

**FBE 421 Financial Analysis and Valuation**

**Syllabus – Fall 2017**

**Professor Julia Plotts**

**Office: Hoffman Hall 221**

**Office Hours: Fridays 9:30am-11:30am by appointment**

**Section 15324 M-W 10-11:50am JFF LL 105**

**Section 15326 M-W 2-3:50pm JKP 110**

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**Course Description**

An applications-oriented course to develop the financial and accounting tools required to do financial planning, valuation and assessment of financial performance. The course covers valuation methods from both a conceptual and practical framework. While there is some new finance theory introduced in this course, the emphasis is on the practical application and integration of finance and accounting concepts to valuing companies. The course covers methods for utilizing financial data and applying valuation techniques to make strategic and financial decisions. The course introduces topics such as mergers and acquisitions, financial restructuring, leveraged buyouts, valuation of private companies, distressed companies and the valuation impact of financial leverage.

The course covers the theory and practice of financial analysis and valuation. Our coverage of the material is designed to allow you to become comfortable with the fundamentals so that you may improve your proficiency in participating in future financial and strategic discussions within a company or organization and with external analysts and service providers.

**Learning Objectives**

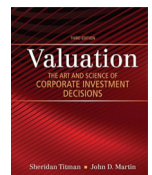
1. Describe the key aspects of financial analysis and valuation to effectively manage different types of enterprises. Gain knowledge of the following areas: accounting, finance, strategy and industry analysis.
2. Demonstrate critical thinking skills in the application of techniques in financial analysis and valuation. Gather, categorize, analyze, interpret, and evaluate relevant qualitative and quantitative information and develop the ability to be creative and innovative through the completion of a final valuation project.
3. Develop communication strategies for discussing financial analysis and valuation.
4. Conduct research using a broad range of sources, synthesizing and judging the quality of collected information and support written or oral claims logically and persuasively.
5. Apply valuation in a global context, considering the interplay of international markets, and economic, social and cultural issues.

**Required Materials**

**Required Textbook:** *Valuation: The Art and Science of Corporate Investment Decisions*, 3rd Edition By Sheridan Titman, John D. Martin. Published by Prentice Hall Copyright © 2016  
ISBN-13: 978-0133479522 ISBN-10: 0133479528

<http://www.facultybookshelf.org/course/8692>

**Required Cases:** The course pack with supplemental readings and cases can be purchased online at the following link: <http://cb.hbsp.harvard.edu/cbmp/access/66410588>



**Course Notes**

Slides, handouts and supplemental readings/articles will be posted on Blackboard. If you have any questions or need assistance with the Blackboard Course Pages, please contact the Marshall HelpDesk at 213-740-3000 or [HelpDesk@marshall.usc.edu](mailto:HelpDesk@marshall.usc.edu). 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.

**Optional Resources**

*The Wall Street Journal, The Economist, Barron's, Forbes* (available through <http://mymarshall.usc.edu> or Gaughan & Tiberti Business Library). Wall Street Journal student subscription, 15-week digital-only membership or print + digital membership for only \$1 per week or 1 year for \$49, link to purchase: <http://r.wsj.net/hZrqm>

A financial calculator is recommended for lecture and exams (discounting cash flows, IRR, etc.).

**Prerequisites and/or Recommended Preparation:**

Prerequisite: BUAD 215 or BUAD 306. This course assumes knowledge of intro corporate finance and accounting. It will be assumed that students are comfortable with the topics of standard corporate finance texts such as Ross, Westerfield and Jaffe or Brealey & Myers. Please review your basic finance and accounting concepts. The pace and schedule of topics covered in this class does not allow for review of these concepts. Students with weak accounting and finance backgrounds will be at a disadvantage in this course. Working knowledge of excel is also important.

**Grading Policies:**

Final grades represent how you perform in the class relative to other students. Historically, the average grade target for this class is a 3.3/4 (B+). 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.

<b><u>Assignments</u></b>	<b><u>% of Overall Grade</u></b>
Class Participation	5%
Individual Case Analysis	10%
Team Valuation Project	20%
Mid-Term Exam	30%
Final Exam	35%
<b>TOTAL</b>	<b>100%</b>

## **Class Participation**

Class participation is an extremely important part of the learning experience in this course as the richness of the learning experience will be largely dependent upon the degree of preparation by *all* students prior to each class session.

A course that incorporates the frequent use of case analyses to illustrate the practical application of concepts and practices requires the student to diligently and thoroughly prepare cases and actively offer the results of the analyses and conclusions derived as well as recommendations during each class session. My expectation and that of your classmates are that you are prepared for *all* classes and will actively participate in and meaningfully contribute to class discussions.

In-class participation is also a critical part of this course's learning experience. Cold calling may take place to encourage active participation and to gain multiple perspectives and points of view, thus lending itself to the richness of the learning experience. In-class participation grading will be based on students' demonstrated willingness to participate and the quality of the comments expressed, rather than quantity. While some students are far more comfortable than others with class participation, *all* students should make an effort to contribute meaningfully.

Students will offer their opinions in group settings many times in their careers; thus, class participation serves to prepare students for this business experience.

The evaluating of in-class participation is based on the following:

- *Relevance* – Does the comment or question meaningfully bear on the subject at hand? Irrelevant or inappropriate comments can detract from the learning experience.
- *Responsiveness* – Does the comment or question connect to what someone else has said?
- *Analysis* – Is the reasoning employed consistent and logical? Has data from course materials, personal experience, or general knowledge been employed to support the assertions/findings?
- *Value* – Does the contribution further the understanding of the issues at hand?
- *Clarity* – Is the comment concise and understandable?

During class sessions, I frequently assume the role of a facilitator to encourage a discussion that includes perspectives from a variety of viewpoints and, secondly, to help pull together prevailing analyses and recommendations. The direction and quality of a discussion is the *collective responsibility of the class*.

## **Excellent Performance**

- Initiates information relative to topics discussed
- Accurately exhibits knowledge of assignment content
- Clarifies points that others may not understand
- Shares personal experiences or opinions related to topic
- Offers relevant / succinct input to class
- Actively participates in class exercises
- Demonstrates ability to apply, analyze, evaluate & synthesize course material.
- Demonstrates willingness to attempt to answer unpopular questions
- Builds on other students' contributions
- Very high levels of professionalism manifested in interactions with speakers and classmates.

## **Average Performance**

- Participates in group discussions when asked

- Demonstrates knowledge of course material
- Offers clear, concise, “good” information on class assignments
- Offers input, but tends to reiterate the intuitive
- Attends class regularly

#### Unacceptable Performance

- Fails to participate even when directly asked
- Gives no input to discussions
- Does not demonstrate knowledge of the readings
- Shows up to class: does nothing
- Distracts group / class
- Irrelevant discussion

Grades for individual student contributions to team projects are assigned by me, based on my observations of the team’s working dynamics, my assessment of the team’s project quality, and thoughtful consideration of the information provided through your peer evaluations.

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.

#### Assignments and Group Case Analysis

We will analyze real companies and work through problems by analyzing different scenarios and courses of action. In your analysis of our HBS case studies you should place yourself in the role of the decision maker as you read through the situation and identify the problems and issues. The next step is to perform the necessary analysis. To get the most out of cases, you should read and reflect on the case individually, and then meet in study group teams prior to class to “warm up” and discuss your findings with other classmates. In class we will probe underlying issues, compare different alternatives, and finally, suggest courses of action in light of the objectives of the case.

All cases are used as a means to assess class participation assessment. Your team/group case analysis will be turned in as a written deliverable. Do your best to work through the case utilizing readings and other supporting materials. Seeking assistance or “hints” from the instructor, the T.A. or past students is not authorized. A written case analysis should consist of a written (executive summary) using a standard font and font size (such as Times New Roman size 11-12), addressing the case questions with supporting computations and tables in a separate appendix (if relevant).

Assignment and case grading is based on the quality of your analysis, how well you support your assumptions and apply valuation techniques, and the judgment you exercise and on the professionalism of your presentations. The quality of work product should be reflective of what you would be comfortable presenting to a current or prospective employer. Case grades will be determined relative to the analyses of other groups in the class. Groups will be randomly selected to verbally present their findings on *both* the graded and discussion cases during the class session.

I encourage you to work in teams to maximize the learning experience. Please work on your cases in groups of 3-6 people. I will not become involved in any group problems. Teams may change composition during the course of the semester. If a set of teammates decides they can no longer

work together, they are free to separate. If any member of the team cannot find another suitable team to join, he or she will have no choice but to hand in the rest of the valuation cases individually. In choosing teammates, consider the skills your team will want to possess: accounting, finance and excel modeling expertise. Also make sure that your teammates' expectations for their performance in this course are consistent with your expectations for yourself.

In addition to the group cases, there will be several individual and group assignments to help you apply the material. These will be posted on Blackboard and are designed to complement the textbook and lecture material.

### **Assignment Submission Policy**

Assignments must be turned in on the due date/time electronically via Blackboard. The cover sheet of each written assignment should contain the first and last names of the students submitting the assignment arranged alphabetically. All of the names of the members in the group must appear at the top of the memo to receive credit.

### **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. If I returned a graded paper to you, it is your responsibility to file it.

### **Technology Policy**

Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. 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, iPads, other texting devices, laptops, I-pods) must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

### **Academic Integrity and Conduct**

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 (plagiarism). Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the *SCampus*, the Student Guidebook ([www.usc.edu/scampus](http://www.usc.edu/scampus) or <http://scampus.usc.edu>). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and 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.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://dps.usc.edu/contact/report/>. This is important for the safety

of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *Relationship and Sexual Violence Prevention and Services* (RSVP) <https://engemannshc.usc.edu/rsvp/> provides 24/7 confidential support, and the sexual assault resource center webpage <https://sarc.usc.edu/reporting-options/> describes reporting options and other resources.

### **Support Systems**

Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* ([www.usc.edu/disability](http://www.usc.edu/disability)) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* (<http://emergency.usc.edu/>) will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

### **Students with Disabilities**

The Office of Disability Services and Programs ([www.usc.edu/disability](http://www.usc.edu/disability)) provides certification for students with disabilities and helps arrange the relevant accommodations. 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 me (or to your TA) as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: [ability@usc.edu](mailto:ability@usc.edu).

### **Emergency Preparedness/Course Continuity**

In case of a declared emergency if travel to campus is not feasible, the *USC Emergency Information* web site (<http://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of Blackboard, teleconferencing, and other technologies.

### **Other**

The material presented and the classroom discussions is not intended to be financial advice to students in connection with any issue(s) they or others may have. If students have a financial matter, they are advised to promptly consult an experienced professional who can fully review the facts and advise them accordingly.

## FBE 421 Course Outline and Schedule

	Topics	Readings and Deliverables
8/21 8/23	Course Overview and Syllabus Value-Based Management (VBM) and Performance Drivers	Syllabus Watch first two segments of online video link and see Appendix II for discussion questions: <a href="http://tinyurl.com/qd5hdnf">http://tinyurl.com/qd5hdnf</a>  <i>HBS Course pack #801125 Fundamental Enterprise Valuation: Return on Invested Capital (ROIC)</i>
8/28 8/30	Introduction to Valuation and Forecasting and Valuing Cash Flows Understanding Financial Statements	Titman Martin Chapters 1-2  Titman Martin Chapter 6
9/4 9/6	<i>Labor Day – No Class Scheduled</i> Understanding Cash flow	<i>HBS Course pack: Solving the Puzzle of the Cash Flow Statement</i>
9/11 9/13	Financial Analysis and Performance Evaluation Estimating Cost of Capital	<b>Whole Foods case due (Coursepack)</b>  Titman Martin Chapters 4, 5
9/18 9/20	Estimating Cost of Capital Relative Valuation/Comps	Titman Martin Chapters 4, 5 Titman Martin Chapter 8
9/25 9/27	Comps continued Enterprise Valuation Enterprise Valuation	<i>Practice Problem: 8-14. DKS IPO (page 311)</i> Titman Martin Chapter 9 <i>Practice Problem: 9-13 (page 356)</i>
10/2 10/4	Enterprise Valuation <b>Midterm Exam</b>	<b>Spyder Case Due (Coursepack)</b>
10/9 10/11	VC/Private Equity Guest Speaker Team Project Introduction	<i>See Blackboard for VC/Growth Equity readings</i>
10/16 10/18	Private Equity Mergers and Acquisitions	Chapter 10 <i>HBS Course pack: 1) “The Mergers and Acquisitions Process; 2) HBR article on Amazon Whole Foods deal</i>
10/23 10/25	Valuation Frameworks Case 2 Mergers and Acquisitions	<b>Singapore Airlines Case Due (Coursepack)</b>
10/30 11/1	Private Equity Leveraged Buyouts	Chapter 10 <i>Practice Problem: 10-9</i>
11/6 11/8	Leveraged Buyouts Real Options	<b>Heinz M&amp;A Case due (Coursepack)</b> Skim Chapters 11-12
11/13 11/15	Team Project Presentations Team Project Presentations	<b>Team Project Due</b>
11/20 11/22	Real Estate Valuation/M&A <i>Thanksgiving -No Class Scheduled</i>	<i>See Blackboard for Readings</i>
11/27 11/29	Review/Wrap Up Review/Wrap Up	
12/8 12/11	<i>2pm section Final Exam - Friday December 8<sup>th</sup> 2-4pm</i> <i>10am section Final Exam – Monday December 11<sup>th</sup> 8-10am</i>	

*\*Schedule is subject to change based on guest speaker availability (with the exception of exam dates)*

**Appendix I**  
**PEER EVALUATION FORM FOR TEAM PROJECT DUE 11/13**

Please identify your team and team members. Then rate all your team members, *including yourself*, based on the **contributions** of each team member for the selected assignment according to the criteria listed below. On a scale of 0 – 2 with 0 indicating does not meet expectations, 1 meets expectations and 2 exceeds expectations, rate each person on each of the five criteria. Lastly, add up the points for each person with the maximum number of points for each person being 10. In the box below, describe the exact contributions of each team member, including yourself.

Team Members/ Assessment Criteria of Team Contributions	Team Member 1	Team Member 2	Team Member 3	Yourself
<b>1. Role Performance</b>				
<b>2. Assists Team Members</b>				
<b>3. Listening and Discussing</b>				
<b>4. Research and Information Sharing</b>				
<b>5. Time Management</b>				
<b>Total</b>				

Contribution details:



## Appendix II Description of Classroom Preparation and Individual Case Deliverables

### 8/23 Value-Based Management

The goal of the firm is value creation. Return on capital and growth drive value creation. Value creation is fundamentally more important than that of growing revenues, earnings per share, maximizing volume and/or market share. Firms create value by investing capital in positive net present value (NPV) projects.

*The reading for this session can be found online.*

- Review Online article “Creating value: An interactive tutorial” November 2010 <http://tinyurl.com/qd5hdnf> In this video presentation, McKinsey partner Tim Koller explores the four guiding principles of corporate finance that all executives can use to home in on value creation when they make strategic decisions. Watch the first two segments: 1) The core-of-value principle and the 2) conservation of value principle
- Review online book excerpt from McKinsey Quarterly, “What is value-based management?” An excerpt from Valuation: Measuring and Managing the Value of Companies, August 1994, Timothy Koller. <http://tinyurl.com/pc4f4ln>

### 9/11 Individual Case Deliverable – Whole Foods Market: The Deutsche Bank Report Financial Analysis and Performance Evaluation

This case examines the decisions of Deutsche Bank research analyst Karen Short in May 2014 while covering the stock of Whole Foods Market, the leading natural and organic food retailer. Having recently issued a “buy” recommendation for the stock backed by a strong financial forecast, Short must reevaluate her decision in the face of a lower-than-expected earnings announcement by Whole Foods management and an associated market price decline. This case asks that you scrutinize the analyst’s financial forecast considering the developing industry dynamics and Whole Foods’ competitive position.

- Describe Whole Foods’ strategy.
- Prepare a competitor analysis. How would you define the industry? Who are Whole Foods’ competitors?
- How attractive is Whole Foods’ current market position? Is it sustainable?
- What do the financial ratios in Exhibit 4 tell you about the past operating performance of Whole Foods? How informative are the historical ratios for Whole Foods’ prospective performance?
- Examine Exhibit 7 in detail. How important are each of the underlying financial assumptions in the Return on Invested Capital forecast? What assumptions (i.e., margins, asset turnover, growth) play the biggest role in driving the anticipated improvements in ROIC?
- Do you agree with the existing financial assumptions in the Deutsche Bank forecast? If so, why? If not, what adjustments would you make to the model? Be prepared to defend the basis of your forecast for Whole Foods’ performance.

*Later in the course during our discussion about mergers and acquisitions we will discuss Amazon’s decision to acquire Whole Foods.*

**10/2 Individual Case Deliverable - Spyder Active Sports**  
**Valuing a Private, High-Growth Company and Evaluation of Strategic Alternatives**

David Jacobs founded a high-end ski apparel company in 1978. He successfully built and grew the company, establishing a major international brand that appealed to ski racers and other active skiers. In 1995, he sought external financing to support further growth of the company and structured a financial deal with CHB Capital Partners, a private equity firm in Denver. By 2004, Jacobs was ready to consider alternative types of equity transactions that would provide a source of liquidity to him and his family, including sale of Spyder to another apparel company and sale of a large block of stock to a private equity firm.

*Perform a standalone valuation of Spyder*

**Discounted Cash Flow valuation (DCF):**

- Utilizing the forecast in exhibit 5 of the case perform a discounted cash flow valuation of Spyder.
- You will need to take the data from Spyder's projected income statement (2005E-2008E) and calculate free cash flow = EBIT – taxes<sup>1</sup> + depreciation – net working capital - capital expenditures = Spyder Free Cash Flow
- You will need to estimate Spyder's terminal value. This can be done through a Gordon Growth perpetuity. If this method were to be applied for Spyder it would be assumed that at the end of 2008E the company reaches a steady state of growth. The terminal value will need to be discounted back to present along with the FCF forecast. Another approach would be what the Titman Martin text refers to as the hybrid approach for terminal value (exit multiple approach). This involves value the company in 2008E based on its revenue or EBITDA and the multiples provided from exhibit 9 and 11. For example, if Spyder expects to have EBITDA of \$27,895 in 2008, if the entire company were to be purchased for 10x EV/EBITDA then its implied value at the end of 2008 would be 278 million. This "terminal value" would need to be discounted back to present along with the forecast period cash flows. Like so much of what we do in finance, this approach is quite subjective and is highly dependent on assumptions for the company's ability to achieve the forecast, market conditions, etc.
- Determine the appropriate discount rate for this analysis - You will need to calculate Weighted Average Cost of Capital (WACC) including determining a beta based on the comps (unlevering and relevering). A Discounted Cash Flow (DCF) valuation of Spyder requires assumptions that are not mentioned in the case.<sup>2</sup>

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<sup>1</sup>Tax rate if determined from the income statement ranges from 16% to 45%. It is acceptable to consider a constant corporate tax rate (i.e. 35%)? Tax rate details were not given or discussed, and since Spyder has international operations and those foreign tax rates weren't mentioned, it is acceptable to assume an average tax rate based on the data provided or a corporate tax rate assumption.

<sup>2</sup>Tax rate if determined from the income statement ranges from 16% to 45%. It is acceptable to consider a constant corporate tax rate (i.e. 35%)? Tax rate details were not given or discussed, and since Spyder has international operations and those foreign tax rates weren't mentioned, it is acceptable to assume an average tax rate based on the data provided or a corporate tax rate assumption.

- Risk-free rate and Market Risk Premium (MRP) for CAPM (Ke) is not given in the case. The case didn't give a risk-free rate, but the 10 and 20-yr. treasury rate for the time of the case is available online. The yield on a 20-year Treasury bond was 4.77% on 3/31/2004. The market risk premium assumption of 5-6% per our discussion is fine (this would be assuming a method of analyzing historical and predicted returns).

- Betas for comparable firms is provided in exhibit 11. Refer to lecture material on WACC regarding levering and unlevering beta and perform an analysis for an "implied" Spyder beta. It is up to you what assumptions you would like to make on firms comparable to Spyder.

- Capital Structure: Spyder is not publicly traded; can we use book value for V, E, and D in this case? If the #1 step in a WACC is capital structure weights for the firm being analyzed you should make a determination that ties with your recommendation, for example if you think Jacobs should buy out his partner he would most likely need to take on debt to do so. If you feel they should sell to a strategic or financial buyer then this has different capital structure implications. If you feel they should remain 100% equity financed due to their life cycle stage then that is also a fair assumption. Make an assumption based on book values or using industry figures to calculate the target capital structure is also a reasonable

- The present value of the free cash flow forecast and the terminal value is your estimate for implied “Enterprise Value” of the company.

**Market Approach (Public Comps and M&A Comps):**

- Spyder is not a publicly traded company; but we can still apply the market approach (price multiples) to estimate the company’s implied value. Evaluate the financial data provided for Spyder and also the comparable publicly-traded company price multiples (Exhibit 11) and comparable past merger and acquisition multiples (Exhibit 9) to determine an estimated “implied” value for the company in 2004.
- An example would be if you applied one of the EV/EBITDA multiples from a company or transaction to Spyder’s 2004 EBITDA,  $10 \times \$9,582 =$  implied value of \$95 million in 2004. This approach is very subjective. Applying an appropriate multiple is dependent on the assumption that the asset you are comparing Spyder to is similar in growth, profitability, etc. The case does not provide descriptions of the merger and acquisition comparables. However, I have provided these descriptions in a tab in the excel workbook “Exhibit 9 Comp M&A description.” Descriptions of the public companies are provided in the exhibit 10 of the case. I have also provided some historical financial performance for these companies in the excel worksheet.

**Risks?** What are the risks to the valuation? Perform a basic sensitivity analysis and address the uncertainty in the assumptions and valuation approach.

**Perspectives of Each Stakeholder:** Compare the alternative transactions described on the last page of the case. Which exit option would you choose if you were: 1) David Jacobs; 2) a general partner in CHB Capital; 3) Shimokubo?

**10/23 Individual Case Deliverable – Singapore Airlines: In Talks to invest in Jeju Air**

Jeju Air is a market leader in the South Korean low-cost carrier industry, operating more than 20 domestic and international air routes in Asian countries. In the midst of rising economic activity and the opening of more air routes in North Asia, Jeju Air is planning an initial public offering to seek capital to grow its China business. Meanwhile, Singapore Airlines is in discussions to purchase a 20 per cent equity investment in Jeju Air.

This case provides an additional example to practice WACC, Enterprise DCF and relative valuation. Unlike the Spyder case you must complete the forecast of FCF with the information provided.

- Compute the WACC and forecast free cash flow with the information provided in the case for Jeju Air.
- Perform a DCF and relative valuation analysis (comps). Which method do you feel is most appropriate for Jeju Air given its strategy and lifecycle stage?
- Is this investment a wise decision for Singapore Airlines?
- What is Singapore Airlines' future outlook in terms of its existing underperforming subsidiaries?

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assumption. WACC can be determined using the industry figures and making assumption on cost of debt. For example, if Spyder is an implied AA it would have a pre-tax cost of debt of around 5-6% (according to the 20-year Treasury Bond rate and the Reuter Corporate Spread for 2004 (in basis points).

## 11/6 Group Case Deliverable – H. J. Heinz M&A<sup>3</sup>

During December 2012, Jorge Paulo Lemann, a co-founder and partner at 3G, proposed to Warren Buffett that 3G and Berkshire Hathaway acquire H. J. Heinz Company. Lemann and Buffett, who had known each other for years, jointly decided that the Heinz turnaround had been successful and that there was significant potential for continued global growth. 3G informed Heinz CEO William Johnson that it and Berkshire Hathaway were interested in jointly acquiring his company. Johnson then presented the investors' offer of \$70.00 per share of outstanding common stock to the Heinz board. After much discussion, the Heinz board and its advisors informed 3G that without better financial terms they would not continue to discuss the possibility of an acquisition. Two days later, 3G and Berkshire Hathaway returned with a revised proposal of \$72.50 per share, for a total transaction value of \$28 billion (including Heinz's outstanding debt). Following a forty-day "go-shop" period, Heinz, 3G, and Berkshire Hathaway agreed to sign the deal. But was it a fair deal? And what about the future consequences for shareholders, management, employees, and citizens of Pittsburgh, the location of the company's headquarters?

- Is the company a good candidate for an LBO. *Optional: Prepare an LBO Model*
- Complete a valuation of Heinz for this acquisition based on the financial information provided.

### DCF

#### *Financial Forecast FCF and TV:*

- Revenue, EBITDA and EBIT for 2014E-2018E are provided in Exhibit 2. For working capital I evaluated the historical days of trade and other receivables, inventories and prepaid expenses and also payables and accrued liabilities. Then I kept those assumptions relatively constant to forecast the projected balance sheet working capital items for 2014-2018.
- For CapEx I assumed a historical % of sales (3%).
- For Terminal Value I assumed a conservative perpetual growth rate of .75-1.25% and exit multiple assumptions were taken from the comps.

#### *WACC Assumptions:*

- Exhibit 2 provides information for  $K_e$  including beta,  $R_f$  and MRP assumptions.
  - Exhibit 2 also provides the corporate tax rates and the pre-tax cost of debt (I assumed 4.7%, which was the most recent weighted average  $K_d$  for Heinz).
  - For capital structure weights: For the value of "E" I assumed the pre-announcement stock price of \$60 and the fully diluted shares outstanding from 4/28/13 of 323 million. For total "D" I added the short and long term interest bearing debt from 4/28/13 and subtracted the cash and equivalents.
- Complete a separate valuation based on the Heinz alternative financial assumptions found in the Heinz Exhibits Spreadsheet, under the HNZ Alt tab.
    - For the ALT scenario the spreadsheet provided shows sensitivity in
      - Revenue to grow at 1.3% per year
      - EBITDA margin to remain constant at 17.6% per year
      - Capex to increase to \$450M in 2013, then decline by 10% per year until 2018
      - Depreciation expense to grow from 75% of Capex in 2013 to 100% of Capex in 2018

<sup>3</sup> Supplement Information: <http://www.sec.gov/Archives/edgar/data/46640/000119312513089866/d491866dprem14a.htm>  
[https://www.bcgperspectives.com/content/articles/mergers\\_acquisitions\\_postmerger\\_integration\\_divide\\_conquer\\_deals\\_split\\_synergies/](https://www.bcgperspectives.com/content/articles/mergers_acquisitions_postmerger_integration_divide_conquer_deals_split_synergies/)

- Amortization to remain at \$47M per year
- Net working capital needed to fund growth will be \$50M in 2013, then \$30M per year until 2018
- Tax rates remain constant at 35%, Discount rate to be 6.5% for every forecast year

**COMPS**

- For the implied value of Heinz based on the “market approach” evaluate the transactions and comps provided to help determine whether the offer price was “fair.”