

FIN 556 A-B

Business Valuation and Investment Analysis

Winter 2020 M-W 1:30pm – 3:20pm PCAR 295

Overview

Business Valuation and Investment Analysis is designed to provide you with the tools and techniques to value various types of assets.

Objectives

Recognize the biases associated with any valuation exercise and apply your knowledge to assess the valuations of others.

Understand the importance of being consistent in your assumption choices when valuing an asset.

Demonstrate the ability to gather the inputs necessary to value projects and companies and choose the right valuation model to use.

Make relevant assumptions when applying a valuation technique. For example: which cash flows to discount, what discount rate and growth pattern to use?

Know how to tie narrative and numbers to reach a valuation decision.

Understand how to value companies at different stages in their life cycle.

PROF. LÉA STERN

OFFICE: PCAR 448

EMAIL: <u>leastern@uw.edu</u>

OFFICE HOURS:

WEDNESDAYS 3:30- 4:30 P.M. COURSE WEBSITE: CANVAS

Teaching Assistant:

Finance Ph.D. student **Sophia Mao** yumao@uw.edu

Sophia's Office hours: Tuesdays 4-5pm in PCAR 446



Assignment 1: January 29

- **Mini exam**: February 5

Team valuation report ~ Part 1: February 16

- **Assignment 2**: February 19

Team valuation report ~ Part 2: March 10 @ 5pm

- **Final team presentation**: March 11

COURSE MATERIALS:

I recommend the following textbook as an optional resource for this class:

Aswath Damodaran, Investment Valuation: Tools and Techniques for Determining the Value of any Asset, 3rd edition, published by Wiley (2012). The student version (paperback) is available and more affordable.

You may also purchase the second edition of Damodaran's textbook.

Another option you may consider is referring to the relevant chapters in Berk and deMarzo's Corporate Finance book, 4th edition, published by Pearson / Addison-Wesley (2016).

- Slides on Canvas (required)
- Miscelleanous readings on Canvas

COURSE RESPONSIBILITIES:

Individual assignments: There will be two individual assignments (15% each).

> You are encouraged to discuss the assignments with your peers, but you must complete them on your own (i.e., write your own answers, no cutting and pasting of answers). Please bring a HARD COPY of your assignments to class.

Mini-exam: Closed book exam (20%).

Team Project: With your team (4 to 6 peers), you will value two companies:

> Your team will get to present during the quarter (5%) to discuss a valuation topic and apply it to one of the two companies.

You will select the date at which you will present via an online poll on a first come first served basis (the date at which the poll will open will

be announced in class).

Each team will receive instructions for their presentation in an email

one week before their presentation date.

Your team will produce a *valuation report* for both companies (30%).

You will submit your report online by 5pm on March 10th.

You will pitch your valuation analysis in a final presentation to the

class during the last session (15%) on March 11th.

Collaborative learning is an integral part of your learning experience at the Foster School. Your active contribution is expected in all team projects.

TECHNOLOGY POLICY:

You may use your laptop in class for class-related purposes such as note taking. However, I support the School's policy against accessing email, surfing the Internet, etc. during class. Please constrain the use of your laptop and other electronic devices during class to class-related purposes.

MBA HONOR CODE:

I employ the policies and procedures espoused by the Foster School of Business Honor Code to maintain academic integrity in the course.

ACCOMMODATIONS:

If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course. To request academic accommodations, please contact Disabled Student Services, 448 Schmitz, 206-543-8924 or uwdrs@uw.edu or disability.uw.edu.

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Faculty Syllabus Guidelines and Resources. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form available at https://registrar.washington.edu/students/religious-accommodations-request/.

COURSE OUTLINE

Please note that this course outline is subject to change.

Class 1 (Monday, Jan. 6)

Module 1

Syllabus overview

Introduction to Valuation

Biases, Uncertainty and Complexity

Valuing vs. Pricing

Discounted Cash Flow Valuation: an Overview

Relative Valuation: an Overview

- > Slides on Canvas
- > Optional readings: Chapters 1, 2

Class 2 (Wednesday, Jan. 8)

Module 2

Firm Valuation v. Equity Valuation The Discount Rate: an overview

The Risk Free Rate

Estimating default spreads

- > Slides on Canvas
- Optional readings: Chapter 7

Class 3 (Monday, Jan. 13)

Module 3

The Equity Risk Premium

Historical Risk Premium

Modified Historical Risk Premium

- > Slides on Canvas
- > Optional readings: Chapter 7

Class 4 (Wednesday, Jan. 15)

Modules 3 and 4

The Equity Risk Premium
Implied Equity Risk Premium

Relative Risk: Estimating Beta Regression beta

- > Slides on Canvas
- > Optional readings: Chapter 7

Class 5 (Wednesday, Jan. 22)

Modules 4 and 5

Relative Risk: Estimating Beta Bottom-up beta

Cost of debt

Constructing a synthetic rating

- > Slides on Canvas
- > Optional readings: Chapter 8

Class 6 (Monday, Jan. 27)

Module 5

Estimating market values

Hybrid securities

Dealing with preferred stock and convertible bonds

- > Slides on Canvas
- > Optional readings: Chapter 8

Class 7 (Wednesday, Jan. 29)

Cash Flows:

Updating and cleaning up earnings

- > Slides on Canvas
- > Optional readings: Chapter 9

Module 6

Module 7

Submit Assignment 1



Class 8 (Monday, Feb. 3)

Cash Flows:

Normalizing

Adjusting earnings: R&D Earnings management The Theranos scandal Dealing with negative earnings

- > Slides on Canvas
- > Optional readings: Chapter 9, 22

Class 9 (Wednesday, Feb. 5)

Mini Exam



Class 10 (Monday, Feb. 10)

The Reinvestment Rate

The Growth Rate

Historical growth

Analysts' growth forecast

Fundamental Growth

- > Slides on Canvas
- > Optional readings: Chapters 10 and 11

Modules 8 and 9

Class 11 (Wednesday, Feb. 12)

Module 9

Estimating the Growth Rate: Top-Down Growth

- > Slides on Canvas
- > Optional readings: Chapter 11

Class 12 (Wednesday, Feb. 19)

Module 10

Terminal value Model choice Loose ends in DCF valuation

Submit Assignment 2



- > Slides on Canvas
- > Optional readings: Chapter 12

Class 13 (Monday, Feb. 24)

Module 11

Narrative in DCF valuation Valuation: some examples

> Slides on Canvas

Class 14 (Wednesday, Feb. 26)



Guest speaker Jason Stoffer (Partner at Maveron)

Class 15 (Monday, Mar. 2)

Module 12

The challenges in valuing young high-growth companies Examples

- > Slides on Canvas
- > Optional readings: Chapter 23

Class 16 (Wednesday, Mar. 4)

Module 12

The challenges in valuing young high-growth companies (continued) VC valuation

Valuing mature companies

DCF Big picture & Wrap Up

- > Slides on Canvas
- > Optional readings: Chapter 23

Class 17 (Monday, Mar. 9)

> Topic TBD

Class 17 (Wednesday, Mar. 11)

Final Team Presentations

