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|  | **Course Title: FBE 529: FINANCIAL ANALYSIS AND VALUATION** |
| **Syllabus for Fall 2016** |
| **Professor: Lloyd Levitin**  |
| **Office Phone: 310-740-6524****Office Location: HOH 211** |
| **E-mail: levitin@marshall.usc.edu** |
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Classes Held: Tuesdays 6:30 – 9:30 P.M.

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| Office Hours: Tuesdays and Thursdays 3:00-4:00 P.M. |
| Location: | JKP 210 |
| Teaching Assistant | Qiaoqi Zhou  |

**I. COURSE OBJECTIVE**

Understanding what determines the value of a firm and how to estimate that value is a prerequisite for making rational business decisions. Entire industries (investment banking, securities analysis, and consulting) have grown prosperous providing valuation skills to investors and managers. The objective of this course is to provide you with a competent foundation in various valuation approaches, with an emphasis on the “best practices.” We cover discounted cash flow models, market multiple models, as well as specialized models used for M&A transactions and LBOs. We focus on valuation of businesses at the divisional and corporate levels. The course emphasizes practical and “real world” applications of valuation methodologies.

**II. LEARNING OBJECTIVES**

By the end of the course, students should be able to:

* Perform a valuation for any public or private company.
* See clearly how industry fundamentals and competitive forces directly impact financial results and, in the process, drive stock valuation.
* Assess whether a company is creating value for its shareholders.
* Pull apart the financial statements to get at the relevant information for valuing equities.
* Identify “red flags” that indicate manipulation of financial statements and/or an impending liquidity crisis.
* Evaluate the reports of business valuation experts and to be able to ask the “right” questions of these experts.

**III. WHO SHOULD TAKE THE COURSE**

The course is of interest to those contemplating careers in investment banking, security analysis, consulting, private equity, and corporate finance. And it will also help with personal investing.

**IV. PREREQUISITE KNOWLEDGE**

This course assumes that the background knowledge of students includes basic finance and accounting. Prerequisites are one from GSBA 521 or GSBA 521b or GSBA 548.

**V. TEACHING METHODS**

The course will be in the form of lectures, class discussions, practice problems and a team project. During class, we will not have time to discuss all the material covered in the assigned text readings. Class time will be spent deepening our understanding of the major topics in the chapter, clarifying points of possible confusion, and working out exercises and problems. It is your responsibility to read the assigned material whether it is covered in class or not.

**VI. ABOUT YOUR INSTRUCTOR**

Lloyd Levitin is a Professor of Clinical Finance and Business Economics at Marshall. He was Executive Vice President and CFO of Pacific Enterprises from 1982-1995 (now Sempra Energy), and was actively involved in the firm’s diversification program which included numerous acquisitions. He testified as an expert on utility diversification to the Senate Finance Committee of the U.S. Congress and has been a consultant for JurEcon, Inc., a nationwide consulting and research firm for management and counsel. He has a MBA from Wharton and a JD from University of San Francisco. He practiced as a CPA after receiving his MBA, and as an attorney after receiving his JD.

**VII. VALUATION REQUIRES A SKILL SET THAT COMBINES BOTH ART AND SCIENCE**

Various valuation models and formulae will be taught in this class. Learning how to plug numbers into models and formulae to produce a valuation answer is the easy part. The quality that separates winners from losers in the world of valuation is the ability to decide which information to use under the circumstances and what assumptions to make that become inputs to the models and formulae. In other words, one has to exercise good judgment to be a winner. This course will sharpen your skills in making these judgments.

The instructor will provide cases from his business career and his knowledge of valuation successes and failures of others to help students sharpen their ability to improve decision making. In the financial world, judgment is the quality that can make the difference between success and failure in one’s career.

**VIII. REQUIRED COURSE MATERIALS**

1. Textbook: Valuation (6th ed.) by Koller, Goedhart, and Wessels, 2015, John Wiley & Sons.
2. PowerPoint presentations to be posted to Blackboard.
3. Financial calculator capable of performing discounted cash flows (please bring calculator to each class).

**IX. GRADING SUMMARY**

|  |  |
| --- | --- |
|  | **% of Grade** |
|  |  |
| Quiz 1 | 10% |
| Quiz 2 | 10% |
| Quiz 3 | 10% |
| Final Exam |  30% |
| Group Project – Valuation of Home DepotPeer Evaluation |  20% 10% |
| Class Participation |  10% |
|  |  |
| **TOTAL** |  100% |

Final grades represent how you perform in the class relative to other students. Your grade will not be based on a mandated target, but on your performance. Three items are considered when assigning final grades:

1. Your average weighted score as a percentage of the available points for all assignments (the points you receive divided by the number of points possible).
2. The overall average percentage score within the class.
3. Your ranking among all students in the class.

**Quizzes and Final Exam**

Quizzes and Final exam will be closed-notes, closed book. If you are unable to take a Quiz, the following rules apply:

1. If you fail to inform me in writing before the Quiz begins, you will receive a zero grade, even if you have a valid excuse. An exception will be made if you have a note from your doctor that you were unable to communicate your excuse.
2. If you inform me in writing before the Quiz begins, and you have an acceptable excuse, then the final exam will count for 40% of your grade.
3. If you have an acceptable excuse for missing two of the scheduled quizzes, the final exam will count for 50% of your grade.
4. If you have an acceptable excuse for missing all 3 quizzes, the final exam will count for 60% of your grade.

There will be no make-up quizzes if you miss one.

You should bring a calculator to perform calculations. The final exam is similar to the quizzes in format, but cumulative in coverage.

**Group Project**

Valuation of Home Depot (20% of your grade). Students will divide themselves into teams of 4-6 students each by August 30. Any student who cannot find a team should inform my TA by August 30. The requirements for this group assignment are set forth on page 9 of this syllabus. The due date is November 29.

**Peer Evaluation on Group Project (10% of your grade)**

Group Projects provide a valuable learning experience – how to work effectively and efficiently in groups (a common practice in Corporate America), learning from others, and sharpening a student’s ability to communicate to others. However, human nature being what it is, some students are tempted to relax and let others carry their load. In order to provide an incentive for all students to make maximum contributions to the team project, students will be asked to grade each team member’s contributions on a 10-point scale.

This evaluation is to be submitted by email to the Instructor before the last day of classes. No form will be provided. Simply list each person on the team and your score for the student. *Any team member who does not email his (her) evaluation of team members by November 29 will be deemed to have given a 10-point score to each member of the team.*

**Homework Problems**

Problems contained in PowerPoint slides. PowerPoint presentations will be given in each class session. PowerPoint presentations may include practice problems either to be worked out and discussed in class, or for homework and discussed in the next class. Solutions to homework problems are not to be handed in, but students must be prepared to discuss their solutions.

Problems contained in text at end of the assigned reading. In addition, the weekly assignment contains readings in the text and Review Questions which appear at the end of the assigned reading. Students will be called upon to provide answers to these questions.

**Class Participation (10% of your grade)**

Attendance and participation are essential for success in this course.

You may earn up to 10 points for class participation (i.e., 10% of your final grade). Each of you will be awarded these 10 points on the first day of class. Your objective will be to keep these 10 points throughout the semester. *This requires attendance at classes and your being well-prepared to answer assigned questions and to provide solutions to homework problems..*

Attendance will be taken during each class. There are 14 classes scheduled for the semester. You may miss two classes without penalty. However, for each additional class that you miss, one point will be deducted from your class participation grade. In effect, you have two excused absences. Additional absences will reduce your grade.

To help me out, you should bring a name card and place it on the desk in front of you. Failure to do so may result in your not receiving credit for participation.

**X. ACADEMIC INTEGRITY**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own. All students are expected to understand and abide by these principles. *SCampus*, the Student Guidebook, ([www.usc.edu/scampus](http://www.usc.edu/scampus) or <http://scampus.usc.edu>) contains the University Student Conduct Code (see University Governance, Section 11.00), while the recommended sanctions are located in Appendix A.

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/> . Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

**XI. STUDENT DISABILITY**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to be as early in the semester as possible. DSP is located in STU 301 and is open 8:30 AM to 5:00 PM, Monday through Friday. The phone number for DSP is (213) 740-0776. For more information visit [www.usc.edu/disability](http://www.usc.edu/disability).

**XII. TECHNOLOGY POLICY**

Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the professor. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. ANY e-devices (cell phones, PDAs, iPhones, Blackberries, other texting devices, laptops, iPods) must be completely turned off during class time. Videotaping faculty lectures is not permitted, due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded material is reserved exclusively for USC students registered in this class.

**XIII. ADD/DROP PROCESS**

If you are absent for the two classes prior to September 3, I may drop you from the class by that date. These policies maintain professionalism and ensure a system that is fair to all students.

**XIV. RETENTION OF GRADED COURSEWORK**

Final exams and all other graded work which affected the course grade will be retained for one year after the end of the course ***if*** the graded work has not been returned to the student (i.e., if I returned a graded paper to you, it is your responsibility to file it, not mine).

**XV. EMERGENCY PREPAREDNESS/COURSE CONTINUITY**

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.

Please activate your course in Blackboard with access to the course syllabus. Whether or not you use Blackboard regularly, these preparations will be crucial in an emergency. USC's Blackboard learning management system and support information is available at [blackboard.usc.edu](http://blackboard.usc.edu/).

**XVI. CLASS NOTES POLICY**

Notes or recordings made by students based on a university class or lecture may only be made for purposes of individual or group study, or for other non-commercial purposes that reasonably arise from the student’s membership in the class or attendance at the university. This restriction also applies to any information distributed, disseminated or in any way displayed for use in relationship to the class, whether obtained in class, via email or otherwise on the Internet, or via any other medium. Actions in violation of this policy constitute a violation of the Student Conduct Code, and may subject an individual or entity to university discipline and/or legal proceedings.

*Policy approved by Lloyd Armstrong, Jr., Provost and Senior Vice President for Academic Affairs, on January 26, 2000.*

**XVII. OCTOBER 11 CLASS**

The class scheduled for October 11 will not be held.

**XVIII. CLASS SCHEDULE AND ASSIGNMENTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **DATE** | **TOPIC** | **ASSIGNMENT** |
| **Valuation Concepts** | Aug 23 | Introduction and Key Valuation Concepts | Text: Chapter 1 and Questions 1-7; Chapter 2 and Questions 1-5 |
| Aug 30 | Key Valuation Concepts - continued | Text: Chapter 3 and Questions 1-7; Chapter 4 and Questions 1-9 |
| Sep 6 | Return on Invested Capital (ROIC) | Text: Chapter 5 and Questions 1-14; Chapter 6 and Questions 1-8 |
| Sep 13 | Analyzing Growth; Industry and Company Analysis | Text: Chapter 7 and Questions 1-8 |
| **DCF Models** | Sep 20 | Introduction to Enterprise DCF ModelQuiz 1 | Text: Chapter 8, pages 137-152 and Questions 1-4; Chapter 9 and Questions 1-6 |
| Sep 27 | Analyzing Performance | Chapter 10 and Questions 1-6 |
| Oct 4 | Forecasting Performance and Terminal Value | Text: Chapter 11 and Questions 1-6; Chapter 12 and Questions 1-6 |
| Oct 18 | Cost of Capital Quiz 2 | Text: Chapter 13 and Questions 1-4 and 7 |
| Oct 25 | Valuation Calculations;Analyzing Results;Other DCF Models | Text: Chapter 14 and Questions 1, 2, 3, 5, 6 Chapter 15 and Questions 1-4Chapter 8, pages 152-166 and Questions 5-8 |
| **Market Multiples** | Nov 1 | Using Multiples;Valuation By Parts | Text: Chapter 16 and Questions 1-9Text: Chapter 17 and Questions 1-8 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **DATE** | **TOPIC** | **ASSIGNMENT** |
| **Applications of Valuation Methods** | Nov 8 | Mergers and Acquisitions; including LBOs | Text: Chapter 27 and Questions 1-8 |
| Nov 15 | Restructuring;Valuation of Private Company Quiz 3 | Text: Chapter 28 and Questions 1-8 |
| Nov 22 | Valuation of High Growth Companies, Valuation of Venture Capital | Chapter 32 and Questions 1-7 |
| **Review** | Nov 29 | Review, including Practice Problems | HD Project Due |
| **Final Exam** | Dec 13 | 7-9:00 PM |  |

1. **HOME DEPOT (HD) VALUATION PROJECT - Due Date November 29, 2016**

The group project counts for 20% of your grade. The group project is to prepare a valuation report on Home Depot. The purpose of the project is for you to apply what you have learned in class, including how to analyze the financial performance of a company, and how to value it applying the valuation techniques presented in the course. The completed valuation report is to include the following sections:

Table of Contents

1. Summary and Investment Conclusion
2. Capsule description of the company
3. Recommendation (buy, hold, or sell). Explain your reasoning for your recommendation (there is no right answer)
4. Industry and Company Analysis
5. Company description
6. Industry analysis
7. Competitive analysis
8. Historical financial performance past 3-5 years
9. Include ROE, ROIC, EBIT margin, revenue growth, ratios of operating working capital to revenues, depreciation and cap exp to revenues, debt/capital, and debt/EBITDA.
10. Valuation
11. DCF Valuation based on FCF/WACC Model. You may use the DCF template posted to Blackboard. Support the DCF valuation by completing Table 1 attached.
12. Market comparables valuations:
13. Discuss the comparables chosen and rationale for inclusion
14. Complete Tables 2-6 attached
15. Discuss your rationale for the weights you provided for each multiple (see Tables 5 & 6)
16. Valuation Range and comparison to current stock price
17. Statement of Conclusions

Table 1

HOME DEPOT

 Historical

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | FYE2012 | FYE 2013 | FYE2014 | FYE2015 | FYE2016 | Used forFYE 2017 |
| Revenue |  |  |  |  |  |  |
| Revenue Growth |  |  |  |  |  |  |
| EBIT Margin |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Depr/Revenues |  |  |  |  |  |  |
| Cap exp/Revenues |  |  |  |  |  |  |
| W/C as % of Change in Revenues |  |  |  |  |  |  |
| W/C as % of Revenues  |  |  |  |  |  |  |

Table 2

 Publicly Traded Companies(1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** |
|  Stock price (current) |  |  |  |  |  |
|  # of shares |  |  |  |  |  |
| = Mkt. Value Equity |  |  |  |  |  |
| + Interest bearing debt |  |  |  |  |  |
| + Noncontrolling interest |  |  |  |  |  |
| – Nonoperating assets  |  |  |  |  |  |
| = Enterprise Value |  |  |  |  |  |

(1)Include at least 5

Table 3

EQUITY MULTIPLE CALCULATIONS

|  |  |  |  |
| --- | --- | --- | --- |
|  | Publicly Traded Comparables(1) |  | Stats(2) |
|  | A | B | C | D | E |  | Med | Mean |
| 1. Mkt. Value Equity (MVE) |  |  |  |  |  |  |  |  |
| 2. # Shares |  |  |  |  |  |  |  |  |
| 3. Price per share |  |  |  |  |  |  |  |  |
| 4. 2015 EPS(1) |  |  |  |  |  |  |  |  |
| 5. 2016 Proj. EPS(2) |  |  |  |  |  |  |  |  |
| 6. 2017 Proj. EPS |  |  |  |  |  |  |  |  |
| 7. 5-year Ave. EPS (2011-2015) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 8. Price per share/2015 EPS |  |  |  |  |  |  |  |  |
| 9. Price per share/2016 proj EPS |  |  |  |  |  |  |  |  |
| 10. Price per share/2017 proj EPS |  |  |  |  |  |  |  |  |
| 11. Price per share/5yr Ave. EPS |  |  |  |  |  |  |  |  |

(1)5 comps shown. This is minimum # to use.

(2)Only show stats for multiple calculations (lines 8-11)

(1)2015 EPS is the EPS for fiscal year ending 1/31/16

(2)2016 projected EPS is for fiscal year ending 1/31/17

Table 4

ENTERPRISE MULTIPLE CALCULATIONS

|  |  |  |  |
| --- | --- | --- | --- |
|  | Publicly Traded Comparables(1) |  | Stats(2) |
|  | A | B | C | D | E |  | Med | Mean |
| 1. Enterprise Value (EV) |  |  |  |  |  |  |  |  |
| 2. 2015 Sales |  |  |  |  |  |  |  |  |
| 3. 2016 Proj. Sales |  |  |  |  |  |  |  |  |
| 4. 5-year Ave. Sales (2011-2015) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 5. EV/2015 Sales |  |  |  |  |  |  |  |  |
| 6. EV/2016 proj Sales |  |  |  |  |  |  |  |  |
| 7. EV/5-year Ave. Sales |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 8. 2015 EBITDA |  |  |  |  |  |  |  |  |
| 9. 2016 Proj. EBITDA |  |  |  |  |  |  |  |  |
| 10. 5-year Ave. EBITDA |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 11. EV/2015 EBITDA |  |  |  |  |  |  |  |  |
| 12. EV/proj 2016 EBITDA |  |  |  |  |  |  |  |  |
| 13. EV/5-year Ave. EBITDA |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 14. 2015 EBIT |  |  |  |  |  |  |  |  |
| 15. 2016 Proj. EBIT |  |  |  |  |  |  |  |  |
| 16. 5-year Ave. EBIT |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 17. EV/2015 EBIT |  |  |  |  |  |  |  |  |
| 18. EV/2016 EBIT |  |  |  |  |  |  |  |  |
| 19. EV/5-year Ave. EBIT |  |  |  |  |  |  |  |  |

(1)5 are shown. This is minimum # to use.

(2)Only show stats for multiple calculations (lines 5, 6, 7, 11, 12, 13, 17, 18, 19)

Table 5

HD Valuation Based on Equity Multiples

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Selected PricingMultiple | Median Multiple(1) | HD’s Statistic(2) | Indicated Value | Multiple Weight | Weighted Value(3) |
| 1. Price per share/2015 EPS |  |  |  |  |  |
|  |  |  |  |  |  |
| 2. Price per share/proj 2016 EPS |  |  |  |  |  |
|  |  |  |  |  |  |
| 3. Price per share/proj 2017 EPS |  |  |  |  |  |
|  |  |  |  |  |  |
| 4. Price per share/5-year Ave. EPS |  |  |  |  |  |
|  |  |  |  |  |  |
| HD’s Indicated Value |  |  |  | 100% |  |

(1)From Table 3.

(2)Use 2015 EPS for line 1; proj 2016 EPS for line 2; proj 2017 EPS for line 3; 5-year Ave. EPS for line 4.

(3)Column 3 x Column 4

Table 6

HD VALUATION BASED ON ENTERPRISE VALUE MULTIPLES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Selected PricingMultiple | MedianMultiple(1) | HD’SStatistic(2) | IndicatedValue | MultipleWeight | WeightedValue(3) |
| 1. EV/2015 Sales |  |  |  |  |  |
| 2. EV/proj 2016 Sales |  |  |  |  |  |
| 3. EV/5-year Ave. Sales |  |  |  |  |  |
|  |  |  |  |  |  |
| 4. EV/2015 EBITDA |  |  |  |  |  |
| 5. EV/ proj 2016 EBITDA |  |  |  |  |  |
| 6. EV/5-year Ave. EBITDA |  |  |  |  |  |
|  |  |  |  |  |  |
| 7. EV/2015 EBIT |  |  |  |  |  |
| 8. EV/ proj 2016 EBIT |  |  |  |  |  |
| 9. EV/5-year Ave. EBIT |  |  |  |  |  |
| HD’s indicated EV |  |  |  | 100% |  |
| Add Nonoperating Assets |  |  |  |  |  xx |
| Deduct Interest Bearing Debt |  |  |  |  |  (xx) |
| Deduct Noncontrolling Interest |  |  |  |  |  (xx) |
| HD’s Indicated Equity Value |  |  |  |  |  |
|  |  |  |  |  |  |

(1)From Table 4.

(2)Use 2015 Sales for line 1; proj 2016 Sales for line 2; 5-year Ave. Sales for line 3; 2015 EBITDA

 for line 4; proj 2016 EBITDA for line 5; 5-year AVE EBITDA for line 6; 2015 EBIT for line 7;

 proj 2016 EBIT for line 8; and 5-year Ave. EBIT for line 9.

(3)Column 3 x Column 4