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| Descrizione fisica      | 1 online resource (298 p.)  |
| Collana                 | Quantitative finance series   |
| Altri autori (Persone)  | KnightJohn L<br>SatchellS (Stephen)   |
| Disciplina              | 332.015118  |
| Soggetti                | Finance - Mathematical models<br>Mathematics  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Linear Factor Models in Finance; Contents; List of contributors; Introduction; 1 Review of literature on multifactor asset pricing models; 1.1 Theoretical reasons for existence of multiple factors; 1.2 Empirical evidence of existence of multiple factors; 1.3 Estimation of factor pricing models; Bibliography; 2 Estimating UK factor models using the multivariate skew normal distribution; 2.1 Introduction; 2.2 The multivariate skew normal distribution and some of its properties; 2.3 Conditional distributions and factor models; 2.4 Data model choice and estimation; 2.5 Empirical study<br>2.5.1 Basic return statistics2.5.2 Overall model fit; 2.5.3 Comparison of parameter estimates; 2.5.4 Skewness parameters; 2.5.5 Tau and time-varying conditional variance; 2.6 Conclusions; Acknowledgement; References; 3 Misspecification in the linear pricing model; 3.1 Introduction; 3.2 Framework; 3.2.1 Arbitrage Pricing Theory; 3.2.2 Multivariate F test used in linear factor model; 3.2.3 Average F test used in linear factor model; 3.3 Distribution of the multivariate F test statistics under misspecification; 3.3.1 Exclusion of a set of factors from estimation<br>3.3.2 Time-varying factor loadings3.4 Simulation study; 3.4.1 Design; |

3.4.2 Factors serially independent; 3.4.3 Factors autocorrelated; 3.4.4 Time-varying factor loadings; 3.4.5 Simulation results; 3.5 Conclusion; Appendix: Proof of proposition 3.1 and proposition 3.2; 4 Bayesian estimation of risk premia in an APT context; 4.1 Introduction; 4.2 The general APT framework; 4.2.1 The excess return generating process (when factors are traded portfolios); 4.2.2 The excess return generating process (when factors are macroeconomic variables or non-traded portfolios)  
4.2.3 Obtaining the  $(K \times 1)$  vector of risk premia  
4.3 Introducing a Bayesian framework using a Minnesota prior (Litterman's prior); 4.3.1 Prior estimates of the risk premia; 4.3.2 Posterior estimates of the risk premia; 4.4 An empirical application; 4.4.1 Data; 4.4.2 Results; 4.5 Conclusion; References; Appendix; 5 Sharpe style analysis in the MSCI sector portfolios: a Monte Carlo integration approach; 5.1 Introduction; 5.2 Methodology; 5.2.1 A Bayesian decision-theoretic approach; 5.2.2 Estimation by Monte Carlo integration; 5.3 Style analysis in the MSCI sector portfolios; 5.4 Conclusions  
References  
6 Implication of the method of portfolio formation on asset pricing tests; 6.1 Introduction; 6.2 Models; 6.2.1 Asset pricing frameworks; 6.2.2 Specifications to be tested; 6.3 Implementation; 6.3.1 Multivariate F test; 6.3.2 Average F test; 6.3.3 Stochastic discount factor using GMM with Hansen and Jagannathan distance; 6.3.4 A look at the pricing errors under different tests; 6.4 Variables construction and data sources; 6.4.1 Data sources; 6.4.2 Independent variables: excess market return, size return factor and book-to-market return factor  
6.4.3 Dependent variables: size-sorted portfolios, beta-sorted portfolios and individual assets

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## Sommario/riassunto

The determination of the values of stocks, bonds, options, futures, and derivatives is done by the scientific process of asset pricing, which has developed dramatically in the last few years due to advances in financial theory and econometrics. This book covers the science of asset pricing by concentrating on the most widely used modelling technique called: Linear Factor Modelling. Linear Factor Models covers an important area for Quantitative Analysts/Investment Managers who are developing Quantitative Investment Strategies. Linear factor models (LFM) are part of modern investm

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