

Econometric Modelling Of Stock Market Intraday Activity

This book explores the US economy from 1960 to 2010 using a more Keynesian, Cowles model approach, which the author argues has substantial advantages over the vector autoregression (VAR) and dynamic stochastic general equilibrium (DSGE) models used almost exclusively today. Heim presents a robust argument in favor of the Cowles model as an answer to the pressing, unresolved methodological question of how to accurately model the macroeconomy so that policymakers can reliably use these models to assist their decision making. Thirty-eight behavioral equations, describing determinants of variables such as consumption, taxes, and government spending, are connected by eighteen identities to construct a comprehensive model of the real US economy that Heim then tests across four different time periods to ensure that results are consistent. This comprehensive demonstration of the value of a long-ignored model provides overwhelming evidence that the more Keynesian (Cowles) structural models outperform VAR and DSGE, and therefore should be the models of choice in future macroeconomic studies.

Provides detailed coverage of the models currently being used in the empirical analysis of financial markets. Copyright © Libri GmbH. All rights reserved.

From the back cover: Stock markets are no gamble. They help people to protect themselves from financial risk, to raise money for important ventures, and to put a nation's resources to their best use. This is not secret to academics who have studied stock markets, but it is a secret to most of us who only hear the one-sided judgements of the popular media: pay your money and take your chances; my gain is your loss. In this book, two business professors bring us the real story about stock markets. Using clear language, they explain what serious researchers have found over the last 20 years.

Presents researches in linear and nonlinear modelling of economic and financial time-series. This book provides a comprehensive understanding of financial and economic dynamics in various aspects using modern financial econometric methods. It also presents and discusses research findings and their implications.

1.1 The Importance of Copper Copper, the red metal, has been known in history for thousands of years. It may have been mankind's first metal (Joralemon= 1973). And still, probably more than one hundred decades after native copper was used for the first time (Muhl= (1973: 171)», today, copper is a very important commodity: 1. Only aluminum (first in 1963) surpasses refined copper in terms of the total world's mine production and consumption. It outpaces zinc, lead, nickel and tin • 2. Refined copper is one of the most important export products of the developing countries. In 1975, refined copper ranked 8th in the developing countries' export values in general, it was 6th among their non-fuel exports, and their most important export commodity among the non-ferrous metals • 3. Many small and medium sized industrialized countries depend heavily on copper imports. For example, West Germany's share in world mine production has always been smaller than 0.1 per cent. In the last few decades, however, the Federal Republic's consumption share has amounted to some 8 i. in 1982. 4. Copper is of utmost importance for the export earnings of several countries.

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.

Economists at the Bank of France analyse causes and consequences of French monetary policy and financial deregulation during the 1980s. Using the latest econometric techniques, they demonstrate a strategy that the UK is still hesitating to fully adopt. These essays, never published in English before, offer a comprehensive and authoritative analysis.

In this study a structural model of the South African stock market, the Johannesburg Stock Exchange (JSE), was developed and estimated econometrically. The study has made three important contributions to the literature. Firstly, a structural model of the South African stock market has been developed, which quantifies the relationships between the stock market and macroeconomic variables while analyzing the impact of foreign markets and phenomena such as contagion, policy changes and structural economic changes on the JSE. This will improve the economic agents' understanding of the functioning of the stock market and potentially assist in forecasting the stock market. Secondly, investors are generally assumed to be risk and/or loss averse. This study explains how this risk and/or loss aversion of investors can cause asymmetry in stock prices and the study evaluates different types of stock market asymmetry with advanced econometric techniques such as the threshold cointegration test of Siklos and Enders (2001) and a Markov switching regime model. The Markov switching regime model is used to model the South African business cycle and to construct an indicator for the state of the business cycle, which is in turn used to introduce cyclical asymmetry in the stock market model. The Markov switching regime model is in itself a substantial contribution to the literature since no Markov switching regime model has been estimated for the South African business cycle yet. Apart from being used to capture cyclical asymmetry in the stock market, the Markov switching regime business cycle model can also be used to identify turning points in the South African economy and to model economic growth. Finally, the forecasting performance of the stock market model developed in this study is compared to other stock market models. According to the results, this model is preferred to the other stock market models in terms of modelling and forecasting the level and direction of the JSE. This means that investors and policy markets can use this model to simulate the impact of changes in macroeconomic indicators on the future course of the stock market and use it to develop profitable trading rules.

An in-depth look into the various aspects of behavioral finance Behavioral finance applies systematic analysis to ideas that have long floated around the world of trading and investing. Yet it is important to realize that we are still at a very early stage of research into this discipline and have much to learn. That is why Edwin Burton has written Behavioral Finance: Understanding the Social, Cognitive, and Economic Debates. Engaging and informative, this timely guide contains valuable insights into various issues surrounding behavioral finance. Topics addressed include noise trader theory and models, research into psychological behavior pioneered by Daniel Kahneman and Amos Tversky, and serial correlation patterns in stock price data. Along the way, Burton shares his own views on behavioral finance in order to shed some much-needed light on the subject. Discusses the Efficient Market Hypothesis (EMH) and its history, and presents the background of the emergence of behavioral finance Examines Shleifer's model of noise trading and explores other literature on the topic of noise trading Covers issues associated with anomalies and details serial correlation from the perspective of experts such as DeBondt and Thaler A companion Website contains supplementary material that allows you to learn in a hands-on fashion long after closing the book In order to achieve

better investment results, we must first overcome our behavioral finance biases. This book will put you in a better position to do so. Presents an up-to-date treatment of the models and methodologies of financial econometrics by one of the world's leading financial econometricians.

This book makes two key contributions to empirical finance. First it provides a comprehensive analysis of the Thai stock market. Second it presents an excellent exposition of how modern econometric techniques can be utilised to understand a market. The increasing globalisation of the world's financial markets has made our understanding of the risk-return relationship in a broader range of markets critical. This is particularly so in emerging markets where market depth and liquidity are major issues. One such emerging market is Thailand. The Thai capital market is of particular interest given that it was the market in which the Asian financial crises commenced. As such an understanding of the Thai capital market via study of the pre and post-crisis periods enables one to shed light on one of the major financial markets events of recent times. This book provides a quantitative analysis of the Thai capital market using some very useful and recent econometric techniques. The book provides an overview of the Thai stock market in chapter 2. Descriptive statistics and time series models (moving average, exponential smoothing, ARIMA) are presented in chapter 3 followed by market efficiency tests based on autocorrelations in chapter 4. A richer set of models is then considered in chapters 5 through 8. Chapter 5 finds a cointegrating relationship between macroeconomic factors and stock returns.

The importance of experimental economics and econometric methods increases with each passing day as data quality and software performance develops. New econometric models are developed by diverging from earlier cliché econometric models with the emergence of specialized fields of study. This book, which is expected to be an extensive and useful reference by bringing together some of the latest developments in the field of econometrics, also contains quantitative examples and problem sets. We thank all the authors who contributed to this book with their studies that provide extensive and accessible explanations of the existing econometric methods.

This book brings together the issues of optimal testing for misspecification in econometric modelling, the method of recent development in model selection and model testing with reference to applications in real data sets. It is ideal as a reference for

After tracing the causes of the global financial crisis, the book focuses on two fundamental systemic issues connected with its manifestation: financial-sector regulation and the problem of the dollar-centric international monetary system, both of which have been widely cited among the important factors leading to the 2008 financial crisis. The important analytical question of monetary policy transmission during the crisis is discussed in depth with the help of appropriate econometric models. The effectiveness of India's monetary policy during the crisis is examined by specifying an econometric model, and the impact of the crisis on the Indian stock market is modelled on the basis of risk-enhancing and risk-mitigating features. In closing, the impact of the crisis on real sectors of the Indian economy is analysed in detail.

'... this book succeeds in its mission of analysing the efficiency, predictability and profitability of the Chinese stock market. It is strongly recommended to scholars. It is additionally recommended to practitioners involved in the market, sharing its prosperity and avoiding the possible risk. This book is also recommended to the students who want to learn the systematic application of econometric modelling to market efficiency analysis.' - Shiguang Ma, Economic Record The emergence of a stock market in China only occurred a decade ago and it remains something of an unknown quantity to many observers and traders outside of the country. This book provides an extensive historical and empirical analysis of the Chinese stock-market, the development of which is an integral part of the process of economic modernization that began in China in the late 1970s.

The field of economics and finance is one of the few areas where the need for neural network applications is increasing. This book investigates the use of neural networks in developing real-world applications to help economists and financial strategists predict the movement of the markets.

This book explores how econometric modelling can be used to provide valuable insight into international housing markets. Initially describing the role of econometrics modelling in real estate market research and how it has developed in recent years, the book goes on to compare and contrast the impact of various macroeconomic factors on developed and developing housing markets. Explaining the similarities and differences in the impact of financial crises on housing markets around the world, the author's econometric analysis of housing markets across the world provides a broad and nuanced perspective on the impact of both international financial markets and local macro economy on housing markets. With discussion of countries such as China, Germany, UK, US and South Africa, the lessons learned will be of interest to scholars of Real Estate economics around the world.

India is one of the major emerging economies of the world and has witnessed tremendous economic growth over the last decades. The reforms in the financial sector were introduced to infuse energy and vibrancy into the process of economic growth. The Indian stock market now has the largest number of listed companies in the world. The phenomenal growth of the Indian equity market and its growing importance in the economy is indicated by the extent of market capitalization and the increasing integration of the Indian economy with the global economy. Various schools of thought explain the behaviour of stock returns. The Efficient Market Theory is the most important theory of the School of Neoclassical Finance based on rational expectation and no-trade argument. The book investigates the growth and efficiency of the Indian stock market in the theoretical framework of the Efficiency Market Hypothesis (EMH). The main objective of the present study is to examine the returns behaviour in the Indian equity market in the changed market environment. A detailed and rigorous analysis, made with the help of the sophisticated time series econometric models, is one of the key elements of this volume. The analysis empirically tests the random walk hypothesis and focuses on issues like nonlinear dynamics, structural breaks and long memory. It uses new and disaggregated data on recent reforms and changes in the market microstructure. The data on various indices including sectoral indices help in measuring the relative efficiency of the market and understanding how liquidity and market capitalization affect the efficiency of the market.

This book provides an essential toolkit for all students wishing to know more about the modelling and analysis of financial data. Applications of econometric techniques are becoming increasingly common in the world of finance and this second edition of an established text covers the following key themes:- unit roots, cointegration and other develop

This collection of original articles—8 years in the making—shines a bright light on recent advances in financial econometrics. From a survey of mathematical and statistical tools for understanding nonlinear Markov processes to an exploration of the time-series evolution of the risk-return tradeoff for stock market investment, noted scholars Yacine Aït-Sahalia and Lars Peter Hansen benchmark the current state of knowledge while contributors build a framework for its growth. Whether in the presence of statistical uncertainty or the proven advantages and limitations of value at risk models, readers will discover that they can set few constraints on the value of this long-awaited volume. Presents a broad survey of current research—from local characterizations of the Markov process dynamics to financial market trading activity Contributors include Nobel Laureate Robert Engle and leading econometricians Offers a clarity of method and

explanation unavailable in other financial econometrics collections

Written by leading market risk academic, Professor Carol Alexander, Practical Financial Econometrics forms part two of the Market Risk Analysis four volume set. It introduces the econometric techniques that are commonly applied to finance with a critical and selective exposition, emphasising the areas of econometrics, such as GARCH, cointegration and copulas that are required for resolving problems in market risk analysis. The book covers material for a one-semester graduate course in applied financial econometrics in a very pedagogical fashion as each time a concept is introduced an empirical example is given, and whenever possible this is illustrated with an Excel spreadsheet. All together, the Market Risk Analysis four volume set illustrates virtually every concept or formula with a practical, numerical example or a longer, empirical case study. Across all four volumes there are approximately 300 numerical and empirical examples, 400 graphs and figures and 30 case studies many of which are contained in interactive Excel spreadsheets available from the the accompanying CD-ROM . Empirical examples and case studies specific to this volume include: Factor analysis with orthogonal regressions and using principal component factors; Estimation of symmetric and asymmetric, normal and Student t GARCH and E-GARCH parameters; Normal, Student t, Gumbel, Clayton, normal mixture copula densities, and simulations from these copulas with application to VaR and portfolio optimization; Principal component analysis of yield curves with applications to portfolio immunization and asset/liability management; Simulation of normal mixture and Markov switching GARCH returns; Cointegration based index tracking and pairs trading, with error correction and impulse response modelling; Markov switching regression models (Eviews code); GARCH term structure forecasting with volatility targeting; Non-linear quantile regressions with applications to hedging.

In this dissertation, three related issues concerning empirical time series models for energy financial markets and the stock market were investigated. The purpose of this dissertation was to analyze the interdependence of price movements, focusing on the forecasting models for crude oil prices and the hedging models for gasoline prices, and to study the change in the contemporaneous causal relationship between investors' activities and stock price movements in the Korean stock market. In the first essay, the nature of forecasting crude oil prices based on financial data for the oil and oil product market is examined. As crack spread and oil-related Exchange-Traded Funds (ETFs) have enabled more consumers and investors to gain access to the crude oil and petroleum products markets, I investigated whether crack spread and oil ETFs were good predictors of oil prices and attempted to determine whether crack spread or oil ETFs were better at explaining oil price movements. In the second essay, the effectiveness of diverse hedging models for the unleaded gasoline price is examined using futures and ETFs. I calculated the optimal hedge ratios for gasoline futures and gasoline ETF utilizing several advanced econometric models and then compared their hedging performances. In the third essay, the contemporaneous causal relationship between multiple players' activities and stock price movements in the Korean stock market was investigated using the framework of a DAG model. The causal impacts of three players' activities in regard to stock return and stock price volatility are examined, concentrating on foreign investor activities. Within this framework, two Korean stock markets, the KSE and KOSDAQ markets, are analyzed and compared. Recognizing the global financial crisis of 2008, the change in casual relationships was examined in terms of pre- and post-break periods. In conclusion, when a multivariate econometric model is developed for multi-markets and multi-players, it is necessary to consider a number of attributes on data relations, including cointegration, causal relationship, time-varying correlation and variance, and multivariate non-normality. This dissertation employs several econometric models to specify these characteristics. This approach will be useful in further studies of the information transmission mechanism among multi-markets or multi-players.

This collection of papers represents the state of the art in the application of recent econometric methods to the analysis of financial markets. From a methodological point of view the main emphasis is on cointegration analysis and ARCH modelling. In cointegration analysis the links between long-run components of time series are studied. The methods used can be applied to the determination of equilibrium relationships between the variables, whereas ARCH models are concerned with the measurement and analysis of changing variances in time series. These econometric models have been the most significant innovations for the empirical analysis of financial time series in recent years. Other econometric methods and models applied in the papers include factor analysis, vector autoregressions, and Markov-switching models. The papers cover a wide range of issues and theories in financial and international economics: the term structure of interest rates, exchange-rate determination, target-zone dynamics, stock-market efficiency, and option pricing.

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Over the past 25 years, applied econometrics has undergone tremendous changes, with active developments in fields of research such as time series, labor econometrics, financial econometrics and simulation based methods. Time series analysis has been an active field of research since the seminal work by Box and Jenkins (1976), who introduced a general framework in which time series can be analyzed. In the world of financial econometrics and the application of time series techniques, the ARCH model of Engle (1982) has shifted the focus from the modelling of the process in itself to the modelling of the volatility of the process. In less than 15 years, it has become one of the most successful fields of applied econometric research with hundreds of published papers. As an alternative to the ARCH modelling of the volatility, Taylor (1986) introduced the stochastic volatility model, whose features are quite similar to the ARCH specification but which involves an unobserved or latent component for the volatility. While being more difficult to estimate than usual GARCH models, stochastic volatility models have found numerous applications in the modelling of volatility and more particularly in the econometric part of option pricing formulas. Although modelling volatility is one of the best known examples of applied financial econometrics, other topics (factor models, present value relationships, term structure models) were also successfully tackled.

Provides statistical tools and techniques needed to understand today's financial markets The Second Edition of this critically acclaimed text provides a comprehensive and systematic introduction to financial econometric models and their applications in modeling and predicting financial time series data. This latest edition continues to emphasize empirical financial data and focuses on real-world examples. Following this approach, readers will master key aspects of financial time series, including volatility modeling, neural network applications, market microstructure and high-frequency financial data, continuous-time models and Ito's Lemma, Value at Risk, multiple returns analysis, financial

factor models, and econometric modeling via computation-intensive methods. The author begins with the basic characteristics of financial time series data, setting the foundation for the three main topics: Analysis and application of univariate financial time series Return series of multiple assets Bayesian inference in finance methods This new edition is a thoroughly revised and updated text, including the addition of S-Plus® commands and illustrations. Exercises have been thoroughly updated and expanded and include the most current data, providing readers with more opportunities to put the models and methods into practice. Among the new material added to the text, readers will find: Consistent covariance estimation under heteroscedasticity and serial correlation Alternative approaches to volatility modeling Financial factor models State-space models Kalman filtering Estimation of stochastic diffusion models The tools provided in this text aid readers in developing a deeper understanding of financial markets through firsthand experience in working with financial data. This is an ideal textbook for MBA students as well as a reference for researchers and professionals in business and 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.

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