Corporate Finance, Module 19: “Financing and Valuation: Adjusted Present Value”

*Required reading:*

(The attached PDF file has better formatting.)

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{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 boxed introduction on pages 523-524 from the second bullet point (“2. Adjust the present value …”) to the end. Read section 19.4, “Adjusted Present Value,” on pages 536-539; skip the sub-section “APV for International Projects” on page 540; and read the example on “APV for the Perpetual Crusher Project” on pages 540-541. Focus on the sub-section “The Value of Interest Tax Shields” on page 539. The middle of this section says that “In Chapter 18, we argued that the effective tax shield on interest was probably not 35% ($T_c$ = 0.35) but some lower figure, call it T*. We were unable to pin down an exact figure for T*.” This relates to the interaction of the corporate tax rate and the personal tax rate, which we skipped. The final exam gives the figure for T*; you will *not* be asked to derive the figure from the tax rates on corporate income, capital gains, and dividends.

If the debt is perpetual, the value of the tax shield is not hard to compute. When the debt is of a fixed term that will *not be renewed*, the mathematics is more complex. In most cases, we assume debt will be renewed; if the project is perpetual, the debt is perpetual.

The “perpetual crusher project” illustration is good; know it well, since the final exam problems are similar.

Skip the sub-sections “A Technical Point on Financing Rule 2” on page 542, “Which Financing Rule?” on page 543, and “APV and Hurdle Rates” on pages 543-544; but read the sub-section “A General Definition of the Adjusted Cost of Capital” on page 544, and know the two concepts in the two bullet points.

Skip section 19.5, “Discounting Safe, Nominal Cash Flows” on pages 544-548. Read section 19.6, “Your Questions Answered,” on pages 548-550. Many of the concepts are difficult to grasp, and Brealey and Myers try to answer the most common questions.

Read the summary from the paragraph on page 551 beginning “APV is, in concept at least, simple…” to the end on page 552 (we skipped the paragraph on financing rule 2). As Brealey and Myers say in the last paragraph: “This chapter is almost 100% theory. The theory is difficult…” Firms have thousands of varieties, and each is slightly different. The final exam questions follow the illustrations in the textbook and the practice problems on the discussion forum; they do not insert slight changes that require a different method.