Corporate Finance, Module 11, “Agency Problems, Monitoring, Compensation Systems”

Corporate finance module 11: Readings for Eleventh Edition

(The attached PDF file has better formatting.)

The page numbers here are for the *eleventh* edition of Brealey and Myers. You may also use the seventh, eighth, ninth, or tenth 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 eleventh 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 section 12.1, “Incentives and compensation,” on pages 295-304. The three subsections are needed to understand the capital structure modules of this course. Agency problems, monitoring, and compensation systems affect whether corporate managers act in shareholders’ interests. Landsburg (microeconomics course) also discusses agency problems and compensation systems. Issues of corporate pay are highly politicized in the U.S. and in Europe. The proper question is not whether corporate executives are over-paid or under-paid but how to structure the compensation system to optimize the value of the firm.

Some actuaries believe that changes in corporate structure (based on the three problems identified here) and rules about corporate governance have driven the demutualization movement in the life insurance industry. We don’t judge whether this view is correct, but a good understanding of this module helps you see the connections among corporate governance, corporate structure, and the manner in which corporate managers are monitored and compensated.

Read section 12.2, “Measuring and rewarding performance: residual income and EVA,” on pages 304-307; know economic value added well (EVA). EVA was put on the SOA syllabus in the 1980’s, and its use has spread among many insurance companies. Several papers on the CAS and SOA finance syllabi are from a textbook put together by the Stern-Stewart firm, the main advocates of EVA. EVA is economic income minus the cost of holding capital (the dollar amount of the cost of capital, or the cost of capital times the amount of capital). With multiple year projects and the Brealey and Myers definition of economic income, the net present value is the economic income at project inception, and the expected EVA (not necessarily the realized EVA) is zero in later years.

Jacob: I’ve heard that we use after-tax GAAP earnings for EVA, not economic earnings.

Rachel: Economic earnings depend on the capitalization rate and cash flow estimates; GAAP earnings are shown in a firm’s financial statements. In practice, we *adjust* GAAP earnings to make them closer to economic earnings. Brealey and Myers discuss these adjustments. The accounting items are not tested on the VEE final exam for this course.

Skip pages 307-308 of section 12.3 (Biases in accounting measures of performance); this course focuses on the financial theory, not the accounting practices. Read the sub-section “Measuring Economic Profitability” on pages 309-310; this sub-section is tested every semester on the final exam, since it shows how to measure economic profits. *Skip* the rest of this section (from “Do the biases wash out in the long run on page 310 through page 313.) Read the summary on pages 313-314.

Review problems 4 and 5 on page 315; problems 14 and 15 on page 316; and problem 17 on page 317.

For insurance pricing, the *cash flows* are the free cash flows, or the potential dividends to equityholders (shareholders). For insurance, statutory accounting regulates the free cash flows. We use statutory income, not cash flows, to determine NPV or IRR for insurance companies. This is correctly done by Atkinson and

Dallas for life insurance and the IRR readings on the CAS advanced ratemaking exam. Some candidates read Brealey and Myers and jump to the conclusion that actuaries are doing it wrong. Don't make that mistake.