

**UNIVERSITY OF SOUTHERN CALIFORNIA**  
**Marshall School of Business**  
**Fall 2007**  
**FBE 529 Monday, Wednesday Class**  
**Financial Analysis and Valuation**

Instructor: Lloyd Levitin  
Office: Accounting 301E  
Office Hours: Tues. 4:30-5:30 P.M.  
Mon., Wed. 1-2:00 P.M.  
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**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 give a general grounding in the valuation approaches used by successful practitioners. We cover discounted cash flow models, market multiple models which use comparables to obtain valuation estimates, residual income models, as well as specialized models used for M&A transactions, LBOs, and venture capital deals. The applications we cover include valuation of public and private companies, mergers and acquisitions, corporate restructurings, leveraged buyouts and venture capital deals. 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. The course will be in the form of lectures, discussions, and class problems.

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

- Value any publicly traded firm, small or large, healthy or troubled.
- Value a private firm for sale to another person or company, or for purposes of going public in an IPO
- Value a division of a firm for sale or purchase
- Value the synergy in an acquisition
- Understand the differences between intrinsic value and the publicly traded stock price
- Assess whether a company is creating value
- Pull apart the financial statements to get at the relevant information for valuing equities and to identify “red flags”

## **REQUIRED COURSE MATERIALS**

1. Textbook: “Equity Asset Valuation” by Stowe, Robinson, Pinto, McLeavey, by Wiley (2007)
2. Instructor’s Handouts and Lecture Slides to be posted to “Blackboard”.
3. Financial calculator capable of performing discounted cash flows (please bring calculator to each class)
4. Some basic knowledge of Excel

## **INSTRUCTOR’S HANDOUTS**

These handouts will be posted as they are available. Eventually, they will be published by the Instructor as a “Practical Guide To Valuation of Businesses.” The student will find material in these handouts that is not covered in the Stowe chapters, and vice versa. Further, terminology in the field of finance is not standardized and terms and symbols in formulas can vary by source.

### **List of Instructor’s Handouts**

1. Overview of Valuation
2. Understanding the Business
3. Discounted Cash Flow – Summary of Various Models
4. Discounted Cash Flow – Dividend Discount Model
5. Discounted Cash Flow – Enterprise Model
6. Discounted Cash Flow – Equity Cash Flow (Expanded Dividend) Model
7. Discounted Cash Flow – APV and Capital Cash Flow Models
8. Residual Income Models
9. Market Multiples
10. Mergers and Acquisitions
11. LBO’s and Leveraged Recapitalizations
12. Valuing Private Businesses
13. Asset Restructuring
14. Summary of Course

## **GRADING**

|  |             |
|--|-------------|
| Two Team Projects (written case analyses to be done in groups) | 30%         |
| Midterm  | 25%         |
| Final Exam   | 30%         |
| Class Participation (individual)                               | 5%          |
| Peer Evaluation (individual)                                   | <u>10%</u>  |
|  | <u>100%</u> |

## **TEAM PROJECTS**

There are two Team Projects. They are to be done in groups. The due dates, course weight, and the requirements for each are set forth in the attached **Topics, Readings and Assignments**. Groups can be of varying size, but not more than eight or less than four. If you have problems finding a group, you must let the teaching assistant know within 3 weeks before the first Team Project is due, and he will assign you to groups already formed, and notify the welcoming group.

Grades on the Team Projects and exams will be posted in Blackboard.

## **MIDTERM**

The midterm is worth 25% of the course grade. It will be open-book, open notes. Laptops or any hand-held device with email capabilities cannot be used in an exam. You should bring a calculator to perform calculations. If you are unable to take a midterm, the following rules apply:

- (1) If you fail to inform me in writing before the midterm 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 midterm begins, and you have an acceptable excuse, then at the instructor's discretion, either a make-up exam will be given, or the score you receive on the final exam will be doubled.
- (3) If you come to class to take the midterm, and then leave ill, you receive a grade based on work completed unless you provide a note from your doctor verifying the sudden illness.

## **FINAL EXAM**

A final examination will be held in the regularly-scheduled final exam period for this class. The exam will be open-book, open-notes. Laptops or any hand-held device with email capabilities cannot be used. You should bring a calculator to perform calculations. The final exam is worth 30% of the course grade and is cumulative from the beginning of the course.

## **CLASS PARTICIPATIONS**

Five percent of the course grade is awarded for class participation. This grade will reflect your attendance as well as my assessment of both the quantity and quality of the individual's contribution to class learning. Students will be asked to discuss solutions to the self-study problems assigned. A student called upon to discuss the assignment for the day, and is not present, or hasn't worked the problem, will suffer a reduction in the class participation grade. Students are encouraged to display their name card at all times to help me to get to know you.

## **PEER EVALUATION**

Study groups 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 study group, students will be asked to grade each team member's contributions on a 0 to 10 point scale. This evaluation is to be submitted by an email to the Instructor before the last day of classes. Any team member that does not email his (her) evaluation of team members will be deemed to have given a 10 point score to each member of the team.

## **LEARN BY DOING**

You learn by doing. Accordingly, seventeen self-study problems (SSP) and two Team Projects (TP) are assigned. The due dates are on the attached **Topics, Readings and Assignments**. The SSP are not to be turned in but the problems and solutions will be discussed in class, and prepared students can receive credit for class participation. The two Team Projects (to be done in groups) are to be handed in for grading. .

## **UNCLAIMED PAPERWORK**

Returned assignments unclaimed by a student will be discarded after two weeks, and hence, will not be available should a grade appeal be pursued by a student following receipt of his/her course grade.

## **EXTRA-CREDIT ASSIGNMENTS**

In fairness to other students, there will be no extra-credit assignments. Requests for extra-credit assignments to make up poor performance on a test will not be granted.

## **ACADEMIC INTEGRITY**

The use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work, is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tensions accompanying examinations. Where a clear violation has occurred, however, the Instructor may disqualify the student's work as unacceptable and assign a failing mark on the paper.

## **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.

## TOPICS, READINGS AND ASSIGNMENTS

| Session | Topics Discussed<br>In Class                                      | Readings             | Self-Study Problems or Team<br>Projects<br>(See attached for full<br>description of assignment) |
|---------|---|----------------------|---|
| 8/27    | Overview of Valuation   | Handout #1           |   |
| 8/29    | Overview of Valuation   | Text, Chapter 1      |   |
| 9/3     | HOLIDAY   |                      |   |
| 9/5     | Understanding the Business  | Handout #2           | SSP: Best Buy #1 and Bristol-Myers Squibb   |
| 9/10    | Understanding the Business  |                      |   |
| 9/12    | Understanding the Business  |                      |   |
| 9/17    | Understanding the Business  |                      | SSP: Best Buy #2  |
| 9/19    | Discounted Cash Flow – Summary of Various Models                  | Handout #3           |   |
| 9/24    | Discounted Cash Flow – Dividend Discount Model                    | Handout #4           |   |
| 9/26    | Discounted Cash Flow – Dividend Discount Model                    | Text, Chapter 2      | SSP: Text Ch. 2; Problems 3, 6, 14  |
| 10/1    | Discounted Cash Flow – Enterprise Model                           | Handout #5           |   |
| 10/3    | Discounted Cash Flow – Enterprise Model                           | Text, Chapter 3      | SSP: Text Ch. 3; Problems 5A, 7A, 12  |
| 10/8    | Discounted Cash Flow – Equity Cash Flow (Expanded Dividend) Model | Handout #6           | SSP: Text Ch. 3; Problem 7B   |
| 10/10   | Discounted Cash Flow – APV and Capital Cash Flow Models           | Handout #7           |   |
| 10/15   | MIDTERM   |                      |   |
| 10/17   | Residual Income Models  | Handout #8           |   |
| 10/22   | Residual Income Models  | Text, Chapter 5      | SSP: Text Ch. 5; Problems 6, 7 10, 19   |
| 10/24   | Market Multiples  | Handout #9           |   |
| 10/29   | Market Multiples  | Text, Chapter 4      | SSP: Text Ch 4; Problems 14B, C   |
| 10/31   | Market Multiples  | Text, Chapter 4      | SSP: Sears Holdings Corp  |
| 11/5    | Mergers and Acquisitions  | Handout #10          |   |
| 11/7    | Mergers and Acquisitions  |                      |   |
| 11/12   | Mergers and Acquisitions  |                      | TP #1 KMart-Sears Merger  |
| 11/14   | LBO's and Leveraged Recapitalizations                             | Handout #11          |   |
| 11/19   | LBO's and Leveraged Recapitalizations                             |                      |   |
| 11/21   | Valuing Private Businesses; Asset Restructuring                   | Handouts #12 and #13 |   |
| 11/26   | Team Project Presentation   |                      | TP #2   |
| 11/28   | Team Project Presentation   |                      | TP #2   |
| 12/3    | Team Project Presentation   |                      | TP #2   |
| 12/5    | Team Project Presentation   |                      | TP #2   |
| 12/14   | FINAL EXAM  | 2-4:00 P.M.          |   |

## **Best Buy (BBY) #1 and Bristol-Myers Squibb (BMY) – Due 9/5**

Using the constant-growth value equation provided in Handout #1, Value Best Buy and Bristol-Myers Squibb, as of today. Vary your inputs as to ROE, long-term growth and cost of equity to familiarize yourself as to the sensitivity of those variables on the resulting value. Value Line (see reference on page 10) maybe of help. Compare your answer to the current stock price.

## **Best Buy Assignment #2 - Due 9/17**

Go to Best Buy's website and open the Fiscal 2007 Annual Report. Prepare answers for the following questions based upon the Form 10-K included in the Annual Report.

1. What business is Best Buy Co. in?
2. For segment reporting, how many business segments does it have?
3. What was EBIT for Fiscal Years 2005-2007?
4. What was EBITDA for Fiscal Years 2005-2007?
5. What was the recurring EBIT and EBITDA (i.e., after excluding nonrecurring items) for Fiscal Year 2005-2007?
6. What was ROE for Fiscal Year 2007?
7. What was ROIC for Fiscal Year 2007?
8. What was the recurring ROE and ROIC for Fiscal Year 2007?
9. What is the current cost of equity? The weighted average cost of capital?
10. What was the spread between ROE and cost of equity for Fiscal Year 2007? What does this spread tell you?
11. What was the spread between ROIC and WACC for Fiscal Year 2007? What does this spread tell you?
12. What was recurring NOPAT margin and NOA turnover for Fiscal Year 2007?
13. What was the receivable turnover, inventory turnover and accounts payable turnover for Fiscal Year 2007?
14. What was Days receivables, Days Inventory, and Days Payable, for Fiscal Year 2007?
15. What other computations should you make to properly interpret the answers in questions 14-16?
16. How does Best Buy perform vs. its peers? For simplicity, you may use data provided by Standard & Poor's Net Advantage, Value Line, or Yahoo!Finance. Are your conclusions consistent with market multiples that the peers and Best Buy are current trading at ?
17. What off-balance sheet obligations does Best Buy have?
18. What was the debt to capitalization ratio at end of Fiscal Year 2007 (excluding operating leases) and including operating leases (using a multiple of eight times rental expense to obtain debt equivalents)?
19. Is cash flow from operations increasing or decreasing for Fiscal Years 2005-2007?
20. Did Best Buy use internal cash flow to finance growth, or did it rely on external financing?

21. Did the company pay dividends from free cash flow or did it have to rely on external financing?
22. What are the primary sources of differences between the firm's net income and cash flow from operations?
23. What were the days of working capital financing required for fiscal year ended 2007?
24. Compute following coverage ratios for fiscal year ended 2007: (a) EBIT, (b) EBITDA, and (c) EBITDAR.
25. What was the cash interest coverage for Fiscal Year 2007?
26. In June 28, 2007, WSJ, there is an article relating to the announcement by Best Buy that it plans a \$5.5 billion share buyback and a 30% dividend increase and it will continue to keep opening stores at a fast rate. Based on your analysis of Best Buy, comment on the implications of this strategy.

**Sears Holding Corp. – Due 10/31**

Value Sears Holdings Corp., as of today using market multiples. Compare your answer to the current stock price.

**Team Project #1: KMart – Sears Merger (Due 11/12)**

The joint proxy statement for Kmart and Sears will be posted to Blackboard. Especially review pages 48-71 of original document containing KMart and Sears Projections and Opinions of the Firm's Financial Advisors. Based on your team's analysis, answer the following questions:

1. If you are a stockholder of either KMart or Sears, would you be persuaded by the banker's opinions? State your reasoning. What concerns would you have?
2. If you are a buy-side analyst for a pension fund holding KMart stock, what questions would you like to ask KMart's financial advisor?
3. If you are a buy-side analyst for a pension fund holding Sears stock, what questions would you like to ask the Sears financial advisor?

The assignment is worth 10% of your course grade.

## **Team Project #2: Valuation of a Stock of Your Choice (Due 11/26)**

The team project requires you to conduct a complete analysis and valuation of a publicly-held stock of your choosing. Your team will present your report in PowerPoint to the class the last two weeks of the semester. Your report is due on 11/26. You and your team are security analysts employed by a buy-side mutual fund. The class is to be considered as portfolio managers deciding on whether to purchase, sell, or hold the stock you are discussing. Your report to the class should be no longer than 20 minutes, including time for questions. Your report should contain the following.

1. **Business Strategy:** Briefly describe the company's industry and specific lines of business, discuss its strategy for success and, most importantly, the sustainability of returns generated by the strategy.
2. **Historical Performance:** Use ratio analysis to evaluate the current and past performance of the business and assess its sustainability of returns. Compare your company to some peers in the same industry.
3. **Forecasting.** Include a forecast of the firm's future cash flow. Provide specific justification for each major component of your forecasts. Is the forecast based on past trends, comparisons with other firms in the industry, an industry report, or your gut feel? How does your forecast for the next few years compare with analyst forecasts?
4. **Valuation:** Use both the discounted cash flow (FCFF) and market multiple models to produce a range of estimated equity value. Compare your valuation to the current market valuation, providing possible explanations for any differences.
5. **Recommendation:** Make a recommendation to buy, hold, or sell the stock justifying your recommendation.

### **Grade**

This assignment is worth 20% of your final grade. One-half of your grade will depend on student evaluation. Students will vote by Scantron, using either letters A or B on the A-E options in a Scantron. A letter "A" means that the voting student accepts your recommendation. A letter "B" means that the voting student rejects your recommendation. The student vote is to be based on your team's persuasiveness in obtaining the student's acceptance of your team's recommendation taking into account the quality, completeness, and clarity of your presentation, and your ability to correctly apply the tools of analysis described in this course. The student's grade will be calculated by multiplying by 10% the fraction obtained by dividing the number of students voting for Option A by the total number of students voting for Options A or B. The other half of your grade will be the instructor's vote following the same criteria as the students. You will hand the project in. You can supplement your PowerPoint material with spreadsheets handed out to the class if you believe that makes your analysis easier to follow.

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| <p style="text-align: center;"><b>FBE 529</b><br/><b>Research Guide Using</b><br/><b>Marshall Electronic Resources</b></p> |
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Crocker Library's homepage = [www.marshall.usc.edu/library](http://www.marshall.usc.edu/library)

- Click on "Electronic Resources" to access all Marshall databases
- Click on "USC Libraries Electronic Resources" to access all USC databases
- Connecting to Marshall Electronic Resources from off-campus:  
[http://www.marshall.usc.edu/web/Library.cfm?doc\\_id=6167](http://www.marshall.usc.edu/web/Library.cfm?doc_id=6167)

## Articles:

### ABI/Inform Global by ProQuest

Use to find articles in newspapers, magazines, trade journals and academic journals including the *Wall Street Journal*

- Click on 'Databases Selected' to capture the entire ProQuest index
- Search multiple keywords at the 'Advanced' search screen
- Select "Company/Org" from the drop-down choices when searching for a specific company
- Use 'Topics' tab search by specific subjects (Merger & Acquisitions)
- Use tabs to sort results by source including 'Scholarly Journals' and 'Trade Publications'
- Use "Publications" tab to find specific titles (*Wall St. Journal, The Economist, Forbes, Fortune, Business Week, Mergers & Acquisitions, Barron's, etc.*)
- Click on the "Set Up Alert" button to receive by e-mail articles to be published in the future

### Lexis/Nexis

Find more regional and global news sources by doing a "Guided News Search"

- Click on the 'Business' module link to find articles on 'Industry & Market' information, plus company financials and SEC filings

## Company Information:

### Hoover's

Find company profiles and follow the left-hand menu links for financials, history, executive biographies, competitors and competitive landscape, and SEC filings

- Use the 'Build Custom Report' function to create a PDF company profile document

### Mergent Online

Find company information, financials (including restated) for 15 years, ratios and PDF annual reports

- Use the 'Company Analysis List' function to run metrics on up to 500 companies

## ValueLine

Find company tear sheets and industry overviews (access through 'Investment Survey' link )

- Historical ValueLine access files are available on the msbcdrom drive on Marshall School of Business networked computers. In Windows Explorer, type [\\msbcdrom\vl\\\_historical](\\msbcdrom\vl\_historical) to access files going back to 1987.

## Industry Information:

### Standard & Poor's NetAdvantage

- Click on the 'Company' tab to find tear sheet information on companies
- Click on the 'Industry' tab to retrieve pre-defined industry reports that include company comparables and ratios
- Use the 'Printer Friendly' link to save and print pages, or the PDF link to download the entire report

### Investext Select

Find analyst reports on specific companies or industries as a whole

### OneSource Business Brower

Use this database to find company profiles, industry ratios, market reports and analyst reports. Database access does **not** require USC network connectivity.

- All MBAs are issued a unique password to OneSource – contact Kim Esser ([kim.esser@marshall.usc.edu](mailto:kim.esser@marshall.usc.edu)) if you have forgotten yours.

Please contact the Crocker Library Staff if you have any questions or need additional information:

|                |                 |  |
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