Stochastic Finance: A Numeraire Approach (Chapman and Hall/CRC Financial Mathematics Series)

Jan Vecer
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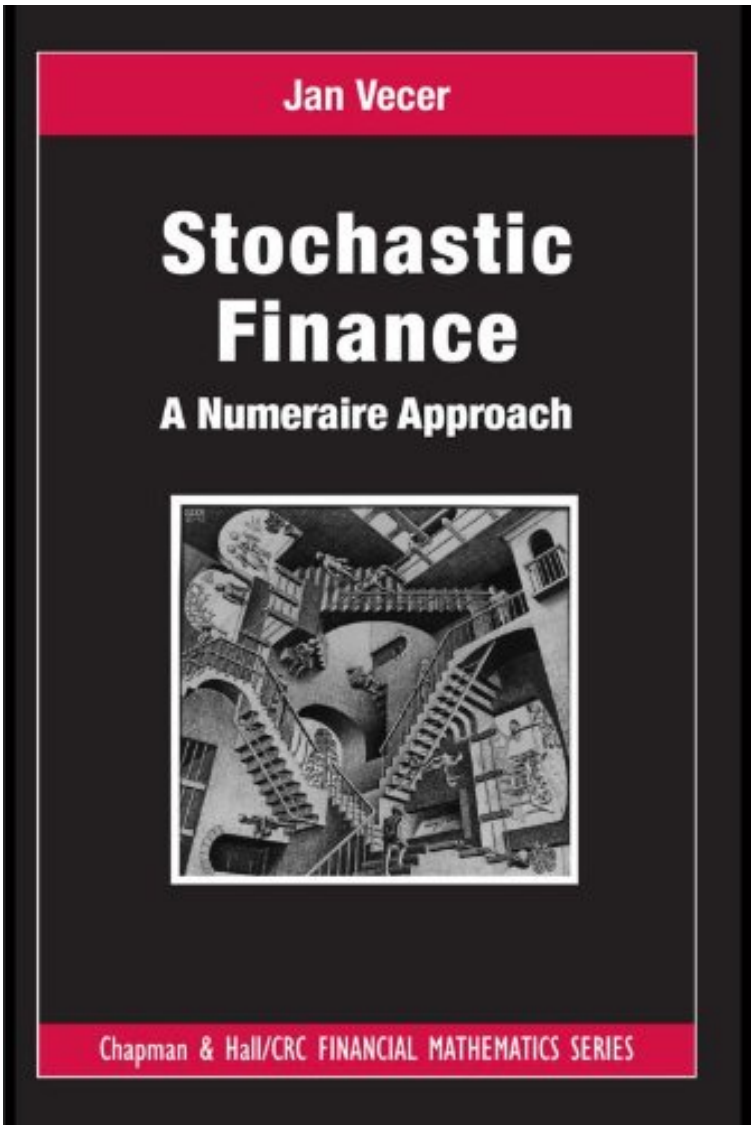

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Jan Vecer : Stochastic Finance: A Numeraire Approach (Chapman and Hall/CRC Financial Mathematics Series) before purchasing it in order to gage whether or not it would be worth my time, and all praised Stochastic Finance: A Numeraire Approach (Chapman and Hall/CRC Financial Mathematics Series):

4 of 5 people found the following review helpful. Incisive Quant Finance BookBy humble opinionUnderstanding the numeraire concept is central in quantitative finance. If you understand the numeraire and changing from one to

another, you will then understand the concept of measure change. This is central to understanding martingale pricing. This book will give you powerful insight into how all this actually works. If you find yourself baffled by seemingly mysterious quant finance concepts then you will find that this book will help put you on solid, practical ground. In short this book will give you a great grasp if you are learning and are fuzzy on some of the fundamental ideas. This book is one of the best investments you can make in your education.11 of 12 people found the following review helpful. A Consistent, Fresh ApproachBy Martin AuerJan Vecer's book differs in two ways from previous texts in this area:First, the author steers clear of unnecessary mathematical technicalities which often bring little insight, and obscure, rather than promote, the main ideas. One major example for this are the cryptic and ultimately largely superfluous filtration issues. While rigorous mathematical treatments must be aware of special cases and sensible generalizations, the main focus should firmly stay on tackling the subject at hand in a simple (yet still precise) way. The book accomplishes that.Second, the numeraire-based approach provides a more consistent, and ultimately easier, way to approach this subject. Usually, numeraire techniques are introduced at later stages, and they force readers to alter their initial, maybe already consolidated, thinking based on discounted payoffs, and money as the main reference asset. By starting off with more general asset relations instead of asset prices, and distinguishing between assets like stocks, and their "prices" in terms of other assets, the book facilitates a better and faster understanding. This comes in hand with a consistent, intuitive notation which plainly does away with much ambiguity.[Full disclosure: I was one of Jan Vecer's students.]5 of 6 people found the following review helpful. Great BookBy Mitch CarpenI had the pleasure of attending Professor Vecer's classes at Columbia University, where he used this book to reinforce the learning process brought about from his great lectures. The book contains many examples and details the subject matter in an easy to understand and easy to apply manner. Professor Vecer was able to successfully strike a balance between the theory and the practicality of stochastic methods and processes in finance. A must have book for any finance professional involved with assessing securities prices and risk.

Unlike much of the existing literature, Stochastic Finance: A Numeraire Approach treats price as a number of units of one asset needed for an acquisition of a unit of another asset instead of expressing prices in dollar terms exclusively. This numeraire approach leads to simpler pricing options for complex products, such as barrier, lookback, quanto, and Asian options. Most of the ideas presented rely on intuition and basic principles, rather than technical computations.The first chapter of the book introduces basic concepts of finance, including price, no arbitrage, portfolio, financial contracts, the First Fundamental Theorem of Asset Pricing, and the change of numeraire formula. Subsequent chapters apply these general principles to three kinds of models: binomial, diffusion, and jump models. The author uses the binomial model to illustrate the relativity of the reference asset. In continuous time, he covers both diffusion and jump models in the evolution of price processes. The book also describes term structure models and numerous options, including European, barrier, lookback, quanto, American, and Asian.Classroom-tested at Columbia University to graduate students, Wall Street professionals, and aspiring quants, this text provides a deep understanding of derivative contracts. It will help a variety of readers from the dynamic world of finance, from practitioners who want to expand their knowledge of stochastic finance, to students who want to succeed as professionals in the field, to academics who want to explore relatively advanced techniques of the numeraire change.

hellip; a nice book for researchers and practitioners. hellip; this book can be regarded as a wonderful application of stochastic analysis, as it includes not only detailed theoretical proofs but also practical illustrative examples. With the systematic and feasible numeraire techniques, the book can serve as an everyday reference book for practitioners, but also as a powerful tool to deal with pricing and hedging for complicated financial assets. Most importantly, the representation of prices as a pairwise relationship of two assets is the most novel characteristic of this book, which could lead to deeper understanding of derivative contracts.?Jian Ping Wan, Mathematical s, 2012f Although the importance of the choice of numeraire has been recognized for quite some time, this is the first book to stress the fundamental role that numeraires play in modern asset pricing theory. The author is the leading expert on the subject so it is a pleasure to highly recommend this book.?Peter Carr, Ph.D., Managing Director of Morgan Stanley and Executive Director of NYUrsquo;s Master of Science Program in Mathematics in Finance Finally, we have a full volume with a systematic treatment of the change of numeraire techniques. Jan Vecer has taken years of teaching experience and practitionersrsquo; feedback to unify a previously complicated topic into the most elegant and easily accessible numeraire textbook to come down the pike. Now it has become fun to learn about parity and duality relationships among exotic options in a whole variety of models. The practitioners will be happy about the dimension reduction methods. There should be more such books. ?Uwe Wystup, Ph.D., Managing Director of MathFinance AGAbout the AuthorJan Vecer is a professor of finance and has taught courses on stochastic finance at Columbia University, the University of Michigan, Kyoto University, and the Frankfurt School of Finance and Management. His research interests encompass areas within financial statistics, financial engineering, and applied probability, including option pricing, optimal trading strategies, stochastic optimal control, and stochastic processes. He earned a Ph.D. in

mathematical finance from Carnegie Mellon University.