

Financial Insurance

Required Text

John C. Hull "Introduction to Futures & Options Markets". Prentice Hall (3rd Edition 1998).

Topics and Readings

This is a course on risk management. Most readings are from the text by Hull, but some notes and material on current topics will be distributed in class. It is highly recommended that you follow the financial news during the course, for example by reading The Wall Street Journal.

I. Basic Concepts in Insurance

1. Insurance and risk management. Markets for catastrophe insurance. Handout.
2. Why do some insurance markets not exist? Moral Hazard, Asymmetric Information, Adverse Selection. George Akerlof, *Quarterly Journal of Economics*, 1970, 84, 488-500. This article is recommended reading and is on soft reserve in the Student Center.
3. Risk Pooling and Risk Sharing. Hedgers and Speculators. Hull chapter 1.
4. Value at Risk. Handout.

II. Futures/Forward Markets

1. Mechanics of Futures and Forward Markets. Hull ch. 2.
2. Pricing of Futures and Forward Contracts. Arbitrage Pricing. Hull ch. 3.
3. Hedging Strategies with Futures. Hull ch. 4.
4. Applications I: Interest Rate Management case study: The Orange County Bankruptcy. Hull ch 5.
5. Applications II: Swaps. Hull ch. 6.

III. Options Markets

1. Mechanics of Options Markets. Hull ch. 7.
2. Basic Principles of Stock Option Contracts. Hull ch. 8.
3. Investment Strategies using Options. Hull ch. 9.
4. Pricing Stock Options I: The Binomial Model. Hull ch. 10.
5. Pricing Stock Options. II: Black-Scholes. Hull ch. 11.
6. Option Price Sensitivities. Hull ch. 14, pages 324-345.
7. Portfolio Insurance. Hull ch. 14 pages 319-324, 345-351.
8. Financial engineering. Exotic Instruments. Lecture Notes.

Course Resources

Announcements regarding the course will be made on the course web page at
<http://weber.ucsd.edu/~atimmerm/174/>

You can also find course assignments, data and a copy of the course syllabus on this homepage.

Office Hours

Thursday, 3-5pm in Econ 318. You can also reach me by e-mail at atimmerm@ucsd.edu or by setting up a personal appointment.

TAs

Bradley Paye. Office Hours: Wednesday, 6-8 pm. Sequoia 242. E-mail: bpaye@weber.ucsd.edu.

Ricardo Sukanuma. Office Hours: Tuesday, 9-11am. Econ 124. E-mail: rsukanum@weber.ucsd.edu.

Grading

Course requirements and grading weights are as follows:

Problem sets: 20%

Midterm Exams: 30% (scheduled for Tuesday, October 24 and Thursday, November 16)

Final Exam: 50%