FINA 7A10: Valuation Prof. Vijay Yerramilli Fall 2022, Session 5

Class Time/ Venue: Class 18112, Wednesday 6:00–9:00pm, CBB410 Class 18051, Thursday 6:00-9:00pm, ONLINE

Office Hours (virtual): 5:00-6:00pm on Tuesday, or by appointment E-mail: vyerramilli@bauer.uh.edu Office: 240D MH; Phone: (713) 743 2516 Website: http://bauer.uh.edu/yerramilli

Course description and objectives

The objective of this course is to provide you with an in-depth understanding of valuation techniques to solve real-life problems. I will focus on rigorous application of the discounted cash flow (DCF) framework, which is widely used in practice to value firms, assets, and projects. The case studies will teach you financial modeling skills in Excel, and how to communicate the results of quantitative analysis through financial reports.

Please see Appendix A for a complete list of topics covered. In terms of pedagogic goals, by the end of this course, you should be able to:

- Evaluate corporate projects and make decisions based on financial data.
- Value firms using the DCF methodology.
- Understand how changes in capital structure (i.e., debt-equity composition) affect the firm's cost of capital and value.
- Develop spreadsheet models in Excel, and write professional reports.

Who should take this course?

A thorough understanding of valuation is essential for anyone planning a career in business, and especially for those specializing in finance. The topics in this course have applications in corporate finance, mergers and acquisitions, investment banking, commercial banking, security analysis, and consulting. Therefore, they are most likely to come up in job interviews. Moreover, FINA 7A10 is a prerequisite for many other advanced electives in finance.

Prerequisites

FINA 6A35 ("Managerial Finance") is a necessary prerequisite. I expect that you have a clear understanding of time value of money concepts and the risk-return relationship at the level of the CAPM. I have prepared a PowerPoint presentation titled "Review of Basic Valuation Concepts" that provides a quick review of these important concepts. It is your responsibility to go through these lecture slides and brush up on these concepts before the first lecture, because I'll not be presenting this material in class. You will be required to take an online assessment on these topics, which will count toward your participation grade.

Valuation requires *basic knowledge of financial statements*: organization of the income statement and balance sheet; accounting treatment of capital expenditures versus expenses; distinction between long-term assets and working capital; and the role of non-cash expenses, such as depreciation. You may want to use the two *Merrill Lynch* brochures available on the Blackboard course page to brush up on the organization of financial statements.

I expect that you have a working knowledge of *Microsoft Excel* which we use extensively for financial modeling not only in this course but also in other finance electives. You will be at a significant disadvantage if you are not familiar with Excel. The university provides free Microsoft Office (which includes Excel) to every student. See https://uh.edu/infotech/services/office365/office-pro-plus/ for details.

Course material

All my lecture slides, Excel files, homework problem sets, and other material are available on the course page on **Blackboard** (http://www.uh.edu/blackboard). We will also use Blackboard for assignment submissions and tests, and I will make all important announcements through Blackboard. It is your responsibility to check this page regularly and to ensure that you are receiving all my announcements through email.

The cases studies can be downloaded directly from Harvard Business School Publishing (HBSP). I have prepared a **case packet**, which is available at https://hbsp.harvard. edu/import/986564. Once you log in to HBSP, click on *"My Courses"* and select the course name *"Valuation (Fall 2022)"*. (Note: You may have to login with your UH email id for HBSP to recognize you as a UH student.)

There is **no required textbook** for this class. I do recommend that all finance students acquire a copy of "Valuation: Measuring and Managing the Value of Companies," (Wiley Finance), by McKinsey & Company's Tim Koller, Marc Goedhart and David Wessels (ISBN: 978-1118873700; any edition is fine). This is not a standard textbook but it offers a detailed and practical guide to valuation which should be useful beyond this course. It is definitely a worthwhile investment for students specializing in finance.

Equipment/Software

We will use the **Zoom** (https://zoom.us/) video conferencing platform for all office hours. Online students will also use Zoom to attend lectures. You will need a computer with a microphone and a webcam in order to participate in the office hours (and lectures, in case of online students). Please utilize headphones or another secondary microphone source for communicating during class. You will find more information on distance learning resources at the following page: https://www.bauer.uh.edu/distancelearning/students/.

All the tests in this course will be administered online through Blackboard, for both in-person and online students. You will need to download and install the **Respondus LockDown Browser** for the University of Houston on your computer in order to take the online tests through Blackboard. This secure browser prevents you from printing, copying, going to another URL, or accessing other applications during an assessment. It also allows for proctoring through a webcam. *The online tests will not be accessible with a stan- dard web browser*. Visit http://www.uh.edu/fdis/technology/respondus-lockdown/getting-started-lockdown for more information on how to download and install this browser. A student guide is available at http://www.uh.edu/blackboard/downloads/Learn_LockdownBrowser_student_guide.pdf.

Respondus has an add-on spreadsheet tool which does not have the full functionality of Excel, but can handle basic calculations. Alternatively, if you prefer, you can use a calculator for the tests. A basic scientific calculator that does powers is fine.

Grading

Grading will be based on the following components, *adjusted for class participation*: case studies (25%), quizzes and assignments (35%), and final exam (40%). In order to earn an 'A' grade in this class, you must do well on both the team-based case study assignments and the individual tests. There are no fixed cutoffs for determining the letter grades because I grade on a curve, and will adjust the grade based on the quality of your class participation. Below is a detailed description of the individual components in the grading schedule.

Case Studies

There are three equally-weighted case study assignments in this class:

- 1. Ocean Carriers
- 2. Hansson Private Label, Inc.: Evaluating an Investment in Expansion
- 3. JetBlue Airways IPO Valuation

The specific questions for each case study are available on Blackboard, and the submission deadlines are listed in the Appendix. You will work on case studies in teams of 4, and are required to submit **one report per team**. Designate a team member to submit the report (in PDF format) electronically on Blackboard before the deadline. You will receive the team score on your case report within a week of submission. My grading will be based on your quantitative analysis as well as the quality of the written report. Here are some pointers on how to prepare a case report:

- Prepare concise responses to the case questions, supported by tables, figures, and quantitative analysis. Include all the exhibits that are necessary to support the written analysis in the report, so that the reader can understand the report without having to go through your Excel spreadsheet.
- Do not use information from outside sources. Base your analysis only on the information provided to you in the case, plus any additional assumptions that I may have provided along with the case questions.
- Use font size of 11 or higher. Make sure that the tables and other exhibits are professionally formatted and are readable.

Given the importance of teamwork in this class, it is imperative that the teams are in place as soon as possible. If there are classmates that you want to work with, send me a team request by email *within 24 hours* of the first class; else, I will assign you to a team.

To avoid free-riding within teams, I require all students to: (a) *upload individual spread-sheets* of case studies on the due date to demonstrate that they made an independent attempt to solve the case; and (b) submit a *confidential and mandatory peer evaluation* of their teammates at the end of the semester. I could downgrade your final letter grade by several notches or take other corrective action if I detect any evidence of free-riding.

Quizzes, Final Exam, and Assignments

I will use periodic quizzes to assess your understanding of specific topics, and a comprehensive final exam to test your overall understanding of the material covered in this course. As noted above, all tests will be administered online through Respondus Lockdown browser. These are closed-book tests but you are allowed to use a one-page "cheat sheet" to help you recall essential formulas and procedures. Use the homework questions available on Blackboard to prepare for the final exam and quizzes. The homework assignments do not have to be turned in, and will not be graded.

I will use Excel-based assignments to develop your financial modeling skills, and to prepare you for the case study assignments. Unlike with the tests, these assignments will be administered through a regular browser so that you can complete them on Excel and submit your spreadsheet and answers online.

Participation

I expect you to attend class, and actively participate in the lectures and case discussions. I could adjust the letter grade at the margin based on the quality of your class participation. Any unexcused absences, especially on the days on which we discuss cases, will have an adverse effect on your participation grade.

If you are attending an online class or office hour, identify yourself clearly on Zoom (use full name instead of a nickname) and enable your device camera. Zoom offers privacy protections such as blurred/virtual backgrounds, and many features to facilitate participation in discussions.

Appendix: Course Schedule

Week 1 (October 19/20)	Overview of the DCF Methodology DCF Technique I: WACC Method
Week 2 (October 26/27)	DCF Technique I: WACC Method Application to Project Valuation
Week 3 (November $2/3$)	Weighted Average Cost of Capital (WACC). WACC and Capital Structure
Week 4 (November 9/10)	Discussion of "Ocean Carriers" DCF Technique II: Adjusted Present Value (APV) Method
Week 5 (November 16/17)	DCF Technique II: Adjusted Present Value (APV) Method Discussion of <i>"Hansson Private Label, Inc."</i>
No class on Nov. 23/24 (Thanks giving break)	
Week 6 $(Nov 30/Dec 1)$	WACC Method vs. APV Method Multiples Valuation

Week 7Discussion of "JetBlue Airways IPO Valuation"(December 7/8)Discussion of the final exam

Important Dates:

- Case 1: Due by 11:59pm on November 8 (Tuesday)
- Case 2: Due by 11:59pm on November 15 (Tuesday)
- Case 3: Due by 11:59pm on December 6 (Tuesday)
- Final Exam: December 14 & 15 (Wed & Thu)
- Quizzes/Assignments: expect some form of assessment every week.

Appendix: Miscellaneous Information

Accessibility Statement

The C. T. Bauer College of Business would like to help students who have disabilities achieve their highest potential. To this end, in order to receive academic accommodations, students must register with the Justin Dart, Jr. Student Accessibility Center and present approved accommodation documentation to their instructors in a timely manner.

Academic Misconduct

The University of Houston's Academic Honesty Policy is strictly enforced by the Bauer College and by this professor. A discussion of the policy is included in the UH Student Handbook, http://www.uh.edu/dos/studenthandbook. It is your responsibility to fully understand and comply with all principles contained within this Handbook. Please make sure you understand this policy and, in particular, the meaning of plagiarism.

The following are clear examples of academic misconduct:

- Obtaining answer keys, spreadsheets or reports from outside sources, friends, or from other teams while working on case study assignments.
- Discussing test questions and answers with other students before the test is due.
- Copying others' answers or helping others to copy your answers.

Always check with me if you are unsure whether your actions qualify as academic misconduct.