial Engineering;Market Manipulation;Rogue Traders;Speculation;London WhaleReview: Reviews of the First Edition: “This timely and well-written book is a ‘must read’ for anyone directly or indirectly involved in financial markets and instruments as well as risk management. By telling actual stories of how rogue traders and incompetent managers put their firms at risk, the author demystifies the complex world of financial derivatives. His incisive and in-depth analysis of all major derivatives debacles should help the reader understand what happened and avoid future disasters.” Gabriel Hawawini The Henry Grunfeld Professor of Investment Banking INSEAD “The author has written a book whose clarity makes it accessible to a wide range of practitioners and executives, and he brings the technical subject matter to life through the concrete examples of the highest profile failures in the use of derivatives” B Craig Owens Senior Vice President and Chief Financial Officer Campbell Soup “The book is a timely contribution to a subject that has been at the epicenter of the current financial crisis ... Learning from past mistakes and applying the lessons is what sets this book apart and should make it a useful guide for practitioners.” Dr Oliver S Kratz Head of Global Thematic Equities Deutsche Bank

A Guide to the Mathematics OUP Oxford

Understanding Credit Derivatives and Related Instruments, Second Edition is an intuitive, rigorous overview that links the practices of valuing and trading credit derivatives with academic theory. Rather than presenting highly technical explorations, the book offers summaries of major subjects and the principal perspectives associated with them. The book's centerpiece is pricing and valuation issues, especially valuation tools and their uses in credit models. Five new chapters cover practices that have become commonplace as a result of the 2008 financial crisis, including standardized premiums and upfront payments. Analyses of regulatory responses to the crisis for the credit derivatives market (Basel III, Dodd-Frank, etc.) include all the necessary statistical and mathematical background for readers to easily follow the pricing topics. Every reader familiar with mid-level mathematics who wants to understand the functioning of the derivatives markets (in both practical and academic contexts) can fully satisfy his or her interests with the comprehensive assessments in this book. Explores the role that credit derivatives played during the economic crisis, both as hedging instruments and as vehicles that potentially magnified losses for some investors Comprehensive overview of single-name and multi-name credit derivatives in terms of market specifications, pricing techniques, and regulatory treatment Updated edition uses current market statistics (market size, market participants, and uses of credit derivatives), covers the application of CDS technology to other asset classes (CMBX, ABX, etc.), and expands the treatment of individual instruments to cover index products, and more

Derivatives Academic Press

The book has been tested and refined through years of classroom teaching experience. With an abundance of examples, problems, and fully worked out solutions, the text introduces the financial theory and relevant mathematical methods in a mathematically rigorous yet engaging way. This textbook provides complete coverage of discrete-time financial models that form the cornerstones of financial derivative pricing theory. Unlike similar texts in the field, this one presents multiple problem-solving approaches, linking related comprehensive techniques for pricing different types of financial derivatives. Key features: In-depth coverage of discrete-time theory and methodology. Numerous, fully worked out examples and exercises in every chapter. Mathematically rigorous and consistent yet bridging various basic and more advanced concepts. Judicious balance of financial theory, mathematical, and computational methods. Guide to Material. This revision contains: Almost 200 pages worth of new material in all chapters. A new chapter on elementary probability theory. An expanded the set of solved problems and additional exercises. Answers to all exercises. This book is a comprehensive, self-contained, and unified treatment of the main theory and application of mathematical methods behind modern-day financial mathematics. Table of Contents List of Figures and Tables Preface I Introduction to Pricing and Management of Financial Securities 1 Mathematics of Compounding 2 Primer on Pricing Risky Securities 3 Portfolio Management 4 Primer on Derivative Securities II Discrete-Time Modelling 5 Single-Period Arrow–Debreu Models 6 Introduction to Discrete-Time Stochastic Calculus 7 Replication and Pricing in the Binomial Tree Model 8 General Multi-Asset Multi-Period Model Appendices A Elementary Probability Theory B Glossary of Symbols and Abbreviations C Answers and Hints to Exercises References Index Biographies Giuseppe Campolieti is Professor of Mathematics at Wilfrid Laurier University in Waterloo, Canada. He has been Natural Sciences and Engineering Research Council postdoctoral research fellow and university research fellow at the University of Toronto. In 1998, he joined the Masters in Mathematical Finance as an instructor and later as an adjunct professor in financial mathematics until 2002. Dr. Campolieti also founded a financial software and consulting company in 1998. He joined Laurier in 2002 as Associate Professor of Mathematics and as SHARCNET Chair in Financial Mathematics. Roman N. Makarov is Associate Professor and Chair of Mathematics at Wilfrid Laurier University. Prior to joining Laurier in 2003, he was an Assistant Professor of Mathematics at Siberian State University of Telecommunications and Informatics and a senior research fellow at the Laboratory of Monte Carlo Methods at the Institute of Computational Mathematics and Mathematical Geophysics in Novosibirsk, Russia.

Theory and Practice PHI Learning Pvt. Ltd.

This highly acclaimed text, designed for postgraduate students of management, commerce, and financial studies, has been enlarged and updated in its second edition by introducing new chapters and topics with its focus on conceptual understanding based on practical examples. Each derivative product is illustrated with the help of diagrams, charts, tables and solved problems. Sufficient exercises and review questions help students to practice and test their knowledge. Since this comprehensive text includes latest developments in the field, the students pursuing CA, ICWA and CFA will also find this book of immense value, besides management and commerce students. THE NEW EDITION INCLUDES • Four new chapters on ‘Forward Rate Agreements’, ‘Pricing and Hedging of Swaps’, ‘Real Options’, and ‘Commodity Derivatives Market’ • Substantially revised chapters—‘Risk Management in Derivatives’, ‘Foreign Currency Forwards’, and ‘Credit Derivatives’ • Trading mechanism of Short-term interest rate futures and Long-term interest rate futures • Trading of foreign currency futures in India with RBI Guidelines • Currency Option Contracts in India • More solved examples and practice problems • Separate sections on ‘Swaps’ and ‘Other Financial Instruments’ • Extended Glossary

Risk Management and Financial Derivatives John Wiley & Sons

Written by two of the most distinguished finance scholars in the industry, this introductory textbook on derivatives and risk management is highly accessible in terms of the concepts as well as the mathematics.With its economics perspective, this rewritten and streamlined second edition textbook, is closely connected to real markets, and:Beginning at a level that is comfortable to lower division college students, the book gradually develops the content so that its lessons can be profitably used by business majors, arts, science, and engineering graduates as well as MBAs who would work in the finance industry. Supplementary materials are available to instructors who adopt this textbook for their courses. These include:Solutions Manual with detailed solutions to nearly 500 end-of-chapter questions and problemsPowerPoint slides and a Test Bank for adoptersPRICED! In line with current teaching trends, we have woven spreadsheet applications throughout the text. Our aim is for students to achieve self-sufficiency so that they can generate all the models and graphs in this book via a spreadsheet software, Priced!

A Guide to Trading and Valuation with Applications McGraw-Hill

A new textbook offering a comprehensive introduction to models and techniques for the emerging field of actuarial Finance Drs. Boudreault and Renaud answer the need for a clear, application-oriented guide to the growing field of actuarial finance with this volume, which focuses on the mathematical models and techniques used in actuarial finance for the pricing and hedging of actuarial liabilities exposed to financial markets and other contingencies. With roots in modern financial mathematics, actuarial finance presents unique challenges due to the long-term nature of insurance liabilities, the presence of mortality or other contingencies and the structure and regulations of the insurance and pension markets. Motivated, designed and written for and by actuaries, this book puts actuarial applications at the forefront in addition to balancing mathematics and finance at an adequate level to actuarial undergraduates. While the classical theory of financial mathematics is discussed, the authors provide a thorough grounding in such crucial topics as recognizing embedded options in actuarial liabilities, adequately quantifying and pricing liabilities, and using derivatives and other assets to manage actuarial and financial risks. Actuarial applications are emphasized and illustrated with about 300 examples and 200 exercises. The book also comprises end-of-chapter point-form summaries to help the reader review the most important concepts. Additional topics and features include: Compares pricing in insurance and financial markets Discusses event-triggered derivatives such as weather, catastrophe and longevity derivatives and how they can be used for risk management; Introduces equity-linked insurance and annuities (EIAs, VAs), relates them to common derivatives and how to manage mortality for these products Introduces pricing and replication in incomplete markets and analyze the impact of market incompleteness on insurance and risk management; Presents immunization techniques alongside Greeks-based hedging; Covers in detail how to delta-gamma/rho/vega hedge a liability and how to rebalance periodically a hedging portfolio. This text will prove itself a firm foundation for undergraduate courses in financial mathematics or economics, actuarial mathematics or derivative markets. It is also highly applicable to current and future actuaries preparing for the exams or actuary professionals looking for a valuable addition to their reference shelf. As of 2019, the book covers significant parts of the Society of Actuaries’ Exams FM, IFM and QFI Core, and the Casualty Actuarial Society’s Exams 2 and 3F. It is assumed the reader has basic skills in calculus (differentiation and integration of functions), probability (at the level of the Society of Actuaries’ Exam P), interest theory (time value of money) and, ideally, a basic understanding of elementary stochastic processes such as random walks.

Pricing Derivatives Cambridge University Press

Derivatives by Paul Wilmott provides the most comprehensive and accessible analysis of the art of science in financial modeling available. Wilmott explains and challenges many of the tried and tested models while at the same time offering the reader many new and previously unpublished ideas and techniques. Paul Wilmott has produced a compelling and essential new work in this field. The basics of the established theories-such as stochastic calculus, Black-Scholes, binomial trees and interest-rate models-are covered in clear and precise detail, but Derivatives goes much further. Complex models-such as path dependency, non-probabilistic models, static hedging and quasi-Monte Carlo methods-are introduced and explained to a highly sophisticated level. But theory in itself is not enough, an understanding of the role the techniques play in the daily world of finance is also examined through the use of spreadsheets, examples and the inclusion of Visual Basic programs. The book is divided into six parts: Part One: acts as an introduction and explanation of the fundamentals of derivatives theory and practice, dealing with the equity, commodity and currency worlds. Part Two: takes the mathematics of Part One to a more complex level, introducing the concept of path dependency. Part Three: concerns extensions of the Black-Scholes world, both classic and modern. Part Four: deals with models for fixed-income products. Part Five: describes models for risk management and measurement. Part Six: delivers the numerical methods required for implementing the models described in the rest of the book. Derivatives also includes a CD containing a wide variety of implementation material related to the book in the form of spreadsheets and executable programs together with resource material such as demonstration software and relevant contributed articles. At all times the style remains readable and compelling making Derivatives the essential book on every finance shelf.