Record Nr. UNINA9910811779903321 Autore Viens Frederi G. <1969-> **Titolo** Handbook of modeling high-frequency data in finance / / Frederi G. Viens, Maria C. Mariani, Ionut Florescu Hoboken, NJ,: Wiley, c2012 Pubbl/distr/stampa 9786613332844 **ISBN** 9781283332842 1283332841 9781118204580 1118204581 9781118204566 1118204565 9781118204634 1118204638 Edizione [1.] Descrizione fisica 1 online resource (457 p.) Wiley handbooks in financial engineering and econometrics; ; 4 Collana Classificazione BUS027000 Altri autori (Persone) Floresculonut <1973-> MarianiMaria C Disciplina 332.01/5195 Soggetti Finance - Econometric models Econometric models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Handbook of Modeling High-Frequency Data in Finance; Contents; Preface; Contributors; Part One Analysis of Empirical Data; 1 Estimation of NIG and VG Models for High Frequency Financial Data; 1.1 Introduction; 1.2 The Statistical Models; 1.3 Parametric Estimation Methods: 1.4 Finite-Sample Performance via Simulations: 1.5 Empirical Results; 1.6 Conclusion; References; 2 A Study of Persistence of Price

of NIG and VG Models for High Frequency Financial Data; 1.1 Introduction; 1.2 The Statistical Models; 1.3 Parametric Estimation Methods; 1.4 Finite-Sample Performance via Simulations; 1.5 Empirical Results; 1.6 Conclusion; References; 2 A Study of Persistence of Price Movement using High Frequency Financial Data; 2.1 Introduction; 2.2 Methodology; 2.3 Results; 2.4 Rare Events Distribution; 2.5 Conclusions; References
3 Using Boosting for Financial Analysis and Trading3.1 Introduction;

3.2 Methods; 3.3 Performance Evaluation; 3.4 Earnings Prediction and Algorithmic Trading; 3.5 Final Comments and Conclusions; References;

Introduction: 4.2 Description of the Products and Models: 4.3 Impact of Dynamics of Default Correlation on Low-Frequency Tranches: 4.4 Impact of Dynamics of Default Correlation on High-Frequency Tranches; 4.5 Conclusion; References; 5 Construction of Volatility Indices Using A Multinomial Tree Approximation Method 5.1 Introduction 5.2 New Methodology; 5.3 Results and Discussions; 5.4 Summary and Conclusion; References; Part Two Long Range Dependence Models; 6 Long Correlations Applied to the Study of Memory Effects in High Frequency (TICK) Data, the Dow Jones Index, and International Indices; 6.1 Introduction; 6.2 Methods Used for Data Analysis; 6.3 Data; 6.4 Results and Discussions; 6.5 Conclusion; References; 7 Risk Forecasting with GARCH, Skewed t Distributions, and Multiple Timescales: 7.1 Introduction: 7.2 The Skewed t Distributions: 7.3 Risk Forecasts on a Fixed Timescale 7.4 Multiple Timescale Forecasts 7.5 Backtesting; 7.6 Further Analysis: Long-Term GARCH and Comparisons using Simulated Data; 7.7 Conclusion: References: 8 Parameter Estimation and Calibration for Long-Memory Stochastic Volatility Models; 8.1 Introduction; 8.2 Statistical Inference Under the LMSV Model: 8.3 Simulation Results: 8.4 Application to the S&P Index; 8.5 Conclusion; References; Part Three Analytical Results: 9 A Market Microstructure Model of Ultra High Frequency Trading; 9.1 Introduction; 9.2 Microstructural Model; 9.3 Static Comparisons: 9.4 Questions for Future Research References 10 Multivariate Volatility Estimation with High Frequency Data Using Fourier Method: 10.1 Introduction: 10.2 Fourier Estimator of Multivariate Spot Volatility; 10.3 Fourier Estimator of Integrated Volatility in the Presence of Microstructure Noise: 10.4 Fourier Estimator of Integrated Covariance in the Presence of Microstructure Noise; 10.5 Forecasting Properties of Fourier Estimator; 10.6 Application: Asset Allocation: References: 11 The "Retirement" Problem: 11.1 Introduction; 11.2 The Market Model; 11.3 Portfolio and Wealth Processes; 11.4 Utility Function 11.5 The Optimization Problem in the Case p(t,T] o 0

4 Impact of Correlation Fluctuations on Securitized structures; 4.1

Sommario/riassunto

CUTTING-EDGE DEVELOPMENTS IN HIGH-FREQUENCY FINANCIAL ECONOMETRICS In recent years, the availability of high-frequency data and advances in computing have allowed financial practitioners to design systems that can handle and analyze this information. Handbook of Modeling High-Frequency Data in Finance addresses the many theoretical and practical questions raised by the nature and intrinsic properties of this data. A one-stop compilation of empirical and analytical research, this handbook explores data sampled with high-frequency finance in financial engineering, stati