Applied Corporate Finance and Investment Banking

This is the BEM "lab" course. Stress is on bridging the gap between theory and practice, a gap that can be alarmingly high. Throughout the course we will use current financial data and attempt to integrate it with the theories you learned from Professor Roll in BEM 103. This requires a detailed understanding of the limitations of the data in relation to the assumptions of financial theories. The organizing theme of the course is valuation because all financial decision making can be reduced to an appropriate comparison of estimated values.

I have found that to understand an issue a student must to explain it. Consequently, the entire grade for this course is based on participation. In addition to lecturing, I will call on specific students to answer a series of questions. It will be a bit like a scientific version of a Harvard law school class. Don't panic if you don't know answer to some of the questions because I suspect that will be common. However, if it becomes a habit, your grade will suffer. To perform well, it is **critical** that you do the reading **prior** to each class session. For those of you who do go into business related fields, there is a side benefit to the participatory approach. Because corporate events are fast moving, business ideas are usually evaluated in Q&A sessions similar to those in this course.

Prerequisites: BEM 103 no exceptions as this course will build off Prof. Roll's

Time: Tuesday 6-8:50 pm in Baxter 25.

Office hours: By appointment in Baxter 211, bcornell@hss.caltech.edu

TA: Matt Kovach mkovach@hss.caltech.edu

Text: Required: Holthausen and Zmijewski, (HZ) Corporate Valuation:

Theory, Evidence and Practice

Related Books on Valuation

Damodaran: Damodaran on Valuation. Also Damodaran.com

Cornell: Corporate Valuation.

Koller, Goedhart and Wessels: Valuation.

Penman: Financial Statement Analysis and Security Valuation: Fifth Edition,

Pratt: Valuing a Business.

Materials: Available at class Google drive and email. caltechbem107@gmail.com.

password: caltech107.

Reading Assignments and Course Schedule

Note: Reading should be done **prior** to the week under which it is listed.

Week 1 (3/31): Introduction to the course. Conceptual problems in applied finance: What is a firm? What is it supposed to do from a financial point of view? Why is valuation at the heart of financial decision making? Financial reporting and valuation.

To prepare for the class spend some time working with the Yahoo and Google finance sites. Be able to download and analyze corporate financial statement data.

Reading. HZ Chapter 1.

Week 2 (4/7): Discounted Cash Flow Valuation. The basic model with no debt. Adding debt to the equation. Value of equity versus the value of the firm and the enterprise value. The role of taxes.

Reading. HZ Chapter 3, 5.

Class presentation: Project 1, 2.

Week 3 (4/14): More on DCF. Residual Earnings Approach to Valuation.

Class presentation: Project 3, 4.

Reading. HZ Chapter 6, 7.

Week 4 (4/21): Forecasting future free cash flow. The role of analysts.

Continuation of the previous topic.

Class presentation: Project 5.

Reading. Analyst report, Tesla. Cornell and Damodaran: Tesla – Anatomy of a Run-up. HZ Chapter 4.

Week 5 (4/28): Analysis of the cost of capital. CompassLexecon presentation on modern financial data.

What is the "cost of capital?" What are its components? What are its determinants? What is a practical approach for estimating it? Why is the cost of capital used as the discount rate in valuation?

Class presentation: Project 6, 7.

Reading. HZ Chapter 8, 9, 10, 11.

Week 6 (5/5): Multiple based valuation. Valuation complications: Marketability discounts. Employee stock options.

Introduce some important valuation complications including dirty surplus accounting, employee stock options, core versus temporary earnings, liquidity discounts and control premiums.

Class presentation: Project 8

Reading. HZ Chapter 13, 14.

Week 7 Thursday (5/14): Application of event studies. Mergers and acquisitions. Presentation by Martin Willhite.

Reading. HZ Chapter 16 up to page 692. Ross, Westerfield and Jaffee Chapter 29 up to divestitures.

Week 8 (5/19): Control Premiums. Presentation by Steve Walker of IdeaLab on venture capital and the evaluation of start-up businesses.

Reading. Materials provided by Steve Walker.

This will also be an interactive session led by Mr. Walker. It will focus on the identification, evaluation and nurturing of an actual start-up business at IdeaLab.

Week 9 (5/26): The operation of the money management and investment business. Presentation by Jason Hsu co-founder of Research Associates, LLC.

Reading. Arnott, Hsu and Moore: Fundamental Indexation. Cornell and Hsu: The Self-Fulfilling Prophecy of Popular Asset Pricing Models.

Week 10 (6/2): Raising Capital and Valuation. Venture Capital. IPOs

Ross, Westerfield and Jaffee, Chapter 20 up to rights offerings. Ritter on IPOs

Class presentations: Project 9 and 10