Corporate Finance, Module 17, "Optimal Corporate Borrowing"

Corporate finance module 17: Readings for Tenth Edition

(The attached PDF file has better formatting.)

Updated: October 13, 2010

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.}

Read the introduction on page 440. As Brealey and Myers say: "We're shooting for a theory combining MM's insights plus the effects of taxes, cost of bankruptcy and financial distress..." (last paragraph of the introduction).

Read section 18.1, "Corporate Taxes," on pages 440-444. Brealey and Myers do an excellent job of removing the complications of corporate taxes and presenting the theory. Know Table 18-1 on page 441, and the equations at the bottom of this page. The return on the debt drops out of the last equation.

Skip section 18.2, "Corporate and Personal Taxes," on pages 444-447. A complete analysis of all taxes, both corporate and personal, with emphasis on the difference between taxes on capital gains and stock dividends, is necessary to analyze capital structure. But tax analysis is difficult, and it detracts from the concepts. If you ever analyze capital structure, you must spend several days examining the tax liabilities caused by debt and stock dividends, but the final exam for this course concentrates on corporate taxes, not personal taxes. If you ever deal with tax effects on capital structure, you must learn this material, but it is not tested on the final exam for this course.

Read section 18.3, "Costs of Financial Distress," on pages 447-450, skipping the sections "Evidence on Bankruptcy Costs" on page 450-451 and "Direct vs Indirect Costs of Bankruptcy" on pages 451-452. Quantifying the exact cost of bankruptcy is not easy. It is low for insurers (both life and property-casualty) and enormous for firms like Google and Apple and Amazon and Yahoo, all of whose values would disappear if the firms declared bankruptcy.

Read the sections "Financial Distress Without Bankruptcy" on pages 452, "Debt and Incentives" on pages 452-453, "Risk Shifting: The First Game" on pages 453-454, and "Refusing to Contribute Equity Capital: The Second Game," on page 454. Skip the section

"And Three More Games, Briefly," on pages 454-455. The first two "games" have strong incentive effects; the next three games might occur but are less plausible. Read the section "What the Games Cost" on pages 455-457; the example shows why this material is important.

Read the section "Costs of Distress Vary with Type of Asset" on pages 457-458 and the section "The Trade-off Theory of Capital Structure" on pages 458-460. These are important sections; the trade-off theory is the mainstream view. It is not perfect (that is, it can not explain everything), but it does as well as anything else.

The implications for insurers are evident in the capital structure changes over the past three decades. Insurers have low cost of bankruptcy, since their assets are mostly bonds. Statutory accounting does not recognize debt capital as surplus, so insurers use debt financing through holding companies and affiliates.

Read section 18.4, "The Pecking Order of Financing Choices" on pages 460-463 only. Skip the final sub-section, "The Bright Side and the Dark Side of Financial Slack" on pages 463-464. The pecking order is Myers's theory, given as a presidential address to the financial analysts community many years ago.

Read "Is there a theory of optimal capital structure" on page 465.

Read the summary on pages 465-466. This summary is a good review of the chapter. Know the two equations in the summary (page 465 and page 466).

Review problems 2 and 6 on page 467; problems 15 and 18 on page 468; and problem 19 on page 469.