

ACCOUNTING FOR VALUE

B8022, Spring, 2023

PROFESSOR NAME: Stephen Penman

Professor Office: Kravis 1104

E-mail: shp38@gsb.columbia.edu

Course meeting time: Monday 2:00pm – 5:15pm, Kravis 870

Office Hours: Tuesday 3-5pm, or by arrangement

Teaching Assistant: MJ Song MSong26@gsb.columbia.edu

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 but not required. 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

The course works on basic value investing principles: Price is What You Pay, Value is What You Get; The Primary Risk of Investing is the Risk of Paying too Much; Beware of Buying Growth, for Growth is Risky.

But the course has a particular emphasis: How does the investor handle the accounting information about fundamentals in value investing? How does she infer value from such numbers as earnings, book value, cash flows, return on equity, and return on assets? What are the pitfalls? When can he be led astray? How is accounting handled to understand the value generation 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, Fundamental Analysis and Earnings Quality, 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 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 handles accounting numbers to understand when price is different from value. Indeed, the course will show how to bring the appropriate accounting numbers together to challenge the market price and thus avoid the greatest risk in investing, the risk of paying too much.

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 handled appropriately. We’ll apply accounting measurement to understand value added in (prospective) mergers and acquisitions, restructuring of operations, and other corporate strategies.

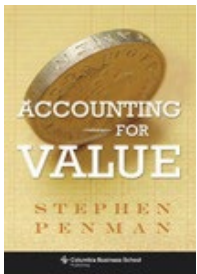
With an understanding of how accounting connects to value, the investor is ready to engage in “accounting arbitrage.” If the market fails to understand the subtleties on the accounting, that provides an arbitrage opportunity for the insightful investor. Benjamin Graham’s “intelligent investor” is an intelligent accountant. He or she knows how to account for value.

The course title is that of my book, *Accounting for Value*. This easy read develops the themes and the course flushes them out. That is with the help of a new book, *Value Investing By the Book*. 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 23.7. What does that tell me? Is the stock too expensive? What do you make of Amazon’s trailing P/E of 104.2 after a drop in its stock price of 37% in 2022.?
- Apple Inc. trades with a PEG ratio of 2.7. Is it cheap or expensive? A PEG of 4.7 for Amazon?
- The value investor is said to “anchor on the fundamentals” and eschew speculation. How does one establish an anchorage using the financial statements?
- Benjamin Graham saw investing as a matter of “negotiating with Mr. Market.” How do the financial statements become part of that negotiation...to argue with Mr. Market about the price?
- 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?

- The value investor is wary of buying growth, for growth is risky. How does the accounting tell me that prospective growth is risky?
- How do I use accounting numbers to understand the growth expectations built into the market price?
- What is the Value Trap? How can I avoid it?
- In sum, how do I challenge the market price using accounting numbers? How do I use accounting numbers to avoid the “risk of paying too much” for a stock?

THE TEXT FOR THE COURSE



Penman, S., *Accounting for Value* (Columbia University Press, 2011). Available on Amazon for about \$22.

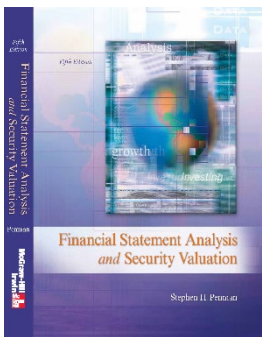
Read the Introduction and the first two chapters of this book before the class begins, then the remaining chapters as the course proceeds. It is written largely for practitioners, introducing and illuminating the issues addressed in the course.

Also available in Chinese, Japanese, and Korean.

The course will introduce a new book by Stephen Penman and Peter Pope called *Value Investing By the Book*. This goes into the themes in the *Accounting for Value Book* in more depth, supplemented with the cases we will use in the course. It is still in draft form, looking for student feedback. You are the test sample!

The first chapter of this book is at the end of this course outline. It gives you the favor of the course.

Another detailed text is Penman, S., *Financial Statement Analysis and Security Valuation*, 5th ed. (Irwin/McGraw-Hill, 2013).



The international soft-cover version is the same material as the U.S. version (with a different cover), but much cheaper. It is also available in Chinese, Japanese, Korean, and Portuguese.

You might also look at English, J., *Applied Equity Analysis* (McGraw-Hill, 2001) for a book that also handles accounting numbers in equity valuation.

CLASS FORMAT

This class requires in-person attendance, with video recording only on special request. Class sessions will revolve around power point presentations, short exercise examples, and longer case discussions. Students are expected to participate actively in class discussions and cases. Beware: Your professor likes to talk, so challenge him with comments and questions. Students will receive a complete copy of notes for each class on Canvas, along with advance case material for subsequent classes. Students should come to class well-prepared to discuss issues and push for the resolution of these cases. Complete solutions to the cases will be posted to Canvas after we have worked the cases in class.

METHOD OF EVALUATION

Course Project	50%
Final Exam	50%

The final exam will be a 90-minute exam in the final class session, open book.

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 15 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 whom you are advising, not to a professor. It must be original work.

The project is due May 12, 2023. Deliver to shp38@columbia.edu in one pdf file or to the Assistants' station in Kravis 1120.

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

<i>Type</i>	<i>Designation</i>	<i>Discussion of concepts</i>	<i>Preparation of submission</i>	<i>Grade</i>
A	group / group	Permitted with designated group	By the group	Same grade for each member of the group
B	group / individual	Permitted	Individually (No sharing of any portion of the submission)	Individual
C	individual / individual	None of any kind	Individually	Individual
D	(An optional category to be defined in detail by the individual faculty member)			

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 professor wants to learn from you also! 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:

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

COURSE SCHEDULE AND TOPICS

Note: Cases must be worked prior to the class period

VbyB refers to *Value Investing By the Book*

Acc4Val refers to the *Accounting for Value* book

Cases are from a case book that will be distributed to you

WEEK	TOPICS	READINGS AND CASES
1	Introduction to Fundamental Analysis	Acc4Val, Ch. 1 and 2 VbyB Ch. 1 and 2
January 23	Value Investing Principles Investing with Pricing Multiples Cash Accounting for Value	Case 1: Starbucks
2	Trading on Multiples and the Value Trap	Acc4Val, Ch. 2 and 7 VyB Ch. 2 and 3
January 30	Cheap Value Investing and the Value Trap Anchoring Value to the Balance Sheet	Case 2: P/E, PEG, Growth
3	Accounting for the Market Price	Acc4Val, Ch. 3 Vby B, Ch. 4
February 6	Negotiating with Mr. Market	Case 3: The FED Model Case 4: Starbucks Again

4	Accounting for Leverage and Financing Risk	Acc4Val, Ch. 4 VbyB Ch. 5
February 13	Leverage and Return in Equity Leverage and Growth Leverage and the P/E and P/B ratio	Case 6: Microsoft Valuation
5	Accounting for the Profitability of the Business	Acc4Val Ch.4-5 VbyB. Ch. 6
February 20	Accounting for value in operating activities Accounting for Investment Accounting for return on investment	Case 8: Microsoft Unlevered Case 9: Apple Adding Value
6	Accounting for Growth	Acc4Val Ch. 5 VbyG Ch. 7
February 27	The drivers of growth Challenging risky growth expectations	Case 10: Amazon
7	Accounting for Risk	Acc4Val Ch. 6 VbyB Ch. 8
March 20	The Drivers of Growth (2) Risk and the Expected Return from Investing	Case 11: BNSF Buffett

8	Accounting for Value in Balance Sheet	Acc4Val Ch. 8, 9 VbyB Ch. 9
March 27	Accounting for Operations	Case 12: Microsoft
	Accounting for Off-Balance Sheet Items	Expected Return
	Accounting for the Accounting in the BS	Case 13: Challenge
	Accounting for Risk in the Balance Sheet	the S&P 500
<hr/>		
9	Accounting for Value in the Income Statement	Acc4Val Ch. 9 FSA&Val Ch. 10, 13, and 18
April 3	Anchoring on Quality Earnings	VbyB Ch. 10
	Identifying Sustainable Earnings and Earnings Power	Case 14: IBM: Challenging Growth
<hr/>		
10	Accounting for Special Situations	VbyB Ch.11
April 10	Valuation of a P@C Insurer	
	Mergers and Acquisitions	
	Restructurings	
<hr/>		
11	Investing in Style	VbyB Ch. 12
April 17	Value versus Growth Investing	

Investing by Size

12	Keeping a Book on Liquidity	VbyB Ch. 13
April 24	In-class Final Exam	

REVIEW SESSIONS

TBA

FINAL EXAM

April 24, in class

DUE DATE FOR PROJECTS

May 12, 2023. Deliver to shp38@columbia.edu in one pdf file or to the Assistants' station in Kravis 1120.

STEPHEN H. PENMAN

Stephen Penman is the George O. May Professor in the Graduate School of Business, Columbia University where he is also co-director of the Center for Excellence in Accounting and Security Analysis and director of the Masters Program in Accounting and Fundamental Analysis. He is also a Distinguished Professor at Bocconi University.

Prior to his appointment at Columbia in 1999, Penman was the L.H. Penney Professor in the Walter A. Haas School of Business at the University of California at Berkeley. He joined Berkeley in 1977. From 1990-95 he served as Chair of the Professional Accounting Program and Chairman of the Accounting Faculty at Berkeley.

Penman has served as a Visiting Professor at Bocconi University the University of Padua, the London Business School, the Jan Wallander Visiting Professor at the Stockholm School of Economics, and in the Cheng Tsang Mun Chair Visiting Professorship at Singapore Management University. He has also been a visitor at Peking (Beijing) University and the Swedish Institute for Financial Research and a distinguished visiting scholar at Stanford Business School. He is an Honorary Professor at the City University of Hong Kong.

Professor Penman received a first-class honors degree in Commerce from the University of Queensland, Australia, and M.B.A. and Ph.D. degrees from the University of Chicago. His research deals with the valuation of equity and the role of accounting information in security analysis, and a number of his papers deal with accounting policy issues. He has published widely in finance and accounting journals and has conducted seminars on accounting and analysis for academic and professional audiences.

In 1991 Penman was awarded the Notable Contribution to Accounting Literature Award by the American Accounting Association and the American Institute of Certified Public Accountants, and in 2002 was awarded the American Accounting Association and Deloitte & Touche Wildman Medal for his book, *Financial Statement Analysis and Security Valuation*, published by McGraw-Hill/Irwin and now in its 5th edition. In 1997 he was awarded the Institute for Quantitative Investment Research (INQUIRE) Prize in the U.K. In 2005 he was awarded the Geewax Terker & Co Prize in Investment Research, and in 2011 the Roger F. Murray prize from The Institute for Quantitative Research in Finance (Q-Group). He has earned the *Abacus* best paper award twice. In 2009 he received an honorary doctorate from the Stockholm School of Economics and, in 2015, was elected to the Financial Economists Round Table. His book, *Accounting for Value*, was published by Columbia University Press in January, 2011.

Stephen Penman is a founding editor of the *Review of Accounting Studies* and served as managing editor from 2002-2006. He is on the advisory boards of Phoenician Capital and Boston Harbor Investment Management and has served as an advisor to fundamental asset managers in the U.S., Europe, and China. He also serves on the Board of Directors of UBS Financial Services Inc. Hedge Fund Solutions and is chair of its audit committee.

In 2019, Penman was elected to the Accounting Hall of Fame. In 2020, he was elected to the Australian Accounting Hall of Fame.

More at: <http://www8.gsb.columbia.edu/cbs-directory/detail/shp38>