Corporate Finance, Module 7, “Risk and Return”

Readings for Ninth Edition

(The attached PDF file has better formatting.)

Updated: November 19, 2007

The page numbers here are for the *ninth* edition of Brealey and Myers. You may also use the seventh or eighth editions of this text. The page numbers for the seventh and eighth editions are in separate postings.

{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.}

The introduction on page 206 summarizes the key concepts. We differentiate between unique risk, which is diversifiable, and market risk, which is not diversifiable.

The Capital Asset Pricing Model (CAPM) posits that the excess return of a project is proportional to its beta.

- The excess return is the return minus the risk-free rate.
- The beta is the covariance of the security’s return (or project’s return) with the market return divided by the variance of the market return.

Modern portfolio theory says that systematic risk warrants a higher return. The CAPM says what the higher return should be for each security. Brealey and Myers are strong advocates of the CAPM.

Read section 9.1 on pages 206-213, which reviews modern portfolio theory. Brealey and Myers give a summary so that they can discuss corporate financing (equity vs debt). They are teaching how to structure a company, not how to structure an investment portfolio. But the two subjects are intertwined, so they must review modern portfolio theory.

Focus on the section “we introduce borrowing and lending” on pages 186-188; know the equations on pages 211-213 (these are elementary, but the concept is important).

Read section 9.2 on pages 213-217. Know the meaning of the *security market line* and the formula for the expected risk premium for common stocks on page 214. The review of the CAPM on page 216 is good, and the subsection on pages 216-217 (“What if a stock did not lie on the security market line?”) is essential for the theory.

Section 9.3 is optional. Although the theory is good, the CAPM hasn’t fared well from empirical testing (though it has done better than anything else). The final exam does not

test this section, and no homework assignments are drawn from it. But after reading about the CAPM, it is worthwhile hearing the cautions against adopting it uncritically.

Skip section 9.4 (pages 222-227). The consumption beta and arbitrage pricing theory are for theorists; you may never use them in your work careers.

Jacob: I have heard that the CAPM is not supported by the evidence, and the consumption CAPM, behavioral finance, and arbitrage pricing theory better explain stock returns.

Rachel: It is true that the CAPM has not fared as well in empirical research as we had once expected it would. But the competing theories mentioned above don't even suggest how to price stocks. The arbitrage pricing theory says that several factors explain stock returns, not just the covariance with market returns. But it doesn't even tell us what these other factors are; we can't use the theory to explain stock returns and we can't test the theory. Behavioral finance suggests that investors are not perfectly rational, but it is vague about how investors make decisions. It discusses many qualitative items that may indeed have an effect. But it does not suggest how to quantify the effects, so we can't use it to price stocks and we can't even test the theory.

Read the summary on pages 227-228 until the middle of page 228 ("the CAPM has also been criticized …"). The rest of the summary reviews the consumption CAPM and arbitrage pricing theory.