



Professor	Greg Hallman
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Office Hours	Monday & Wednesday 10 - 11 (after class)
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Course Web Page	via Canvas
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Course Objectives

This course covers business valuation. The goal of the course is to provide students with practical tools and methods to value a business. While the course is designed first and foremost to be very practical, the tools and methods covered in this course are presented in the framework of generally accepted financial theory.

The course starts with a broad overview and discussion of valuation techniques. There are a number of different ways to try and determine the value of an asset, and it is almost always good practice to use more than one valuation method. Following the overview of valuation techniques, we start with methods for calculating the discount rate used in cash flow valuation methods. Our discount rate discussion involves determining the firm's cost of capital – both debt and equity capital – and the effect of leverage (debt) on the firm's cost of equity and the firm's overall cost of capital. Following our discount rate discussion we cover valuation effects of a firm's capital structure.

After our discount rate and capital structure classes we start coverage of cash flow valuation techniques used to value businesses and equity. We start with the discounted cash flow method (DCF), which is the most widely used cash flow valuation method. DCF valuation models are well-suited for sensitivity analysis, and we will cover methods for modeling the effects of varying material inputs of the DCF model. Cash flow valuation methods include many uncertain inputs, and sensitivity analysis help reveal the effects of varying the major inputs of the valuation. I will go through a detailed DCF example in class, and students will perform a valuation and sensitivity analysis on a company of their choosing as one of the major assignments of the course. Following the DCF work we will cover two additional cash flow valuation methods, the Adjusted Present Value method (APV) and the Capital Cash Flow method (CCF), and work a Harvard Business School (HBS) case covering the DCF, APV, and CCF methods. After our coverage of cash flow valuation methods, we will cover the use of relative valuation multiples (e.g., EV/EBITDA, P/E) and students will use comparable companies and valuation multiples in determining firm and equity value for the firm valued in the DCF exercise. We will also work another Harvard case, Boston Beer, which will give students the opportunity to see how an IPO is priced using primarily comparable companies and their valuation multiples.

After spending extensive time on the basic valuation methods of DCF and Comparable companies, we will conclude our business valuation work with a discussion of valuation methods in a private context, including a look at Private Equity (PE), Venture Capital (VC), control premiums and liquidity discounts, and valuation in both Leveraged Buyout (LBO) and Mergers and Acquisitions (M&A) contexts.

Finally, the course concludes with an example of no-arbitrage pricing in financial asset markets. Using a binomial framework we will price a call option and look at the trading opportunities afforded by mispriced options. No-arbitrage pricing is a powerful tool for deriving the value of financial assets and can be used as a guide for the value of any asset. Our DCF and comparables valuations can produce reasonable and defensible estimates of value, but no-arbitrage pricing in financial markets shows the potential of trading in mispriced assets.

Materials

Required Text (available at the Co-op)

Valuation: The Art & Science of Corporate Investment Decisions, by Sheridan Titman and John Martin, Prentice Hall, 2 edition, 2010.

Required HBS Case material – link = <https://cb.hbsp.harvard.edu/cbmp/access/38574841>

An Introduction to Cash Flow Valuation Methods – HBS Note #9-295-155

Sampa Video, Inc. – HBS Case #9-201-094

Boston Beer – HBS Case #196138-PDF-ENG

Optional Text (available online at Amazon and other sites)

Jonathan Berk and Peter DeMarzo: Corporate Finance. Pearson, Addison Wesley, 3rd edition.

Course Deliverables and Grading

Your grade in the course will be determined by the following deliverables and weights:

	<u>Points</u>
Discount Rate problem set	10
DCF Valuation	15
Bloomberg trading center exercise	5
Comps Valuation	10
HBS Sampa Case	5
HBS Boston Beer Case	5
Final Exam	<u>50</u>
	<u>100</u>

Make-up and extra-credit assignments are generally not possible. Your grade will be determined solely by the components listed above. Regarding class attendance, because there are only 13 meetings (+ the out-of-class Bloomberg assignment), if you miss four or more classes I reserve the right to fail you so that you can take the class at a later date when it might be more convenient for you.

McCombs Classroom Professionalism Policy

The highest professional standards are expected of all members of the McCombs community. The collective class reputation and the value of the Texas MBA/MPA experience hinges on this.

Faculty are expected to be professional and prepared to deliver value for each and every class session. Students are expected to be professional in all respects.

The Texas MBA/MPA classroom experience is enhanced when:

- **Students arrive on time.** On time arrival ensures that classes are able to start and finish at the scheduled time. On time arrival shows respect for both fellow students and faculty and it enhances learning by reducing avoidable distractions.
- **Students display their name cards.** This permits fellow students and faculty to learn names, enhancing opportunities for community building and evaluation of in-class contributions.
- **Students minimize unscheduled personal breaks.** The learning environment improves when disruptions are limited.
- **Students are fully prepared for each class.** Much of the learning in the Texas MBA/MPA program takes place during classroom discussions. When students are not prepared they cannot contribute to the overall learning process. This affects not only the individual, but their peers who count on them, as well.
- **Students attend the class section to which they are registered.** Learning is enhanced when class sizes are optimized. Limits are set to ensure a quality experience. When section hopping takes place some classes become too large and it becomes difficult to contribute. When they are too small, the breadth of experience and opinion suffers.
- **Students respect the views and opinions of their colleagues.** Disagreement and debate are encouraged. Intolerance for the views of others is unacceptable.
- **Laptops are closed and put away.** When students are surfing the web, responding to e-mail, instant messaging each other, and otherwise not devoting their full attention to the topic at hand they are doing themselves and their peers a major disservice. Those around them face additional distraction. Fellow students cannot benefit from the insights of the students who are not engaged. Faculty office hours are spent going over class material with students who chose not to pay attention, rather than truly adding value by helping students who want a better understanding of the material or want to explore the issues in more depth. Students with real needs may not be able to obtain adequate help if faculty time is spent repeating what was said in class. There are often cases where learning is enhanced by the use of laptops in class. Faculty will let you know when it is appropriate to use them. In such cases, professional behavior is exhibited when misuse does not take place.
- **Phones and wireless devices are turned off.** We've all heard the annoying ringing in the middle of a meeting. Not only is it not professional, it cuts off the flow of discussion when the search for the offender begins. When a true need to communicate with someone outside of class exists (e.g., for some medical need) please inform the professor prior to class.

Academic Dishonesty

I have no tolerance for acts of academic dishonesty. Such acts damage the reputation of the school and the degree and demean the honest efforts of the majority of students. The minimum penalty for an act of academic dishonesty will be a zero for that assignment or exam.

The responsibilities for both students and faculty with regard to the Honor System are described on <http://mba.mcombs.utexas.edu/students/academics/honor/index.asp>. As the instructor for this course, I agree to observe all the faculty responsibilities described therein. If the application of the Honor System to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification.

As specific guidance regarding collaboration for this course, it is allowed and in many cases encouraged, on everything except for the final exam. You can work the assignments in this course by yourself or in pairs. If you decide to work by yourself you can certainly ask your classmates for input on any issues you're thinking about. I want the final product to be your work (or your pair's work) but you're welcome to get input from classmates. For the valuation assignment using both DCF and then a comps and multiples approach, **I do not want you to read professional analyst reports until you have completely finished your own valuation work.** The tough part of this business is coming up with defensible inputs and you will cheat yourself out of a lot of the value of these assignments if you read too many professionals and just go along with them. You can look at what the professional analysts think **after** you've come up with your own projections and numbers, but not at all before.

Students with Disabilities

Upon request, the University of Texas at Austin provides appropriate academic accommodations for qualified students with disabilities. Services for Students with Disabilities (SSD) is housed in the Office of the Dean of Students, located on the fourth floor of the Student Services Building. Information on how to register, downloadable forms, including guidelines for documentation, accommodation request letters, and releases of information are available online at <http://deanofstudents.utexas.edu/ssd/index.php>. Please do not hesitate to contact SSD at (512) 471-6259, VP: (512) 232-2937 or via e-mail if you have any questions.

 FIN 286 – Valuation – Hallman – Fall.1 2015 Schedule

day	date	class	Topic	material
Wed	19-Aug	1	Introduction and Discussion of Valuation Techniques - Discounted Cash Flow (DCF), Trading and Transaction Comparables and Multiples, Cost Approach	
Fri	21-Aug	2	Calculating the Discount Rate - The CAPM, The CAPM with Size, Fama-French 3 factor model, the cost of debt, WACC, calculating and unlevering and re-levering beta, adjusting for international risk	Titman & Martin, C4
Mon	24-Aug	3	Finish Discount rate discussion, beta regression calculation example. assign discount rate problem set, due Friday Aug 28	
Wed	26-Aug	4	Capital Structure and Financial Leverage - Effects of Capital Structure on Value: M&M, Tax Effects and Costs of Financial Distress	Berk & DeMarzo, C's 14, 15 & 16
Mon	31-Aug	5	Valuing a Company with the DCF method – in-class example valuation of Campbell's Soup assign DCF Valuation problem set, due Wed, Sept 9	Titman & Martin, C's 2, 3, 6 & 9
Wed	2-Sep	6	DCF Sensitivity Analysis including scenario analysis, break-even, and Monte-Carlo simulation with @Risk.	Titman & Martin, C's 2, 3, 6 & 9
Mon	7-Sep		LABOR DAY – NO CLASS	
Wed	9-Sep	7	A broader look at cash flow valuation and keeping track of the tax shield from debt: Capital Cash Flows, Firm Cash Flows, Equity Cash Flows, WACC, and the APV DCF valuation DUE assign Sampa Video case for in-class Monday, Sept 14	HBS Ruback CCF paper
Mon	14-Sep	8	HBS APV Valuation Case - Sampa Video Case answers to Sampa questions due at the end of class; we (you) will work the answers out on the board in class	Sampa Video
Wed	16-Sep	9	Valuing a company with comparables and multiples, including Campbell's comp example with comparison back to DCF results hand-out Bloomberg trading center assignment, and Comps Valuation assignment : both DUE Monday, Sept 28 Discuss Boston Beer case for Monday	Titman & Martin C8

<i>day</i>	<i>date</i>	<i>class</i>	<i>Topic</i>	<i>material</i>
Mon	21-Sep	10	HBS case – Boston Beer: Valuing the IPO shares of Boston Beer with comps and multiples (Red Hook & Pete’s Wicked) <i>Case answers to Boston Beer questions due at end of class; I will lead discussion and call on people for case answers</i>	Boston Beer
Wed	23-Sep	11	Additional Topics - Control Premiums & Liquidity Discounts, valuing LBOs and M&A transactions, earnings accretion and dilution in M&A transactions <i>Hand out presentation description (if not before)</i>	Titman & Martin, C's 7 & 10
Mon	28-Sep	12	Selected student valuation presentations – All students will be prepared to give a short 5-10 minute presentation on their valuations using both DCF and comps and argue a final answer for value. Students and professors in the audience will be encouraged to ask questions. <i>Comps Valuation write-up and Bloomberg lab exercise DUE</i>	
Wed	30-Sept	13	The valuation of options and a close look at no-arbitrage pricing in a binomial option framework.	Berk & DeMarzo, C's 20 & 21
	TBD		FINAL EXAM	