Corporate Finance, Module 2: “How to Calculate Present Values”

Readings for the Fourteenth Edition (2022) of the Brealey, Myers, Allen, and Edmans text

(The attached PDF file has better formatting.)

The sections in this posting are for the *fourteenth* edition of the Brealey, Myers, Allen, and Edmans text. You may also use the seventh through thirteenth editions; final exam problems can be answered from any edition.

{The Brealey, Myers, Allen, and Edmans 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 Section 3.1, “Using the present value formula to value bonds.” This material is easy for most candidates (you value more complex cash flows for the actuarial exams) but it is the foundation of bond valuation.

Read Section 3.2, “How bond prices vary with yields.” More precise duration formulas are on the actuarial exams. For the corporate finance VEE course, the capital structure of the firm changes with interest rates. The final exam will not test the duration of bonds.

Read Section 3.3, “The term structure of interest rates.” Know the various terms (spot rate, coupon rate, yield to maturity).

Read Section 3.4, “Explaining the Term Structure.” In later chapters, Brealey, Myers, Allen, and Edmans use the CAPM to derive the systematic risk of debt. Other economists assume the CAPM applies to stocks, not to debt. The final exam problems follow the textbook presentation, computing CAPM betas for assets, equity, and debt.

Read Section 3.5, “Real and Nominal Interest Rates.” Know how to derive net present values with both real and nominal interest rates. Some final exam questions give the real interest rate instead of the nominal interest rate. Skip the sub-section on “Indexed bonds and the real rate of interest.”

The discussion of interest rates and of current vs future consumption is consistent with the Barro’s text on *Macroeconomics* and Landsburg’s text on *Microeconomics*. Brealey, Myers, Allen, and Edmans focus on capital markets, whereas economists focus on individual actors. Economists often assume that all consumers have the same preferences. This is not necessary for corporate finance; the capital markets construct a market preference based on the marginal investor.

Read Section 3.6, “The Risk of Default”; skip the section “Sovereign bonds and default risk.” Later modules deal with capital structure, default risk, and optimal debt levels.

Much of the material in Module 2 is also on the actuarial exams. These topics are simple for most candidates, but they are used in later corporate finance modules, where the concepts are harder.

The *key takeaways* at the end of chapters are good reviews of the material. The problems at the end of each chapter are useful for checking that you understand the material. Review problems 1, 4, 6a.

The textbook questions are *not* the homework assignments for this course, though they help you review the material. Illustrative test questions, problems, and homework assignments are shown separately on the discussion forum.