

Finance 34600 - Investment Theory

Outline for Lecture 3 Pricing Securities

The central focus of lecture 3 is asset pricing. That is, how are expected returns determined? (Remember: once we know expected returns and we can forecast cash flows, then we can find the security's price.)

We will begin this lecture by discussing the Capital Asset Pricing Model (CAPM). We will discuss the assumptions of CAPM and the implications of the theory. The key assumptions imply that everyone solves the same passive portfolio problem, although they may have different levels of risk aversion. These assumptions lead us to the facts that everyone holds the market portfolio and the market portfolio is efficient. Because the market portfolio is efficient, we know that the Capital Market Line (CML) is the best attainable CAL.

The CAPM also provides the implication that expected returns on all securities are proportional to the market risk premium and the security's beta. This leads to the Security Market Line (SML). Keys here are that expected excess returns are compensation for risk and beta is the appropriate measure of risk.

After developing the theory of the CAPM, we will discuss the implementation of the CAPM by means of index models (or the market model). Here we focus on the statistical implementation of the CAPM using actual data. In order to calculate a security's beta, we utilize the Security Characteristic Line. We will also discuss the Arbitrage Pricing Theory and the differences between the assumptions and implications of the APT and the CAPM.

Suggested Problems:

Ch. 6: 19, 25, example 6.4 (page 176), and concept checks 6.6 and 6.7.

Ch. 7: 3, 6, 8-14, 18, 23, 27-29, 33, 34 and concept checks 7.2 and 7.4.