Preface

I wrote this book with the corporate financial analyst and graduate student in mind. *Real Options Analysis Course*'s business cases, exercises, step-by-step methodologies, and applications have been adapted for and solved using the enclosed Real Options Analysis Toolkit trial software CD-ROM. It is assumed that the reader has familiarity with real options concepts as outlined in my previous book, *Real Options Analysis* (Wiley, 2002), as some of the more important concepts overlap between these books. As in the first book, I focus on the ease of use and pragmatic applications of real options and forgo many of the theoretical concepts. The idea is to demystify the black-box analytics in real options and to make transparent its concepts, methodologies, and applications. Rather than relying on stochastic Ito calculus, variance reduction, differential equations, numerical methods, or stochastic path-dependent simulations to solve real options problems, I have instead relied heavily on binomial lattices, which I have shown time and again to be reliable and produce identical results, at the limit, to the former approaches. While it is extremely easy to modify binomial lattices depending on the real options or to more accurately mirror the intricacies of actual business cases, it is extremely difficult to do so using the more advanced techniques. In the end, the more flexible and mathematically manageable approach becomes the pragmatic approach. The flexibility in the modeling approach flows well with the overall theme of this book: *"If you can think it, you can solve it!"* Finally, my intention is to reveal as much as possible in the realms of real options. A black box will remain a black box if no one can understand the concepts, despite its power and applicability. Only when the black box becomes so transparent that analysts can understand, apply, and convince others of its results and applicability will the approach receive widespread influence. It took over two decades for discounted cash flow and net present value analysis to take hold in corporate finance—then again, that was during an era of slide rules, little knowledge of corporate finance, and virtually no desktop computer software spreadsheet applications. However, it is vital to note that the software does not eliminate the analyst, as it is only a tool. Instead, the tool exists to allow the analyst to spend more time thinking and framing the real options problem—50 percent of the real options challenge is simply thinking about it, 25 percent is the modeling, and the remaining 25 percent is explaining the results to management. I am convinced

that with the advent of my software, Real Options Analysis Toolkit, books such as this one (that demystifies real options, rather than cloud it with academic jargon and unnecessary complexities), and seminars and trainings like the ones I have held worldwide, the learning curve will be traversed even more quickly and real options will be accepted as widely as discounted cash flow modeling within the next few decades.

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