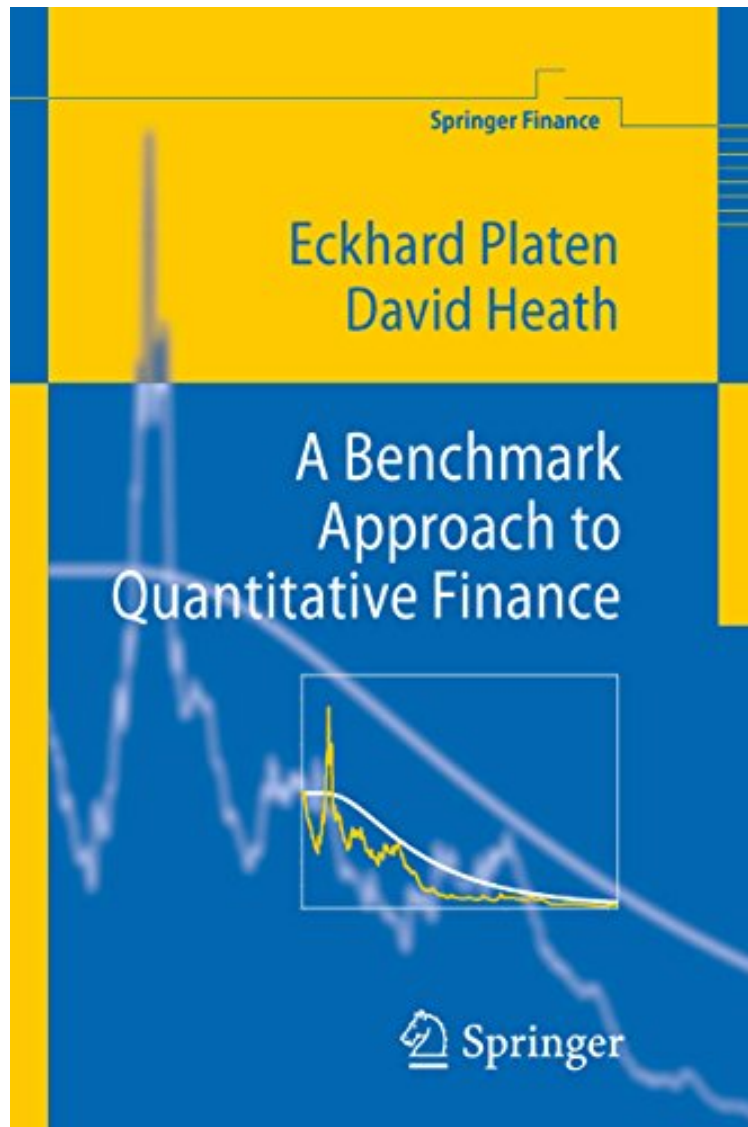


[Free read ebook] A Benchmark Approach to Quantitative Finance (Springer Finance)

A Benchmark Approach to Quantitative Finance (Springer Finance)

Eckhard Platen, David Heath

*ebooks | Download PDF | *ePub | DOC | audiobook*



DOWNLOAD



+

READ ONLINE

#3589623 in eBooks 2006-10-28 2006-10-28 File Name: B00FC32DPA | File size: 40.Mb

Eckhard Platen, David Heath : A Benchmark Approach to Quantitative Finance (Springer Finance) before purchasing it in order to gauge whether or not it would be worth my time, and all praised A Benchmark Approach to Quantitative Finance (Springer Finance):

0 of 0 people found the following review helpful. Appears to be an older version By Hai De Luo The book had some errors which the author corrected for in a more recent version. Makes it harder to follow.

A framework for financial market modeling, the benchmark approach extends beyond standard risk neutral pricing

theory. It permits a unified treatment of portfolio optimization, derivative pricing, integrated risk management and insurance risk modeling. This book presents the necessary mathematical tools, followed by a thorough introduction to financial modeling under the benchmark approach, explaining various quantitative methods for the fair pricing and hedging of derivatives.

From the reviews: "The book under review introduces quantitative finance using the benchmark approach. It is quite a nice blend of narrative and mathematics. There are also some bigger examples which contribute nicely to the overall presentation. Exercises are provided at the end of each chapter. The authors even provide solutions to exercises. I think it could be quite useful for students, because of the first part of the book, and to practitioners, due to the exposition in the second part of the book." (Ita Cirovic Donev, MathDL, March, 2007) "This book provides an introduction to quantitative finance. It aims to stimulate interest in the benchmark approach by describing some of its power and wide applicability. It is intended for quantitative analysts postgraduate students, practitioners in finance, economics and insurance. It is designed for three groups of users. Firstly, it provides useful information to financial analysts and practitioners. Secondly, it aims to introduce those with a reasonable basic mathematical background. Thirdly, researchers may find the later parts of the book interesting." (Klaus Ehemann, Zentralblatt MATH, Vol. 1104 (6), 2007) "The book is a rather comprehensive treatment of quantitative finance and distinguishes itself from other analogous treatments by using a novel approach that allows one to generalize various existing results and to some extent also allows one to bridge a certain gap between current and classical approaches. The comprehensiveness of the book is very valuable for research." (Wolfgang J. Runggaldier, Mathematical s, Issue 2008 d) "A comprehensive introduction to the mathematical foundations of finance. It is thorough and encyclopedic, providing a wide range of definitions and theorems that are useful in the subject. A valuable text for well-motivated students interested in these topics, whether they are pursuing problems within the classical framework or beyond the assumptions of the basic theory." (Gunduz Caginalp, SIAM, Vol. 52 (2), 2010) From the Back Cover The benchmark approach provides a general framework for financial market modeling, which extends beyond the standard risk neutral pricing theory. It permits a unified treatment of portfolio optimization, derivative pricing, integrated risk management and insurance risk modeling. The existence of an equivalent risk-neutral pricing measure is not required. Instead, it leads to pricing formulae with respect to the real world probability measure. This yields important modeling freedom which turns out to be necessary for the derivation of realistic, parsimonious market models. The first part of the book describes the necessary tools from probability theory, statistics, stochastic calculus and the theory of stochastic differential equations with jumps. The second part is devoted to financial modeling under the benchmark approach. Various quantitative methods for the fair pricing and hedging of derivatives are explained. The general framework is used to provide an understanding of the nature of stochastic volatility. The book is intended for a wide audience that includes quantitative analysts, postgraduate students and practitioners in finance, economics and insurance. It aims to be a self-contained, accessible but mathematically rigorous introduction to quantitative finance for readers that have a reasonable mathematical or quantitative background. Finally, the book should stimulate interest in the benchmark approach by describing some of its power and wide applicability. About the Author Professor Eckhard Platen is a joint appointment between the School of Finance and Economics and the Department of Mathematical Sciences to the 1997 created Chair in Quantitative Finance at the University of Technology Sydney. Prior to this appointment he was Founding Head of the Centre for Financial Mathematics at the Institute of Advanced Studies at the Australian National University in Canberra. He completed a PhD in Mathematics at the Technical University in Dresden in 1975 and obtained in 1985 his Dr. sc. from the Academy of Sciences in Berlin, where he headed at the Weierstrass Institute the Sector of Stochastics. He is co-author of two successful books on Numerical Methods for Stochastic Differential Equations, published by Springer Verlag, and has authored more than 100 research papers in quantitative finance and mathematics. Dr David Heath works as a Senior Research Fellow in Quantitative Finance at the University of Technology, Sydney. During the early 1990s he became interested in various aspects of quantitative finance. He completed his PhD in financial mathematics at the Australian National University at the Centre for Financial Mathematics in 1995. Since this time his main research interests have focussed on the application of advanced numerical methods for the pricing and hedging of index, equity, FX and interest rate derivatives. These numerical methods include PDE, Monte Carlo and Markov chain methods. He has developed a range of new quantitative methods that are specifically designed for the benchmark approach. Dr Heath has authored more than thirteen publications in financial mathematics.