# FNCE 728: Corporate Valuation Fall 2015

Professor David Wessels

Department of Finance, the Wharton School

This course will focus on the financial analysis and valuation of companies. The course will be segmented into four major sections.

- During the first few weeks of class, we will discuss the drivers of corporate value, specifically
  return on investment and organic revenue growth. We will examine how the world's most
  valuable companies have created value, and how they have protected their competitive position
  (the key to high value). We will next outline the most common methods of corporate valuation:
  enterprise DCF, economic profit models, and multiples.
- The second section will cover financial analysis using the 10-K. We start with the traditional DuPont Formula and next move to current metrics such as return on invested capital (ROIC) and economic profit (EP). Our primary goal will be to build a clean understanding of operating performance across business units and for the entire company. We will document selected accounting issues that affect our perception of financial performance, free cash flow, and risk. We will cover issues related to off-balance sheet financing, retirement obligations, and deferred taxes. We also examine similar issues related to revenue growth, such as how to separate accounting affects from true organic growth. We conclude the section by deriving non-financial key performance indicators (such as retail basket size and aircraft turnaround time) and discuss their linkage to financial ratios.
- In the final section, we build an integrated valuation model using enterprise DCF. The section starts with the fundamentals of forecasting, how to determine the appropriate forecast period, and issues related to continuing value. We next move to issues related to discounting. We will discuss alternative methods of discounting, such as the weighted average cost of capital (WACC), adjusted present value (APV), capital cash flow, and equity valuation methodologies. The section will cover each component of the cost of capital (the cost of equity and the cost of debt) in detail.

#### **Reading Material**

The course will rely on a textbook and a few supplemental readings (which can be found on canvas).

The textbook can be purchased in the campus bookstore or on Amazon.com:

Valuation: Measuring and Managing the Value of Companies (6<sup>th</sup> edition) by Koller,
 Goedhart, and Wessels, 2015, John Wiley & Sons, Inc, NY.

Lecture notes will be distributed in class and will also be available on canvas.

#### **In-Class Requirements**

Please bring three items to EVERY class: <u>your name tent</u>, the <u>previous lecture's notes</u>, and a <u>basic</u> <u>calculator</u>. As the semester progresses, please remain diligent. I tend to be relentless with those who come to class empty-handed!

#### **Assignments & Grading**

There will be two individual assignments (15%), two group projects (25% total), and a final exam (60% each). For individual assignments, I expect you to work alone and hand in your own work. You can discuss class tools, but not the assignment. For group work, please self-select groups of between 3-5 people, no exceptions. If you have six people, create two groups of three.

Class participation will not formally be scored, <u>but students at the grading cutoffs</u> will be evaluated for their ability to generate an active and positive class environment. The assignment/exam due dates and grading breakdown will be as follows:

	Assignment/Exam	Due Date	Grade
1	Individual Assignment: Nucor Steel	9/28	5%
2	Group Project: Financial Analysis	10/19	10%
	Midterm	11/2	30%
3	Individual Assignment: ROIC	11/16	5%
4	Group Project: Enterprise Valuation	12/7	10%
	Comprehensive Final	TBD	40%

#### **Teaching Assistants & Office Hours**

The teaching assistants for the course will be Ajay Jagannath <a href="mailto:ajayj@wharton.upenn.edu">ajayj@wharton.upenn.edu</a> and Tanvi Rai <a href="mailto:tanvirai@wharton.upenn.edu">tanvirai@wharton.upenn.edu</a>. The TAs will announce office hours on canvas.

If you have a question about class examples OR assignments, please use them as your primary resource. As a general policy, I do not answer questions about the assignments! If you have questions about the course material, please come to me. I will be holding office hours from 1-2:30pm on Mondays and by appointment.

#### **Academic Integrity.**

I expect you to follow Penn's code of academic integrity when completing problem sets, group work, and exams. Allegations of impropriety should be brought directly to me, which in turn will be referred to the University Honor Council. For more, see:

http://www.upenn.edu/academicintegrity/ai codeofacademicintegrity.html

## **Corporate Valuation**

### **Course Schedule**

Section	Class	Date	Notes		Reading
Section 1:	1	8/31/2015	1	Key Value Drivers	Chapters 2, 6 & 7
Core Valuation -			2	Valuation using ROIC & Economic Profit	
Techniques	2	9/21/2015	3	Enterprise DCF Valuation	Chapters 8, 14
			4	Moving from Enterprise Value to Equity	
	3	9/28/2015	5	Valuation using Multiples	Chapter 16
			6	Choosing the Right Multiple	
Section 2:	4	9/29/2015	7	Financial Analysis: Revenue Growth	Chapter 10
Financial Analysis -			8	Financial Analysis: Profitability & Capital	
Allalysis	5	10/5/2015	9	Reorganizing: Invested Capital	Chapter 9
			10	Reorganizing: NOPLAT & Operating Taxes	
	6	10/19/2015	11	Advanced Financial Analysis: Leases	Chapter 20
			12	Advanced Financial Analysis: Pensions	
	7	11/2/2015	n/a	Midterm	
	8	11/9/2015	13	Advanced Financial Analysis: Taxes	Chapter 18
			14	Key Performance Indicators	
Section 3:	9	11/16/2015	15	Enterprise DCF	Chapter 11
Building the Model			16	Proforma Forecasting	
iviouei	10	11/23/2015	17	Continuing Value	Chapter 12
			18	The Cost of Capital	
	11	11/30/2015	19	The Cost of Debt	Chapter 13
			20	The Cost of Equity	
	12	12/7/2015	n/a	Final Presentations	Chapter 15
		TBD	n/a	Final Exam	