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4ECQJM - KIMBERLY TANIYA

This book offers an authorative take on the liquidity of securities markets, its determinants, and its effects. It presents the basic modeling and econometric tools used in market microstructure - the area of finance that studies price formation in securities markets.

The ways financial analysts, traders, and other specialists use information and learn from each other are of fundamental importance to understanding how markets work and prices are set. This graduate-level textbook analyzes how markets aggregate information and examines the impacts of specific market arrangements--or microstructure--on the aggregation process and overall performance of financial markets. Xavier Vives bridges the gap between the two primary views of markets--informational efficiency and herding--and uses a coherent game-theoretic framework to bring together the latest results from the rational expectations and herding literatures. Vives emphasizes the consequences of market interaction and social learning for informational and economic efficiency. He looks closely at information aggregation mechanisms, progressing from simple to complex environments: from static to dynamic models; from competitive to strategic agents; and from simple market strategies such as noncontingent orders or quantities to complex ones like price contingent orders or demand schedules. Vives finds that contending theories like informational efficiency and herding build on the same principles of Bayesian decision making and that "irrational" agents are not needed to explain herding behavior, booms, and crashes. As this book shows, the microstructure of a market is the crucial factor in the informational efficiency of prices. Provides the most complete analysis of the ways markets aggregate information Bridges the gap between the rational expectations and herding literatures Includes exercises with solutions Serves both as a graduate textbook and a resource for researchers, including financial analysts

The Pension Crisis concerns the changing demographic profile of the economy: an increasing number of elderly persons supported by fewer young people. Understanding and tackling this impending crisis is a key task for public policy. An annuity protects an individual from outliving their savings, and is central to pensions policy: this book explores the issues surrounding annuities.

Financial Trading and Investing, Second Edition, delivers the most current information on trading and market microstructure for undergraduate and master's students. Without demanding a background in econometrics, it explores alternative markets and highlights recent regulatory developments, implementations, institutions and debates. New explanations of controversial trading tactics (and blunders), such as high-frequency trading, dark liquidity pools, fat fingers, insider trading, and flash orders emphasize links between the history of financial regulation and events in financial markets. New sections on valuation and hedging techniques, particularly with respect to fixed income and derivatives markets, accompany updated regulatory information. In addition, new case studies and additional exercises are included on a website that has been revised, expanded and updated. Combining theory and application, the book provides the only up-to-date, practical beginner's introduction to today's investment tools and markets. Concentrates on trading, trading institutions, markets and the institutions that facilitate and regulate trading activities Introduces foundational topics relating to trading and securities markets, including auctions, market microstructure, the roles of information and inventories, behavioral finance, market efficiency, risk, arbitrage, trading technology, trading regulation and ECNs Covers market and technology advances and innovations, such as execution algo trading, Designated Market Makers (DMMs), Supplemental Liquidity Providers (SLPs), and the Super Display Book system (SDBK)

Written by one of the leading authorities in market microstructure research, this book provides a comprehensive guide to the theoretical work in this important area of finance.

"Life on earth is filled with many mysteries, but perhaps the most challenging of these is the nature of Intelligence." – Prof. Terrence J. Sejnowski, Computational Neurobiologist The main objective of this book is to create awareness about both the promises and the formidable challenges that the era of Data-Driven Decision-Making and Machine Learning are confronted with, and especially about how these new developments may influence the future of the financial industry. The subject of Financial Machine Learning has attracted a lot of interest recently, specifically because it represents one of the most challenging problem spaces for the applicability of Machine Learning. The author has used a novel approach to introduce the reader to this topic: The first half of the book is a readable and coherent introduction to two modern topics that are not generally considered together: the data-driven paradigm and Computational Intelligence. The second half of the book illustrates a set of Case Studies that are contemporarily relevant to quantitative trading practitioners who are dealing with problems such as trade execution optimization, price dynamics forecast, portfolio management, market making, derivatives valuation, risk, and compliance. The main purpose of this book is pedagogical in nature, and it is specifically aimed at defining an adequate level of engineering and scientific clarity when it comes to the usage of the term "Artificial Intelligence," especially as it relates to the financial industry. The message conveyed by this book is one of confidence in the possibilities offered by this new era of Data-Intensive Computation. This message is not grounded on the current hype surrounding the latest technologies, but on a deep analysis of their effectiveness and also on the author's two decades of professional experience as a technologist, quant and academic.

The availability of financial data recorded on high-frequency level has inspired a research area which over the last decade emerged to a major area in econometrics and statistics. The growing popularity of high-frequency econometrics is driven by technological progress in trading systems and an increasing importance of intraday trading, liquidity risk, optimal order placement as well as high-frequency volatility. This book provides a state-of-the-art overview on the major approaches in high-frequency econometrics, including univariate and multivariate autoregressive conditional mean approaches for different types of high-frequency variables, intensity-based approaches for financial point processes and dynamic factor models. It discusses implementation details, provides insights into properties of high-frequency data as well as institutional settings and presents applications to volatility and liquidity estimation, order book modelling and market microstructure analysis.

Artificial intelligence (AI) is regarded as the science and technology for producing an intelligent machine, particularly, an intelligent computer program. Machine learning is an approach to realizing AI comprising a collection of statistical algorithms, of which deep learning is one such example. Due to the rapid development of computer technology, AI has been actively explored for a variety of academic and practical purposes in the context of financial markets. This book focuses on the broad topic of "AI and Financial Markets", and includes novel research associated with this topic. The book includes contributions on the application of machine learning, agent-based artificial market simulation, and other related skills to the analysis of various aspects of financial markets.

An informative guide to market microstructure and trading strategies Over the last decade, the financial landscape has undergone a significant transformation, shaped by the forces of technology, globalization, and market innovations to name a few. In order to operate effectively in today's markets, you need more than just the motivation to succeed, you need a firm understanding of how modern financial markets work and what professional trading is really about. Dr. Anatoly Schmidt, who has worked in the financial industry since 1997, and teaches in the Financial Engineering program of Stevens Institute of Technology, puts these topics in perspective with his new book. Divided into three comprehensive parts, this reliable resource offers a balance between the theoretical aspects of market microstructure and trading strategies that may be more relevant for practitioners. Along the way, it skillfully provides an informative overview of modern financial markets as well as an engaging assessment of the methods used in deriving and back-testing trading strategies. Details the modern financial markets for equities, foreign exchange, and fixed income Addresses the basics of market dynamics, including statistical distributions and volatility of returns Offers a summary of approaches used in technical analysis and statistical arbitrage as well as a more detailed description of trading performance criteria and back-testing strategies Includes two appendices that support the main material in the book If you're unprepared to enter today's markets you will underperform. But with Financial Markets and Trading as your guide, you'll quickly discover what it takes to make it in this competitive field.

This book exposes and comments on the consequences of Reg NMS and MiFID on market microstructure. It covers changes in market design, electronic trading, and investor and trader behaviors. The emergence of high frequency trading and critical events like the"Flash Crash" of 2010 are also analyzed in depth. Using a quantitative viewpoint, this book explains how an attrition of liquidity and regulatory changes can impact the whole microstructure of financial markets. A mathematical Appendix details the quantitative tools and indicators used through the book, allowing the reader to go further independently. This book is written by practitioners and theoretical experts and covers practical aspects (like the optimal infrastructure needed to trade electronically in modern markets) and abstract analyses (like the use on entropy measurements to understand the progress of market fragmentation). As market microstructure is a recent academic field, students will benefit from the book's overview of the current state of microstructure and will use the Appendix to understand important methodologies. Policy makers and regulators will use this book to access theoretical analyses on real cases. For readers who are practitioners, this book delivers data analysis and basic processes like the designs of Smart Order Routing and trade scheduling algorithms. In this second edition, the authors have added a large section on orderbook dynamics, showing how liquidity can predict future price moves, and how High Frequency Traders can profit from it. The section on market impact has also been updated to show how buying or selling pressure moves prices not only for a few hours, but even for days, and how prices relax (or not) after a period of intense pressure. Further, this edition includes pages on Dark Pools, Circuit Breakers and added information outside of Equity Trading, because MiFID 2 is likely to push fixed income markets towards more electronification. The authors explore what is to be expected from this change in microstructure. The appendix has also been augmented to include the propagator models (for intraday price impact), a simple version of Kyle's model (1985) for daily market impact, and a more sophisticated optimal trading framework, to support the design of trading algorithms. Contents: Monitoring the Fragmentation at Any ScaleUnderstanding the Stakes and the Roots of FragmentationOptimal Organizations for Optimal TradingAppendix A: Quantitative AppendixAppendix B: Glossary Readership: Graduate and research students of financial markets and quantitative finance, Regulators and policy makers, practitioners. Keywords: Market Microstructure;Finance;Financial Markets;Market Liquidity;Financial Regulation;MiFID;Reg NMS;ESMAReview: Reviews of the First Edition: "Lehalle and Laruelle bring [their] experience to bear on every aspect of the discussion, as well as deep quantitative understanding. The resulting book is a unique mixture of real market knowledge and theoretical explanation. There is nothing else out there like it, and this book will be a central resource for many different market participants." Robert Almgren President and Cofounder of Quantitative Brokers, New York "Charles' and Sophie's book on markets microstructure will improve our knowledge and consequently help us to tweak these potentiometers. In promoting better education, this book is at the roots of restoring trust in the markets." Philippe Guillot Executive Director, Markets Directorate Autorité des marchés financiers (AMF), Paris "This book pro

This book proposes new methods to build optimal portfolios and to analyze market liquidity and volatility under market microstructure effects, as well as new financial risk measures using parametric and non-parametric techniques. In particular, it investigates the market microstructure of foreign exchange and futures markets.

Historically, the fields of exchange-rate economics and microstructure finance have progressed independently of each other. Recent interaction, however, has given rise to a microstructure approach to exchange rates. This book focuses on the economics of financial information and how microstruc-

ture tools help to clarify the types of information most relevant to exchange rates. The microstructure approach views exchange rates from the perspective of the trading room, the place where exchange rates are actually determined. Emphasizing information economics over institutional issues, the approach departs from three unrealistic assumptions common to previous approaches: that all information relevant to exchange rates is publicly available, that all market participants are alike in their goals or in how they view information, and that how trading is organized is inconsequential for exchange rates. The book shows how exchange-rate behavior previously thought to be particularly puzzling can be explained using the microstructure approach. It contains a combination of theoretical and empirical work.

The analysis of the microstructure of financial markets has been one of the most important areas of research in finance and has allowed scholars and practitioners alike to have a much more sophisticated understanding of the dynamics of price formation in financial markets. Frank de Jong and Barbara Rindi provide an integrated graduate level textbook treatment of the theory and empirics of the subject, starting with a detailed description of the trading systems on stock exchanges and other markets and then turning to economic theory and asset pricing models. Special attention is paid to models explaining transaction costs, with a treatment of the measurement of these costs and the implications for the return on investment. The final chapters review recent developments in the academic literature. End-of-chapter exercises and downloadable data from the book's companion website provide opportunities to revise and apply models developed in the text.

Liquidity and Asset Prices reviews the literature that studies the relationship between liquidity and asset prices. The authors review the theoretical literature that predicts how liquidity affects a security's required return and discuss the empirical connection between the two. Liquidity and Asset Prices surveys the theory of liquidity-based asset pricing followed by the empirical evidence. The theory section proceeds from basic models with exogenous holding periods to those that incorporate additional elements of risk and endogenous holding periods. The empirical section reviews the evidence on the liquidity premium for stocks, bonds, and other financial assets.

Filling the gap for an up-to-date textbook in this relatively new interdisciplinary research field, this volume provides readers with a thorough and comprehensive introduction. Based on extensive teaching experience, it includes numerous worked examples and highlights in special biographical boxes some of the most outstanding personalities and their contributions to both physics and economics. The whole is rounded off by several appendices containing important background material.

The Theory of the Firm presents an innovative general analysis of the economics of the firm.

The interactions that occur in securities markets are among the fastest, most information intensive, and most highly strategic of all economic phenomena. This book is about the institutions that have evolved to handle our trading needs, the economic forces that guide our strategies, and statistical methods of using and interpreting the vast amount of information that these markets produce. The book includes numerous exercises.

"The main purpose of this handbook is to illustrate the mathematically fundamental implementation of various volatility models in the banking and financial industries, both at home and abroad, through use of real-world, time-sensitive applications. Conceived and written by over two-dozen experts in the field, the focus is to cohesively demonstrate how "volatile" certain statistical decision-making techniques can be when solving a range of financial problems. By using examples derived from consulting projects, current research and course instruction, each chapter in the book offers a systematic understanding of the recent advances in volatility modeling related to real-world situations. Every effort is made to present a balanced treatment between theory and practice, as well as to showcase how accuracy and efficiency in implementing various methods can be used as indispensable tools in assessing volatility rates. Unique to the book is in-depth coverage of GARCH-family models, contagion, and model comparisons between different volatility models. To by-pass tedious computation, software illustrations are presented in an assortment of packages, ranging from R, C++, EXCEL-VBA, Minitab, to JMP/SAS"--

The latest cutting-edge research on market microstructure Based on the December 2010 conference on market microstructure, organized with the help of the Institut Louis Bachelier, this guide brings together the leading thinkers to discuss this important field of modern finance. It provides readers with vital insight on the origin of the well-known anomalous "stylized facts" in financial prices series, namely heavy tails, volatility, and clustering, and illustrates their impact on the organization of markets, execution costs, price impact, organization liquidity in electronic markets, and other issues raised by high-frequency trading. World-class contributors cover topics including analysis of high-frequency data, statistics of high-frequency data, market impact, and optimal trading. This is a must-have guide for practitioners and academics in quantitative finance.

"This exceptional book provides valuable insights into the evolution of financial economics from the perspective of a major player." -- Robert Litzenberger, Hopkinson Professor Emeritus of Investment Banking, Univ. of Pennsylvania; and retired partner, Goldman Sachs A History of the Theory of Investments is about ideas -- where they come from, how they evolve, and why they are instrumental in preparing the future for new ideas. Author Mark Rubinstein writes history by rewriting history. In unearthing long-forgotten books and journals, he corrects past oversights to assign credit where credit is due and assembles a remarkable history that is unquestionable in its accuracy and unprecedented in its power. Exploring key turning points in the development of investment theory, through the critical prism of award-winning investment theory and asset pricing expert Mark Rubinstein, this groundbreaking resource follows the chronological development of investment theory over centuries, exploring the inner workings of great theoretical breakthroughs while pointing out contributions made by often unsung contributors to some of investment's most influential ideas and models.

This book bridges the fields of finance, mathematical finance and engineering, and is suitable for engineers and computer scientists who are looking to apply engineering principles to financial markets. The book builds from the fundamentals, with the help of simple examples, clearly explaining the concepts to the level needed by an engineer, while showing their practical significance. Topics covered include an in depth examination of market microstructure and trading, a detailed explanation of High Frequency Trading and the 2010 Flash Crash, risk analysis and management, popular trading strategies and their characteristics, and High Performance DSP and Financial Computing. The book has many examples to explain financial concepts, and the presentation is enhanced with the visual representation of relevant market data. It provides relevant MATLAB codes for readers to further their study. Please visit the companion website on http://booksite.elsevier.com/9780128015612/ Provides engineering perspective to financial problems In depth coverage of market microstructure Detailed explanation of High Frequency Trading and 2010 Flash Crash Explores risk analysis

and management Covers high performance DSP & financial computing

Focusing on market microstructure, Harris (chief economist, U.S. Securities and Exchange Commission) introduces the practices and regulations governing stock trading markets. Writing to be understandable to the lay reader, he examines the structure of trading, puts forward an economic theory of trading, discusses speculative trading strategies, explores liquidity and volatility, and considers the evaluation of trader performance. Annotation (c)2003 Book News, Inc., Portland, OR (booknews.com).

This work, now in a thoroughly revised second edition, presents the economic foundations of financial markets theory from a mathematically rigorous standpoint and offers a self-contained critical discussion based on empirical results. It is the only textbook on the subject to include more than two hundred exercises, with detailed solutions to selected exercises. Financial Markets Theory covers classical asset pricing theory in great detail, including utility theory, equilibrium theory, portfolio selection, mean-variance portfolio theory, CAPM, CCAPM, APT, and the Modigliani-Miller theorem. Starting from an analysis of the empirical evidence on the theory, the authors provide a discussion of the relevant literature, pointing out the main advances in classical asset pricing theory and the new approaches designed to address asset pricing puzzles and open problems (e.g., behavioral finance). Later chapters in the book contain more advanced material, including on the role of information in financial markets, non-classical preferences, noise traders and market microstructure. This textbook is aimed at graduate students in mathematical finance and financial economics, but also serves as a useful reference for practitioners working in insurance, banking, investment funds and financial consultancy. Introducing necessary tools from microeconomic theory, this book is highly accessible and completely self-contained. Advance praise for the second edition: "Financial Markets Theory is comprehensive, rigorous, and yet highly accessible. With their second edition, Barucci and Fontana have set an even higher standard!"-Darrell Duffie, Dean Witter Distinguished Professor of Finance, Graduate School of Business, Stanford University "This comprehensive book is a great self-contained source for studying most major theoretical aspects of financial economics. What makes the book particularly useful is that it provides a lot of intuition, detailed discussions of empirical implications, a very thorough survey of the related literature, and many completely solved exercises. The second edition covers more ground and provides many more proofs, and it will be a handy addition to the library of every student or researcher in the field."Jaksa Cvitanic, Richard N. Merkin Professor of Mathematical Finance, Caltech "The second edition of Financial Markets Theory by Barucci and Fontana is a superb achievement that knits together all aspects of modern finance theory, including financial markets microstructure, in a consistent and self-contained framework. Many exercises, together with their detailed solutions, make this book indispensable for serious students in finance."Michel Crouhy, Head of Research and Development, NATIXIS

Sound investment decisions require an in-depth knowledge of the financial markets and available financial instruments. This book provides students and professionals with an understanding of the role and activities of an equity security analyst within the investment process. Emphasis is on understanding the process of analyzing companies; the valuation process; and the challenges of achieving success in a highly competitive capital market. The authors present a comprehensive compendium on the financial theory, the empirical evidence and the mathematical tools that form the underlying principles of investment decisions.

This book, written by Joakim Westerholm, Professor of Finance and former trading professional, is intended to be used as basis for developing courses in Securities markets, Trading, and Market microstructure and connects theoretic rigor with practical real world applications.Market technology evolves, the roles of market participants change, and whole market segments disappear to be replaced by new ways to exchange securities. Yet, the same underlying economic principles continue to drive trading in securities markets. Thus, the scope of the book is global, providing a framework that is relevant both for current market designs and for future markets we will see develop. It is designed to stay relevant in a rapidly evolving field.The book contains a selection of lecture notes through which students will gain an in-depth understanding of the mechanism that drives trading in securities markets. The book also contains another set of lecture notes with more advanced, research-based material, suitable for Honours or Master level research students, or for PhD candidates. The material is self-explanatory and can also be used for self-study, preferably in conjunction with assigned readings.

Professor Spulber demonstrates how the intermediation theory of the firm explains firm formation by showing why firms arise in a market equilibrium with costly transactions. In addition, the theory helps explain how markets work by.

The widespread availability of high-quality, high-frequency data has revolutionised the study of financial markets. By describing not only asset prices, but also market participants' actions and interactions, this wealth of information offers a new window into the inner workings of the financial ecosystem. In this original text, the authors discuss empirical facts of financial markets and introduce a wide range of models, from the micro-scale mechanics of individual order arrivals to the emergent, macro-scale issues of market stability. Throughout this journey, data is king. All discussions are firmly rooted in the empirical behaviour of real stocks, and all models are calibrated and evaluated using recent data from Nasdaq. By confronting theory with empirical facts, this book for practitioners, researchers and advanced students provides a fresh, new, and often surprising perspective on topics as diverse as optimal trading, price impact, the fragile nature of liquidity, and even the reasons why people trade at all.

An authoritative graduate textbook on information choice, an exciting frontier of research in economics and finance Most theories in economics and finance predict what people will do, given what they know about the world around them. But what do people know about their environments? The study of information choice seeks to answer this question, explaining why economic players know what they know—and how the information they have affects collective outcomes. Instead of assuming what people do or don't know, information choice asks what people would choose to know. Then it predicts what, given that information, they would choose to do. In this textbook, Laura Veldkamp introduces graduate students in economics and finance to this important new research. The book illustrates how information choice is used to answer questions in monetary economics, portfolio choice theory, business cycle theory, international finance, asset pricing, and other areas. It shows how to build and test applied theory models with information frictions. And it covers recent work on topics such as rational inattention, information markets, and strategic games with heterogeneous information. Illustrates how information choice is used to answer questions in monetary economics, portfolio choice theory, business cycle theory, international finance, asset pricing, and other areas Teaches how to build and test applied theory models with information frictions Covers recent research on topics such as rational inattention, information markets, and strategic games with heterogeneous information

The foreign exchange market is the largest, fastest-growing financial market in the world. Yet conventional macroeconomic approaches do not explain why people trade foreign exchange. At the same time, they fail to explain the short-run determinants of the exchange rate. These nine innovative essays use a microstructure approach to analyze the workings of the foreign exchange market, with special emphasis on institutional aspects and the actual behavior of market participants. They examine the volume of transactions, heterogeneity of traders, the time of day and location of trading, the bid-ask spread, and the high level of exchange rate volatility that has puzzled many observers. They also consider the structure of the market, including such issues as nontransparency, asymmetric information, liquidity trading, the use of automated brokers, the relationship between spot and derivative markets, and the importance of systemic risk in the market. This timely volume will be essential reading for anyone interested in the economics of international finance.

A limit order book is essentially a file on a computer that contains all orders sent to the market, along with their characteristics such as the sign of the order, price, quantity and a timestamp. The majority of organized electronic markets rely on limit order books to store the list of interests of market participants on their central computer. A limit order book contains all the information available on a specific market and it reflects the way the market moves under the influence of its participants. This book discusses several models of limit order books. It begins by discussing the data to assess their empirical properties, and then moves on to mathematical models in order to reproduce the observed properties. Finally, the book presents a framework for numerical simulations. It also covers important modelling techniques including agent-based modelling, and advanced modelling of limit order books based on Hawkes processes. The book also provides in-depth coverage of simulation techniques and introduces general, flexible, open source library concepts useful to readers studying trading strategies in order-driven markets.

The design of trading algorithms requires sophisticated mathematical models backed up by reliable data. In this textbook, the authors develop models for algorithmic trading in contexts such as executing large orders, market making, targeting VWAP and other schedules, trading pairs or collection of assets, and executing in dark pools. These models are grounded on how the exchanges work, whether the algorithm is trading with better informed traders (adverse selection), and the type of information available to market participants at both ultra-high and low frequency. Algorithmic and High-Frequency Trading is the first book that combines sophisticated mathematical modelling, empirical facts and financial economics, taking the reader from basic ideas to cutting-edge research and practice. If you need to understand how modern electronic markets operate, what information provides a trading edge, and how other market participants may affect the profitability of the algorithms, then this is the book for you.

The book provides detailed descriptions, including more than 550 mathematical formulas, for more than 150 trading strategies across a host of asset classes and trading styles. These include stocks, options, fixed income, futures, ETFs, indexes, commodities, foreign exchange, convertibles, structured assets, volatility, real estate, distressed assets, cash, cryptocurrencies, weather, energy, inflation, global macro, infrastructure, and tax arbitrage. Some strategies are based on machine learning algorithms such as artificial neural networks, Bayes, and k-nearest neighbors. The book also includes source code for illustrating out-of-sample backtesting, around 2,000 bibliographic references, and more than 900 glossary, acronym and math definitions. The presentation is intended to be descriptive and pedagogical and of particular interest to finance practitioners, traders, researchers, academics, and business school and finance program students.

We provide a synthesis of the empirical evidence on market liquidity. The liquidity measurement literature has established standard measures of liquidity that apply to broad categories of market microstructure data. Specialized measures of liquidity have been developed to deal with data limitations in specific markets, to provide proxies from daily data, and to assess institutional trading programs. The general liquidity literature has established local cross-sectional patterns, global cross-sectional patterns, and time-series patterns.

Liquid markets generate hundreds or thousands of ticks (the minimum change in price a security can have, either up or down) every business day. Data vendors such as Reuters transmit more than 275,000 prices per day for foreign exchange spot rates alone. Thus, high-frequency data can be a fundamental object of study, as traders make decisions by observing high-frequency or tick-by-tick data. Yet most studies published in financial literature deal with low frequency, regularly spaced data. For a variety of reasons, high-frequency data are becoming a way for understanding market mi-

crostructure. This book discusses the best mathematical models and tools for dealing with such vast amounts of data. This book provides a framework for the analysis, modeling, and inference of high frequency financial time series. With particular emphasis on foreign exchange markets, as well as currency, interest rate, and bond futures markets, this unified view of high frequency time series methods investigates the price formation process and concludes by reviewing techniques for constructing systematic trading models for financial assets.

From a leading financial economist, a searching examination of the ethics of modern finance. In 2001, Goldman Sachs structured a complex financial contract so that its client, the government of Greece, would appear to have far less debt than it actually did. When news of this transaction came out years later, the inevitable question arose: Even though Goldman's actions were legal, were they ethically wrong? Is modern finance itself inherently unethical? In Something for Nothing, financial economist Maureen O'Hara explains that one of the key innovations of modern finance is its reliance on arbitrage, the practice of taking advantage of a price difference between two or more markets to generate profits and remove inefficiencies. When done correctly, arbitrage can create value at little or no cost (in effect, getting "something for nothing"); but it can also be an exploitative tool. In a lucid, insightful discussion of the ethics of arbitrage in modern finance, O'Hara reveals how the rules can often be stretched into still-legal yet highly unethical business practices. Examining key cases in clear and persuasive prose, O'Hara illuminates various aspects of financial ethics, from the Goldman Greek transaction to Lehman Brothers' attempt to cover up its debt, JPMorgan Chase's maneuvers in California's energy markets, Bernie Madoff's trading strategies in the 1980s, high-frequency trading practices, and toxic loans in France. Ultimately, O'Hara turns to philosophy and religion to argue for a new, humanistic approach to ethics in the financial industry. She makes a strong case for a way forward: fewer rules and more standards to foster a morally responsible outlook. Fearlessly raising the questions at the moral heart of our financial system, Something for Nothing is a masterful treatise on the ethics of modern finance.

The past twenty years have seen an extraordinary growth in the use of quantitative methods in financial markets. Finance professionals now routinely use sophisticated statistical techniques in portfolio management, proprietary trading, risk management, financial consulting, and securities regulation. This graduate-level textbook is intended for PhD students, advanced MBA students, and industry professionals interested in the econometrics of financial modeling. The book covers the entire spectrum of empirical finance, including: the predictability of asset returns, tests of the Random Walk Hypothesis, the microstructure of securities markets, event analysis, the Capital Asset Pricing Model and the Arbitrage Pricing Theory, the term structure of interest rates, dynamic models of economic equilibrium, and nonlinear financial models such as ARCH, neural networks, statistical fractals, and chaos theory. Each chapter develops statistical techniques within the context of a particular financial application. This exciting new text contains a unique and accessible combination of theory and practice, bringing state-of-the-art statistical techniques to the forefront of financial applications. Each chapter also includes a discussion of recent empirical evidence, for example, the rejection of the Random Walk Hypothesis, as well as problems designed to help readers incorporate what they have read into their own applications.

Destined to become a market classic, Dynamic Hedging is the only practical reference in exotic options hedging and arbitrage for professional traders and money managers Watch the professionals. From central banks to brokerages to multinationals, institutional investors are flocking to a new generation of exotic and complex options contracts and derivatives. But the promise of ever larger profits also creates the potential for catastrophic trading losses. Now more than ever, the key to trading derivatives lies in implementing preventive risk management techniques that plan for and avoid these appalling downturns. Unlike other books that offer risk management for corporate treasurers, Dynamic Hedging targets the real-world needs of professional traders and money managers. Written by a leading options trader and derivatives risk advisor to global banks and exchanges, this book provides a practical, real-world methodology for monitoring and managing all the risks associated with portfolio management. Nassim Nicholas Taleb is the founder of Empirica Capital LLC, a hedge fund operator, and a fellow at the Courant Institute of Mathematical Sciences of New York University. He has held a variety of senior derivative trading positions in New York and London and worked as an independent floor trader in Chicago. Dr. Taleb was inducted in February 2001 in the Derivatives Strategy Hall of Fame. He received an MBA from the Wharton School and a Ph.D. from University Paris-Dauphine.