

Corporate Finance, Module 20: “Introduction to Options”

Corporate finance module 20: Readings for Tenth Edition

(The attached PDF file has better formatting.)

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The page numbers here are for the *tenth* edition of Brealey and Myers. You may also use the seventh, eighth, or ninth editions of this text. The page numbers for earlier editions are in separate postings. The substantive changes in the textbook are slight among these editions, but the final exam problems are based on the tenth edition.

{The Brealey and Myers textbook is excellent. We say to read certain sections and to skip others. This does not mean that certain sections are better; it means that the homework assignments and exam problems are based on the sections that you must read for this course. Some of the skipped sections are fascinating, but they are not tested.}

Modules 20, 21, 22, and 23 cover options.

- Module 20 is an introduction to options; puts, calls, and put call parity.
- Module 21 covers basic pricing techniques: options deltas and binomial trees.
- Module 22 covers real options: follow-on investments, timing, and abandonment.
- Module 23 covers advanced topics: risky bonds, Black-Scholes, and American options.

Read the introduction on pages 502-503. This introduction covers topics in all four of the options modules for this course. The options discussed on page 502, from “Many capital investments ...” through “... to decommission an offshore oil platform” (on page 503) are covered in real options.

Read section 20.1, “Calls, Puts, and Shares” on pages 503-507. The sections are cumulative: to understand pages 508-509, make sure the previous pages are clear to you. Read the sub-section “Position Diagrams Are Not Profit Diagrams” on pages 506-507. Review Figure 20.3 on page 507; be sure to understand (i) why the horizontal line is above or below the x-axis by the amount of the option premium and (ii) why the break-even point is more or less than the strike price.

Read section 20.2, “Financial Alchemy with Options,” on pages 507-513. Focus on the put call parity relation at the bottom of page 509: “ $c + PV(X) = p + S$.” The textbook writes this as “value of call + present value of exercise price = value of put + share price.” The final exam tests this relation. Know this section well: each semester, you can expect about two exam problems that depend on the put call parity relation.

Read section 20.3, “what determines option values,” on pages 513-518. Know each line in bold type; you use these relations to solve final exam problems. An exam problem may

say that the price of a call option decreased from Monday to Tuesday but the price of the put option on the same stock increased and ask for the possible causes.

Pages 512-513, "spotting the option," deal with real options; you may not grasp the concepts until you complete the module on real options. Skim these two pages now, and come back to them when you study real options.

Read the summary on page 519. The last paragraph of this summary is important.

Review problems 7, 10, and 11 on page 520, problems 15, 16, and 19 on page 521; and problems 22, 24, and 27 on page 522.