

Corporate Finance, Module 5, “Investment Decisions and Net 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 section 6.1 on pages 119-125; know especially “only cash flow is relevant” on pages 119-120, “do not forget working capital requirements,” on page 121, and “include opportunity costs” on pages 121-122. These topics are more complex for insurance products, since we use

- distributable income as the proxy for cash flows
- reserves and risk-based capital requirements as working capital
- either the risk-free rate or a risk adjusted rate as the opportunity cost of capital

The Brealey and Myers text is an ideal scenario. Read it for the concepts; the application to insurance is not easy.

Section 6.2 on page 124-131 is *optional*: the final exam does not test this example *per se*, but the concepts are used in later modules, and they will be tested in these other modules. If you have no problem with the concepts, you can skip this section; if you are unsure whether you have grasped the concepts, review this section.

Jacob: Many tables in this textbook use accounting terms, such as cost of goods sold, change in working capital, and depreciation. I don’t have an accounting background, and these terms are not used for insurance. Must we know these items for the final exam?

Rachel: Module 24, the last module in this course, covers basic accounting measures which you will be tested on. Accounting is the language of business, and the textbook assumes that you know the terms. Understand EBIT (earnings before interest and taxes), tax depreciation, how debt and stockholder dividends are treated, and the components of equity (common capital, capital paid-in, Treasury stock, retained earnings).

Jacob: How well must we know these items?

Rachel: You must derive the market value of equity and debt from accounting statements, the return on book equity, the tax liability, and other determinants of cash flow. You are not being tested on accounting, but you must know accounting to understand the textbook.

The subsections “a final comment on taxes” (page 129-130), “project analysis” (page 130), and “calculating NPV in other countries and currencies” (pages 130-131) are not needed for this course. Skip section 6.3 on “equivalent annual costs” and section 6.4 on “project interactions.” Read the summary on pages 139-140. Skip the mini-case on pages 147-149. The sections to skip do not deal with the core issues in this course.

Jacob: These first five modules are not difficult; is the rest of the course similar?

Rachel: The modules on dividends, capital structure, and option pricing are difficult; the early modules are easier. If you are comfortable with present values, internal rate of return, common stock values, and capital markets, you should read ahead (following the outline in these postings) to the more difficult modules at the end of this course. Many candidates do not leave time for the modules on capital structure and option pricing. The on-line course has a tight structure; there are only a few days between the option pricing modules and the final exam.

Jacob: Does the final exam weight each module equally?

Rachel: The SOA recommended syllabus for VEE corporate finance places great weight on option pricing and capital structure. The SOA does not specify percentages, but only courses with rigorous treatment of these two subjects meet the VEE requirements. This course covers these subjects in depth, and the final exam tests these subjects more comprehensively than other subjects. If you review the practice problems and do the homework assignments, you will be able to answer the final exam questions; you can't neglect these subjects.