ACCOUNTING FOR VALUE

B8022, Spring 2017

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Course meeting time: Monday, 10:45am – 2:00pm, Uris 332 (Section 1)
Wednesday, 10:45am – 2:00pm, Uris 332 (Section 2)

Office Hours: TBA

REQUIRED PREREQUISITES AND CONNECTION TO THE CORE

This course builds on material in Financial Accounting and Corporate Finance core courses and complements courses on equity investing in the Value Investing Program and elective courses on fundamental analysis in the Accounting Division. Capital Markets is a co-requisite, that is, it must be taken at the same time or before this course. Material from the Managerial Economics and Strategy Formulation core courses is also relevant. Students should have a reasonable understanding of financial accounting principles, the balance sheet, income statement, and cash flow statement, along with the basic principles of finance.

COURSE DESCRIPTION AND OBJECTIVES

This course is about handling accounting information in value investing. The issue is straightforward: How do I infer value from such numbers as earnings, book value, cash flows, return on equity, and return on assets? What are the pitfalls? When can I be led astray? How do I make valid inferences? “Profitability” is an important valuation attribute, but do accounting measures of profitability convey real profitability? If not, how do I handle the deficiency? How does accounting differ across industries, jurisdictions, and competitive situations? How is accounting handled to understand the economics of a firm under study?

The answers to these questions require, first, an understanding of the integrity of the numbers that financial statements report and, second, an understanding of what a “clean” number tells us and what it does not tell
us. The first question is the issue of so-called “earnings quality.” While we will be sensitive to the quality of the accounting in this course—and indeed develop some striking criticisms and make adjustments—our focus will largely be on the second, the issue of appreciating the value implications of accounting numbers. (There is a detailed course on earnings quality at Columbia Business School, Earnings Quality and Fundamental Analysis, B8008.)

Accounting numbers, used appropriately, are powerful aids to the value investor in understanding a business and the value in that business. However, they can be easily misused. A P/E ratio, for example, serves as an important input to a value investor, but the investor is in danger of being falsely cued if he or she does not appreciate what that ratio actually captures. A too-simple form of “value investing” trades on P/E and price-to-book (P/B) under the label, “Value versus Growth” investing, but the uninitiated is in danger of falling into the Value Trap. In this course you will understand the Value Trap and how to avoid it. More importantly, you will appreciate how a dedicated approach to value investing deals with accounting numbers to understand when price is different from value. Indeed, the course will show how to bring the appropriate (possibly adjusted) accounting numbers together to challenge the market price and thus avoid the greatest risk in investing, the risk of paying too much.

Accounting numbers, and their interpretation, vary across industries and jurisdictions, so have to be handled carefully in understanding the business and the growth prospects that are so important in value investing. In the course, accounting is dealt with as part of business analysis which is, after all, the prime focus in value investing. We learn about the business via accounting numbers if they are appropriately handled.

With an understanding of how accounting connects to value, the investor is ready to engage in “accounting arbitrage.” If the market fails to understand the subtleties on the accounting, that provides an opportunity.

The course title is that of my book, Accounting for Value. This easy-read develops the themes and the course flushes them out. By the end of the course, you should have the answers to the following questions:

- How do I understand the profitability of a business from the financial statements and what does that imply for the value of the business?
- Apple Inc. trades at a forward P/E of 11.5. What does that tell me? Is the stock cheap or expensive?
- Apple Inc. trades with a PEG ratio of 0.85. Is it cheap?
- The value investor is wary of taking on leverage. How does leverage affect accounting numbers such as earnings and return on equity, and how can those levered numbers lead me astray?
- How do I use the accounting to understand the business and the value imbedded?
- The value investor is wary of buying growth, for growth is risky. How does the accounting tell me that prospective growth is risky?
- What is the Value Trap? How can I avoid it?
- Which accounting numbers do I have to be wary of?
- How do I use accounting numbers to understand the growth expectations built into the market price?
- How do I challenge the market price using accounting numbers?
THE TEXT FOR THE COURSE


Read the Introduction and the first two chapters of this book before the class begins, then the remaining chapters as the course proceeds. It is written largely for practitioners, introducing and illuminating the issues addressed in the course.

Other Reading

A more detailed text that digs into accounting issues in more depth is Penman, S., *Financial Statement Analysis and Security Valuation*, 5th ed. (Irwin/McGraw-Hill, 2013). If you buy this book, the international soft-cover version is the same material at the U.S. version but much cheaper.


CLASS FORMAT

Class sessions will revolve around power point presentations, short exercise examples, and longer case discussions. Students will receive a complete copy of notes for each class, along with advance case material for subsequent classes. Students should come to class well-prepared to discuss issues and push for their resolution.

METHOD OF EVALUATION

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<tbody>
<tr>
<td>Course Project</td>
<td>50%</td>
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<tr>
<td>Final Exam</td>
<td>50%</td>
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The final exam will be for 90 minutes, open book, in the final class for the semester.
Course Project

There are two alternatives for the course project:

1. Take one (or more) of the cases we worked in the course and flush it out more fully, applying it to a larger number of firms or expanding on the issues to get more insights.

2. Evaluate investment in a particular company or sets of companies under a title something like, “Challenging the Market Price of Company X Using Accounting Information” (you choose the X).

The project can be done individually or in groups up to four people. It should be no more than 10 pages in length (exclusive of an appendix with detail on calculations involved). The submission will be graded on its creativity, depth of understanding, rigor, and clarity in communication. Write it as if to a client, not to a professor. It must be original work.

The project is due at the end of the exam period for the semester. It must be submitted in hard copy, delivered to Professor Penman's office, to the Assistants' station in Uris 6W, or by mail. Mailing address: Professor Stephen Penman, 612 Uris Hall, Columbia Business School, 3022 Broadway, New York, NY 10027.

Under Business School standards, the project is Type A (with the group self-selected) in the table below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Designation</th>
<th>Discussion of concepts</th>
<th>Preparation of submission</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>group / group</td>
<td>Permitted with designated group*</td>
<td>By the group</td>
<td>Same grade for each member of the group</td>
</tr>
<tr>
<td>B</td>
<td>group / individual</td>
<td>Permitted</td>
<td>Individually</td>
<td>Individual</td>
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<td>(No sharing of any portion of the submission)</td>
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<tr>
<td>C</td>
<td>individual / individual</td>
<td>None of any kind</td>
<td>Individually</td>
<td>Individual</td>
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<tr>
<td>D</td>
<td>(An optional category to be defined in detail by the individual faculty member)</td>
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* The designated group can be either an assigned study group or a self-selected one.
CLASSROOM NORMS AND EXPECTATIONS

Classroom activities are to be conducted in an atmosphere of mutual respect, engagement, and participation, with the common goal of enhancing each other’s learning and mastery of the material. The 3Ps of the Core Culture apply:

Present:
- On time and present for every session
- Attendance is required, although not tracked

Prepared:
- Complete pre-work required, expect cold calling
- Bring name plates to class

Participating:
- Constructive participation expected
- No electronic devices unless for class-room purposes. Laptops permitted, but only if open to the course material

For each class, preparation involves:

(i) Preparing the case(s) assigned for the class session
(ii) Reading over the class notes for the session, to gain some familiarity in advance and to prompt questions you might raise in class.

Cases and class notes will be posted on Canvass at least a week prior to each class. Hard copies of the class notes will be handed out in class.
COURSE SCHEDULE AND TOPICS

Note: Cases must be worked prior to the class period

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPICS</th>
<th>READINGS &amp; CASES</th>
</tr>
</thead>
</table>
| 1    | • Value Investing Principles  
      • Cash Accounting for Value | Acc4Val, Ch. 1-2  
      Case 1: Starbucks A |
| 2    | • The Value Trap and How to Avoid It  
      • The Value Trap  
      • Anchoring Value to the Balance Sheet | Acc4Val, Ch. 2 and 7  
      Case 2: Banking Your Money |
| 3    | • Accounting for the Market Price  
      • Negotiating with Mr. Market | Acc4Val, Ch. 3  
      Case 3: Tyco Spin-offs  
      Case 4: Starbucks B |

**Challenging the Market Price: Principles and Techniques**

**The Use and Misuse of Accounting Numbers**

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<tr>
<th>WEEK</th>
<th>TOPICS</th>
<th>READINGS &amp; CASES</th>
</tr>
</thead>
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| 4    | • Accounting for Leverage and Financing Risk  
      • Leverage and Return in Equity  
      • Leverage and Growth  
      • Leverage and the P/E and P/B ratio | Acc4Val, Ch. 4  
      Case 5: Microsoft |
| 5    | • Accounting for the Profitability of the Business  
      • Accounting for value in operating activities  
      • Accounting for Investment  
      • Accounting for return on investment | Acc4Val Ch.4-5  
      Case 6: Microsoft Unlevered |
| 6    | • Accounting for Growth  
      • The drivers of growth  
      • Challenging risky growth expectations | Acc4Val Ch. 5  
      Case 7: Apple  
      Case 8: Amazon |
### Accounting for Value in the Business

| 7 | • Do I want to Buy? Presentations                      | Acc4Val Ch. 6-7  
|   | • Accounting for Business Risk                        |                      
|   | • Beta bashing                                       |                      
|   | • Accounting approaches                              |                      |

| 8 | • Accounting for the Balance Sheet                    | Acc4Val Ch.8, 9  
|   | • Accounting for Operations                          | Case 9: Growth Return Profiles  
|   | • Accounting for Off-Balance Sheet Items             | Case 10: Markel  
|   | • Accounting for the Accounting in the BS           |                      
|   | • Accounting for Risk in the Balance Sheet          |                      |

| 9 | • Accounting for the Income Statement                 | Acc4Val Ch. 9  
|   | • Anchoring on Quality Earnings                      | Case 11: Coke Light  
|   | • Identifying Sustainable Earnings and Earnings Power | Case 12: Coke Brand  
|   |                                                      | Case 13: Microsoft  

| 10 | • Accounting for the Income Statement (cont.)         | Acc4Val Ch. 9  
|    | • Diagnosing Earnings and Cash Flows                 | Case 14: IBM  
|    | • Analysis of Cash Flows                             |                      |

| 11 | • The Intelligent Accountant and the Intelligent Investor | Acc4Val Ch. 10 |

| 12 | • Final Exam (90 minutes)                             |                      
|    | • Preparation for Projects (90 minutes)              |                      |