

Finance 7100
ASSET PRICING

Texts: Ingersoll, J. E., Theory of Financial Decision Making Rowman and Littlefield (1987)
Cochrane, J. H., Asset Pricing Princeton (2001)
LeRoy, S.F. and J. Werner, Principles of Financial Economics Cambridge (2001)

Additional material may be made available, either with class handouts, reserve at the library or for purchase at the book store. It is also strongly suggested that the student read a standard MBA level corporate finance textbook as the class proceeds.

Grades: Course grades will be determined by class participation and homework problem performance (40%) and a final exam (60%).

This course considers asset pricing proceeding from the most general to more specific cases. Therefore the traditional CAPM and mean-variance efficiency are considered as special cases in the context of more robust models. Option pricing is considered as special case of the more general arbitrage models.

OUTLINE and REQUIRED READING

0. Preview: Finance Steve Ross New Palgrave Entry.
Ingersoll Chapter 1, LeRoy and Werner Chapters 8 & 9.
- I. Pricing and Arbitrage Ingersoll Chapter 2, LeRoy and Werner Chapters 1-6.
Ross, S. A., "A simple Approach to the Valuation of Risky Streams," *Journal of Business* 1978 J Bus
"Arbitrage" Steve Ross and Phil Dybvig an entry in the New Palgrave.
- II. The General Portfolio Problem: Ingersoll Chapter 3, Merton Chapter 2
LeRoy and Werner Chapters 11 - 13
Grossman, "On the Efficiency of Competitive Stock Markets Where Traders Have Diverse Information." *Journal of Finance*, 31, 1976, 573-85.
Milgrom and Stokey, " " *Journal of Economic Theory*, 1982, 17-27.
- III. The Mean Variance Portfolio Problem Ingersoll Chapter 4, LeRoy and Werner Chapter 19
Fama, *Foundations of Finance*, the whole book.
Roll, R., "A Critique of the Asset Pricing Theory's Tests," *Journal of Financial Economics*. 1977, 129-176.
Dybvig-Ingersoll, "Mean Variance Theory in Complete Markets", *Journal of Business*, 1982.
Brennan, "Capital Asset Pricing Model" New Palgrave Entry.
- IV. Generalized Risk Ingersoll Ch 5, Merton Ch 2, LeRoy and Werner Ch 10
Rothschild and Stiglitz, "Increasing Risk I: A Definition." *JET* 2, 1970.
_____, "Increasing Risk II: Its Economic Consequences." *JET* 3, 1971.

Dybvig-Ross, "Portfolio Efficient Sets", Econometrica, 1982.

Dybvig, (1988) "Distributional Analysis of Portfolio Choice," Journal of Business 61, 369-394.

V. K-Fund Separation Ingersoll Chapter 6

Ross, "Mutual Fund Separation and Financial Theory--The Separating Distributions" JET 1978.

Cass-Stiglitz, "The Structure of Investor Preferences and Asset Returns, and Separability in Portfolio Allocation", JET, 1970.

VI. Arbitrage Pricing Theory. Ingersoll Chapter 7, Cochrane Sections 9.4 and 9.5
Leroy and Werner Chapter 20

S. Ross, "Return, Risk, and Arbitrage." In I. Friend and J. Bicksler (eds.) Risk and Return in Finance. Cambridge, Mass.: Ballinger 1977

Huberman, "A Simple Approach to Arbitrage Pricing Theory", JET, 1982.

Huberman, "Arbitrage Pricing Theory" New Palgrave Entry.

Shanken, "The Arbitrage Pricing Theory: Is It Testable?" Journal of Finance 1982.

Dybvig and Ross, "Yes The Arbitrage Pricing Theory is Testable." Journal of Finance 1982.

Dybvig, "An Explicit Bound on Individual Asset's Deviations from APT Pricing in a Finite Economy" JFE 1983.

Chen, Roll and Ross "Economic Forces and the Stock Market" *Journal of Business* 1986.

VII. Stochastic Discount Factors

The "Modern" presentation of asset pricing Cochrane Chapters 1 through 4.

VIII. Introduction to Option Pricing Cochrane Chapters 17 and 18, Ingersoll Chapter 14

Cox, Ross, and Rubinstein, "Option Pricing: A Simplified Approach," JFE 7, 1979, 229-263.

Ross, "Options and Efficiency," QJE 90, 1976, 75-89.

IX. Multi-period Models

Pricing by Arbitrage Ingersoll Chs 10 and 11, LeRoy and Werner Chs 21-26.

Lucas, R., "Asset Prices in an Exchange Economy," Econometrica, 46, 1429-1445, 1978.

X. Introduction to Continuous-Time Models Ingersoll Chapters 12 and 16, Cochrane's Appendix

Ito Processes and Ito's Lemma

The Black-Scholes Model

The course website has a schedule and lecture notes are posted. Notes are posted so that you will spend more time in class thinking, and discussing, and less time writing. I'd like to make the class as interactive as possible since I believe that discussion is often the best way to learn. These notes are not original material and draw heavily from the readings.