

Book Reviews

Financial Analysis and Corporate Strategy. Mark Grinblatt and Sheridan Titman. Irwin/McGraw-Hill, 1998. 864 pp., \$78.75 (hardcover). ISBN 0-256-09939-1.

Although there are a number of good introductory finance textbooks, there has long been an unfilled need for more advanced material. This need has grown with the increased sophistication of both theory and practice. *Financial Analysis and Corporate Strategy* fills this gap in a masterful way. This comprehensive, up-to-date textbook provides a well-organized and substantial exposition of many finance topics, including, but not restricted to, those taught in most general finance courses. For instance, an extensive exposition of capital budgeting, asset pricing, derivatives, capital structure, and mergers and acquisitions is complemented by very good chapters on the APT, real options, and a significant treatment of agency theory, corporate finance, and risk management. Recent advances in finance are made accessible to readers with few technical skills. The text adds a systematic discussion of empirical evidence and of current practice to this in-depth theoretical treatment. The authors pay considerable attention to nurture the reader's curiosity through a number of practical examples from the real-world vignettes which open each chapter, as well as through the practical insights and executive perspectives found at the end of each part.

The book is organized in six parts containing a total of 22 chapters. It opens with a description of financial markets and instruments (Part I), then deals with asset pricing (Part II) before turning to value creation with capital budgeting (Part III), capital structure (Part IV), incentives, information, and corporate control (Part V), and risk management (Part VI).

Part I contains a descriptive presentation of financial markets and financial instruments. Three chapters are allocated to the process of raising capital, debt financing, and equity financing. The discussion of outside finance and debt and equity instruments, which includes a detailed treatment of IPOs, is both excellent and pleasant to read, although more discussion on secondary equity offerings would be welcome. Emphasis is placed on the increasing diversity of financial instruments, the globalization of financial markets, and on the knowledge needed to obtain value from the complex choices these markets present to financial managers. This knowledge relates broadly to two tasks: how to price instruments, and how to use instruments in a value-maximizing way. The remainder of the book is organized around these two tasks. Part II focuses on the main theories available to value the instruments

described in Part I, while Parts III to VI focus on value creation. The objective here is to highlight the connection between financial markets and corporate finance. As the title of the book suggests, the authors show repeatedly their willingness to view market finance from the perspective of corporate finance, and vice versa, throughout the book. Another objective is to ensure early on in the book that the reader is aware of actual financial decisions made by firms. This allows the authors to combine a theoretical analysis of financial decisions with a discussion of how these decisions are actually made.

Part II, which comprises five chapters, is devoted to asset pricing. Here, the connection with corporate finance is illustrated by the view of the firm as a portfolio of assets. The mathematics of portfolios, introduced in Chapter 4, is kept at a simple level, but the reader is exposed to a discussion of a number of concepts (e.g., short-sales and put options). Most of the exposition of asset pricing models is organized around a clever and recurrent use of tracking portfolios. The tracking portfolios approach is used not only for the intuitive presentation of the CAPM (Chapter 5), but also for the cutting-edge analysis of factor models and the APT (Chapter 6) and for derivatives (Chapters 7 and 8). It also helps this part to form a particularly coherent coverage of asset pricing. The in-depth treatment of the CAPM and the APT is followed by an up-to-date discussion of, among other matters, how to implement the CAPM, empirical issues, market:book ratios, and how to generate factors. The coverage of derivatives complements the exposition of binomial models, which is made easier after the development of tracking portfolios in the previous chapters, with a discussion of derivative techniques popular in the industry. However, developing asset pricing before capital budgeting prevents many applications, especially to the firm's investment decisions, making motivation more difficult.

Part III applies the theories presented in Part II, particularly the tracking portfolio approach, to real investment decisions. This leads to an original treatment of capital budgeting under certainty and uncertainty (Chapters 9 and 10), real options (Chapter 11), and the WACC/APV methods (Chapter 12). Chapters 9 and 10 provide a good analysis of the NPV, IRR, and EVA methods and of the importance of market value, but the asset pricing approach of NPV makes the reading of these chapters rather difficult for readers previously unexposed to finance. Furthermore, tips for capital budgeting to be used for specific types of projects and accounting issues could be elaborated on. Chapter 11 covers the valuation of strategic options not with the derivatives approach, but also with the ratio comparison approach and the competitive analysis approach. This chapter also benefits from interesting discussions of practical examples, for example, the valuation of vacant land and of the flexibility in production, but more discussion on non-

priced risk would be welcome. The coverage of the WACC and APV methods is particularly good at explaining what a rate of return on operating assets and a WACC really are, but it is a pity that no mention is made of risky debt. This prohibits the authors from dealing with important issues like bankruptcy costs and coinsurance. The main problem with the organization of this first half of the book is that the reader must digest a significant treatment of asset pricing before being given the opportunity to become familiar with more basic capital budgeting concepts. In addition, the APV and WACC methods are covered before the chapters on the costs and benefits of debt financing.

The originality of the second half of the book mainly lies in the coverage of corporate finance and risk management which is unique compared to most finance textbooks. Part IV turns to capital structure taking investment decisions as given (Chapters 13 and 14), then to its impact on investment and operating decisions (Chapters 15 and 16). Chapters 13 and 14 cover Modigliani and Miller's irrelevance results and the effect of taxes together with applications such as municipal bonds and leasing. The discussion of dividends would have benefited from a greater elaboration on taxes (e.g., dynamic tax clienteles). Most of the material covered from Chapter 15 onwards is unique for such a textbook. The extensive coverage of bankruptcy costs and the conflicts of interests between shareholders and debtholders (Chapter 15) provides a great introduction to the concepts of agency theory. Chapter 16 covers the recent literature on the interactions between financial decision making and corporate strategy/IO, with the stakeholder theory of capital structure, the strategic use of debt when bargaining with unions or the government, and the impact of capital structure choices on the competitive strategy in the product market. The exposition of these chapters is very clear, but it could be elaborated upon. More could be said on the time consistency problems in using debt as a strategic commitment. Taking this into account, for instance, generally leads to the prediction that debt makes firms less aggressive competitors [Bolton and Scharfstein (1990), Faure-Grimaud (1999)], which is consistent with empirical evidence [Chevalier (1995), Phillips (1995)].

The whole of Part V is allocated to managerial incentives (Chapter 17), informational issues in financial decision making (Chapter 18), and corporate control (Chapter 19). The authors do very well at presenting recent advances in this area in a rigorous, yet reasonably nontechnical way. Chapter 17 focuses on the costs associated with the separation of ownership and control and potential responses in terms of capital structure and executive compensation. Chapter 18 does a superb job of covering financial decision making when managers have more information than shareholders, highlighting the signaling value of high debt

level, dividends/share repurchases, and the cost of equity issues. Chapter 19 complements an interesting theoretical and empirical discussion of the costs and benefits of mergers and acquisitions by the valuation and the financing of acquisitions as well as bidding strategies and management defenses. Both Parts IV and V, which can be read independently of the first three parts, provided one has minimal finance background, have no competitors for advanced corporate finance courses and for readers who would like to have an accessible exposure to recent developments in this area.

Part VI provides a substantial introduction to risk management in an innovative and up-to-date analysis. Chapter 20 gives the implications of the Modigliani–Miller theorem for hedging, the motivations to hedge, hedging activities and their implications for stakeholders, a discussion of foreign exchange risk, and a neat discussion of empirical evidence. Its content not only provides a nice and easy to read introduction to the subject, but also ensures that the reader can read this part right after Part II. Chapter 21 introduces the reader to the estimation of risk exposure and hedge ratios with factor models, regression and mean-variance analysis, and the practice of hedging with forwards, futures, swaps, and options. Chapter 22 concludes Part VI with a treatment of interest rate risk management, including a thorough analysis of the dollar value of a 1 basis point decrease, duration, immunization, convexity, and issues associated with the term structure of interest rates. This part is quite easy to read, and it is undoubtedly an asset for the book.

Overall, the coverage of many finance topics one would want to teach to advanced undergraduates and to MBA students is there. If I had to add something, I would include one or two introductory chapters about the objectives of the firm and financial managers and basic capital budgeting, instead of starting with financing instruments and asset pricing right away. This would make the book more accessible to beginners and this would allow the authors (or the instructor) to employ more applications to capital budgeting when covering asset pricing. Complementary discussion on Fisher separation, market efficiency, and practical capital budgeting problems would also be welcome. Apart from that, I find the coverage to be very good. I really appreciate that there is so much material in so many areas. This is a great asset of this textbook. In particular, the extensive and up-to-date treatment of Parts IV to VI cannot be found elsewhere and fills a real need. I also quite like the organization of the book and the willingness to convince the reader that asset pricing and corporate finance go hand in hand. However, the late analysis of capital budgeting in a relatively sophisticated asset pricing perspective contributes to make the book less accessible to beginners, and it is a pity that the APV and WACC methods are covered before capital structure.

All this makes the book particularly suitable for advanced undergraduate and MBA courses, including thematic courses. It could also be read by beginners in conjunction with some other introductory textbook [e.g., Brealey and Myers (1996)] provided the reader is highly motivated and he/she has a good scientific background. Finally, it provides a superb reference textbook to readers with technical skills and/or significant finance background, in particular M.Sc. and Ph.D. students, as well as qualified professionals and academics who would like to refresh their memories in some subjects.

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Derivatives: A PowerPlus Picture Book. Mark Rubinstein.

Over the last 20 years futures and options have gone from being a "niche" subject with limited class enrollments to a standard class which almost every finance major takes. In keeping with the growth in class enrollment has been the growth in the number of textbooks for these classes. There are now available numerous books which cover the basic material plus books which cover various subareas such as fixed income derivatives, credit derivatives, value-at-risk, and the more technical aspects of derivative pricing. Unfortunately many of these books are unnecessarily dry and lacking in economic intuition.

An interesting alternative to the current crop of books is *Derivatives: A PowerPlus Picture Book*, by Mark Rubinstein. This book merits special attention for a number of reasons. First, Professor Rubinstein is a well-known scholar in the area of derivatives pricing and the coauthor of one of the earliest and still one of the best textbooks on options pricing, *Options Markets* (with John Cox). Second, the *PowerPlus Picture Book* is a much more sophisticated product than a standard textbook. Aside from the content, the *Picture Book* is worth looking at as an interesting example of what a new generation of textbooks might look like. The *Picture Book* is a set of PowerPoint slides with hyperlinked computer applications plus a book which on each page presents a miniature copy of a slide and text which expands on the material on that slide. This is quite different from other textbooks which supply slides and spreadsheets as an afterthought. Here, the slides and computer applications are the heart of the product and the book plays a supporting role. The slides are hyperlinked to several types of material. One is "Matlab for Derivatives." This is an extremely nice program which is easy to use and computes everything you might want (prices, greeks, graphs, payoff diagrams, binomial trees, volatility smiles, CDF functions) and more. When a reader links to this program from a particular slide the reader is presented with a relevant example and cued on how to alter the example in a way which illustrates the point currently being made. At that point a curious student could continue to explore the material on their own or they can return to the slide. The slides also link to other material, such as interactive chapter quizzes, worked examples, *Rubinstein's Options Calculator* and *options.live*. Updates and additional features can be seen by visiting the *Picture Book's* web site at: www.in-the-money.com.

The *Picture Book* presents the material in a very intuitive, casual way while still maintaining a high level of technical sophistication. In addition, there is more emphasis on the economics of the derivatives than in most textbooks. One of the most striking things about the *Picture Book* is the extent to which the author's enthusiasm and love for the material really comes through. The *Picture Book* has far more "personality" than the average textbook.

The organization of the book is as follows. The first chapter provides background material. There is a brief review of basic financial and statistical concepts such as expected value, variance, present value, and state prices. The next section introduces the reader to the whole spectrum of derivative products. This is one of the most unique sections of the book. The discussion includes the standard derivatives such as futures, forwards, puts and calls, in addition to exotic options and nonfinancial options. There is a brief description of each derivative along with a reference to an academic article that analyzes that particu-

lar derivative in more detail. After reading this section, most readers would be convinced that derivatives are truly everywhere and that armed with some knowledge of derivatives, one could gain insight into many problems, both financial and nonfinancial. The final section of this chapter discusses the organization of the markets for derivatives. This section is quite interesting and contains lots of information that doesn't appear in other derivatives books. I'm quite sure that this is the only derivatives text that gives 17 ways (in alphabetical order) a broker can cheat unsophisticated customers.

The second chapter covers the standard material on forwards and futures, and the third chapter does a nice job of presenting the introductory material on options (definitions, terminology, payoff diagrams, etc.). The fourth and fifth chapters cover the binomial options pricing model and the Black–Scholes model and the important extensions to these models. Chapter 6 covers volatility and Chapter 7 covers dynamic strategies such as portfolio insurance and dynamic asset allocation. The book also contains an interesting annotated bibliography, a derivatives glossary with graphics and numerous Internet links, and an applications bibliography. The applications bibliography has an extensive list of topics, but only one article is cited for each topic. One could argue about which article was the appropriate choice, but at a minimum it provides a starting point for anyone interested in pursuing a particular topic in more depth.

Despite the many positive things about the *Picture Book*, I could easily imagine someone having real doubts about using the *Picture Book* for a class. The big issue is whether it would work to use the *Picture Book*, if you didn't want to use the slides in class. This certainly was an issue for me since I don't like using slides in class. Even people who use slides might feel uncomfortable using someone else's slides so extensively. As one of my colleagues said, using these slides could make you feel like a teaching assistant in your own class. However, after having spent some time with the *Picture Book*, it is clear to me that this isn't really a problem. If you never plan to use the slides in class, you can assign material from the *Picture Book* and have the students sit down with the book and their laptop and go through the material like any book, with the added advantage of being able to link to *Matlab for Derivatives*, *Rubinstein's Options Calculator*, or *options.live* to explore the material further. If you like to use slides but don't want to use the slides in their current form, you can modify the slides or intersperse the slides with your own slides.

I do have some complaints with the current version of the *Picture Book*. First, although the *Picture Book* has an admirable amount of practical material related to trading (discussions of liquidity and the types of things that can go awry when discrepancies between the model

and real life are ignored), there is not enough discussion of how derivatives are used in practice, particularly in the area of corporate finance. Many students need to see a couple of “real-life” examples for the material to come alive. A couple of examples like the WorldCom offer for MCI in 1997 (which was essentially a cylinder) would add a lot. Professor Rubinstein promises to cover material on corporate finance applications and real options in a second volume. However, I think introducing some of this material early on would be helpful. Second, the format of one slide per page in the book unduly constrains the presentation of the material. There are places in the book where the material across slides is somewhat disconnected. More integration of the material across pages is needed. Last and certainly least, there is often too much material on each slide. This is especially the case for the slides that contain many equations. In addition, there are sometimes too many PowerPoint bells and whistles on the slides for my taste, but on the other hand, perhaps it’s those goofy features that contribute to the book’s charm.

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