Pricing Derivative Securities

Thomas W Epps
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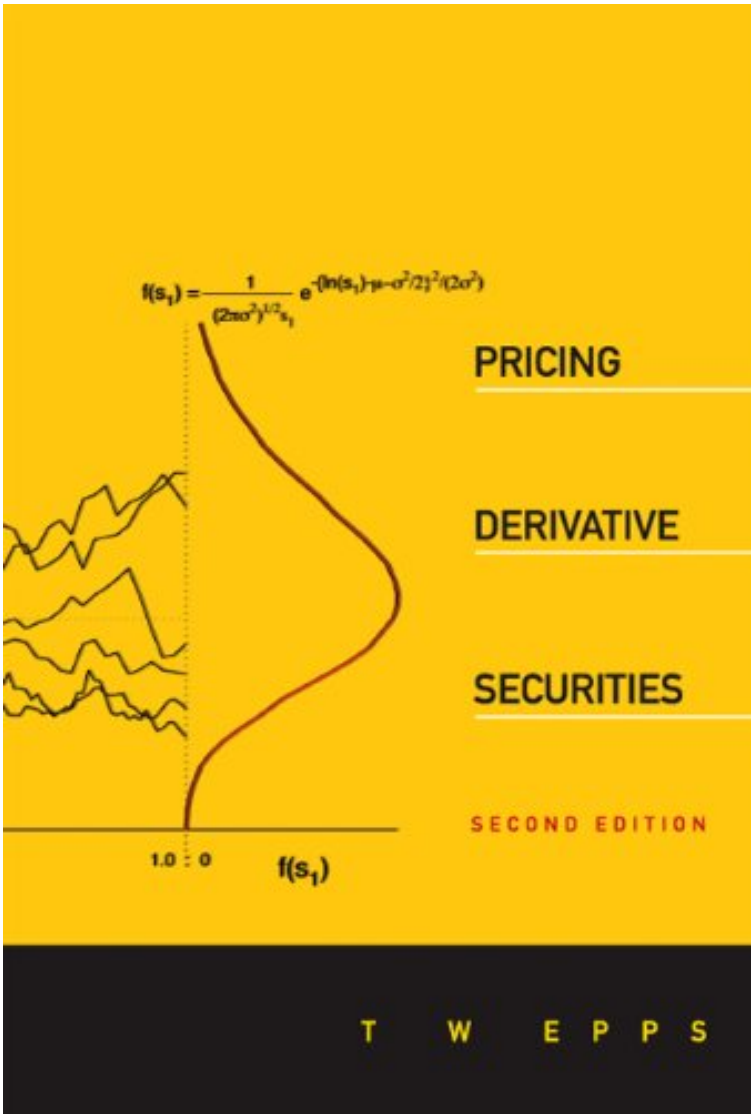

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Thomas W Epps : Pricing Derivative Securities before purchasing it in order to gage whether or not it would be worth my time, and all praised Pricing Derivative Securities:

1 of 4 people found the following review helpful. Very goodBy Stanislav D. MaydanThis book has the best treatment of differences between the change of measure for a given numeraire vs the change from one numeraire to another stochastic (i.e. based on asset with stochastic variation) numeraire.6 of 7 people found the following review helpful. Detailed and CompleteBy Todd WilliamsAs a biased reviewer (I helped proof the text), I will try to give comments as helpful as possible. First, from the standpoint of content alone, the text is ahead of most other general textbooks on derivative securities. There's hardly a topic in mathematical finance left untouched. About the only topic that is

skimmed over is the PDE approach, but even there, Epps has a chapter on solving PDEs numerically (along with C++ and Fortran code in the appendix). There's also a limited amount on interest rate derivatives (one chapter). Epps provides more mathematical details than most texts. The background math is not relegated to a terse appendix, but is covered in detail in two large chapters at the beginning of the book. Two chapters in particular, "Models with Uncertain Volatility" and "Discontinuous Processes," have material that's hard to find in other books, and is presented very well. It's nice to see Ito's Lemma for Jump Diffusion processes explained, as well as an interesting section on pricing "inside" options (writing puts on a firm's own stock). Finally, there's a chapter on simulation and a huge amount of C++ and Fortran code, along with an exhaustive bibliography. I would recommend it without hesitation!2 of 6 people found the following review helpful. this is goodBy A Customeri learned rigorous finance for the first time via this book. and it has been my favorite enough to buy the book again as soon as i had lost it. mathematical introduction is the best part of this book.

This book presents techniques for valuing derivative securities at a level suitable for practitioners, students in doctoral programs in economics and finance, and those in masters-level programs in financial mathematics and computational finance. It provides the necessary mathematical tools from analysis, probability theory, the theory of stochastic processes, and stochastic calculus, making extensive use of examples. It also covers pricing theory, with emphasis on martingale methods. The chapters are organized around the assumptions made about the dynamics of underlying price processes. Readers begin with simple, discrete-time models that require little mathematical sophistication, proceed to the basic Black-Scholes theory, and then advance to continuous-time models with multiple risk sources. The second edition takes account of the major developments in the field since 2000. New topics include the use of simulation to price American-style derivatives, a new one-step approach to pricing options by inverting characteristic functions, and models that allow jumps in volatility and Markov-driven changes in regime. The new chapter on interest-rate derivatives includes extensive coverage of the LIBOR market model and an introduction to the modeling of credit risk. As a supplement to the text, the book contains an accompanying CD-ROM with user-friendly FORTRAN, C++, and VBA program components.Contents:Introduction and OverviewMathematical PreparationTools for Continuous-Time ModelsDynamics-Free PricingPricing Under Bernoulli DynamicsBlack-Scholes DynamicsAmerican Options and ldquo;Exoticsrdquo;Models with Uncertain VolatilityDiscontinuous ProcessesInterest-Rate DynamicsSimulationSolving P.D.E.s NumericallyProgramsReadership: Graduates, postgraduates and researchers in economics, finance, business and mathematics; quantitative analysts and financial engineers.

"It is certainly a book which should be on every financial engineer's shelf." -- Journal of Finance, April 2002"The book will be interesting for financial academics and for practitioners working in financial derivatives." -- Mathematics Abstracts, 2002