Preface

Financial statements are the lens trained on a business. Financial statement analysis calibrates the lens to bring the business into focus. Imperfections in the financial statements can dirty the lens and distort the picture. Financial statement analysis deals with the imperfections in financial statements to improve the focus.

Financial statements have many uses, but the predominant one is to provide information for investing in businesses. Every day millions of shares and corporate bonds are traded in the world's capital markets, and prices are set to value these securities. Investors want to know what firms are worth so they can understand at what price to trade. They turn to financial statement analysis to get an indication of the underlying value of firms. This book focuses on these investors.

Underlying value is sometimes referred to as fundamental value, and the analysis of information about fundamental value is referred to as fundamental analysis. This book is about fundamental analysis. Financial statement analysis is central to fundamental analysis. Indeed, in this book, fundamental analysis is developed as a matter of appropriate financial statement analysis. As the lens on a business, financial statements, focused with the techniques of financial statement analysis, provide a way of interpreting the business that enables readers to understand the value it generates for shareholders.

Such understanding is sorely needed. The business media are full of "talking heads," each with an opinion on what shares are worth, with varying and sometimes conflicting arguments for buying or selling shares. Systematic thinking, however, is often lacking. Many arguments seem ad hoc. Some are fallacious. Investors seek ways to distinguish good arguments from bad ones, good advice from poor advice. Many investors are concerned that share prices can be driven away from fundamental value by "speculative mania" and "irrational exuberance." Concerned with paying too much for shares, or paying too little, they seek sound analysis that gives them some confidence in making their investments. This book lays out the techniques of sound fundamental analysis.

The Approach

Conceptual Framework

Good analysis comes from good understanding. And good understanding is provided by a conceptual framework that helps you—the student analyst—organize your thinking. In this information age, there are large amounts of information about firms. A conceptual framework guides you in using this information intelligently—to turn the information into knowledge.

This book works from a conceptual framework that helps you understand how businesses work, how they generate value, and how the value they generate is captured (or not captured) in financial statements. The framework helps you translate your knowledge of a business into a valuation. The framework helps you interpret what you see in financial statements. It gives you answers to the many important questions facing analysts. What "fundamentals" should the analyst focus on—dividends, cash flows, or earnings? How is an analyst's earnings forecast converted into a valuation? How can an investor rely on earnings when earnings are sometimes measured with doubtful accounting methods? What role does the balance sheet play? What is a growth company and how is growth valued? What does a firm's price-earnings (P/E) ratio tell you? What does its price-to-book ratio tell you?

Most important, the framework gives you the security that your analysis is a sound one. The framework is built block by block from "first principles" so that you see clearly where the analysis comes from and, by the end of the book, have a firm understanding of the principles of fundamental analysis. You will also be able to distinguish good analysis from poor analysis.

Practical Tools

This book is about understanding, but it is primarily about doing. Concepts and frameworks are important only if they lead to analysis tools. Each chapter of the book ends with the Analyst's Tool Kit, which summarizes the key analysis tools in the chapter and the key measures used in the analysis. By the end of the book, you will have a complete set of tools for practical analysis. The tool kit is efficiently organized so that the analyst proceeds in a disciplined way with the assurance that his or her analysis is coherent and does not overlook any aspect of the value generation in a firm. The book identifies too-simple methods of analysis. It shuns ad hoc methods but strives to develop simple schemes that recognize the tradeoff between the benefit of more complicated analysis and the cost. At all points in the book, methods are illustrated with applications to well-known firms such as Dell Computer, Wal-Mart, Nike, and Reebok.

Valuation and Strategy

The tools in the book are those that a security analyst outside the firm uses to advise clients about investing in the firm. These analysts present their recommendations in an equity research report. After studying this text, you will have the ability to write a persuasive, state-of-the-art equity research report. But the tools are also those that a manager within a firm uses to evaluate investments. The analyst outside the firm values the firm on the basis of what he understands the firm's strategy to be, while the manager within the firm uses the same tools to evaluate investments and choose the strategy. The techniques that are used to assess the value of a firm's strategy are also the techniques used to choose among strategies, so this book integrates valuation analysis and strategy analysis.

Accounting-Based Approach to Valuation

Valuation texts typically use discounted cash flow analysis to value businesses, whereas analysts typically forecast earnings to indicate business value. The stock market appears to focus on earnings; when a firm announces earnings that are different from analysts' earnings estimates, the stock price responds accordingly. This book focuses on earnings forecasting rather than cash flow forecasting. It explains how a focus on earnings gives a better understanding of the value generation in a business and leads to better practical analysis.

Earnings differ from cash flows because of the "accruals" of accounting, so the book demonstrates how accrual accounting helps in understanding a business and its value. Accruals such as depreciation, goodwill amortization, pension liabilities, and deferred taxes are shown to have a purpose. A cash flow perspective sees accruals, rather, as arbitrary. The book shows how to work with the accounting rather than dismissing it. As accruals affect both the income statement and the balance sheet, earnings forecasts (in the income statement) cannot be interpreted without the balance sheet, which lists assets that generate the earnings. Therefore, the accrual-accounting framework is one of income statements and balance sheets working together.

Financial statements are sometimes dismissed as uninformative, but you will see that, with the appropriate analysis, they can be quite revealing. With the appropriate analysis, the financial statements come to life.

The Quality of the Accounting

With an understanding of how accounting should work you will develop an appreciation in this book of what is good accounting and what is poor accounting. By the end of the book you will recognize the defects in financial statements that are issued by firms and will have developed a critique of the "generally accepted accounting principles" and disclosure rules that determine what is in the statements. You will also understand how the accounting in reports can be distorted, as well as discover tools that detect distortion and give you an indication of the quality of the accounting that a firm uses.

Integrating Finance and Accounting

Financial statements are prepared according to the dictates of accounting principles, and you take accounting courses to learn these accounting principles. Your appreciation of financial statements is often in terms of the accounting used to prepare them, not in terms of what the financial statements say about investing in businesses.

Principles of finance guide investment analysis and you typically take finance courses to learn these principles. However, the investment analysis in these courses often does not employ financial statements or accounting concepts in any systematic way. Frequently you see finance and accounting as distinct or, if you see them as related, the relationship is vague in your mind. Finance courses are sometimes dismissive of accounting, while accounting courses sometimes propose analysis that violates the principles of finance.

This book *integrates* your learning from finance and accounting courses. By integrating financial statement analysis and fundamental analysis, the book combines accounting concepts with finance concepts. Accounting is viewed as a matter of accounting for value and the accounting for value is appropriated for investment analysis. The organized structure of the financial statements helps organize fundamental analysis. Accounting principles for measuring balance sheets and income statements are incorporated as principles for measuring value. All analysis is performed in a way that is consistent with the principles of modern finance and with an appreciation of what is good accounting and what is poor accounting.

Activist Approach

Investment texts often take the view that capital markets are "efficient," with market prices that always reflect the underlying value of the securities traded. These texts are primarily concerned with measuring risk, not with valuation. The investor is viewed as relatively passive, accepting prices as fair value, concerned primarily with managing risk through portfolio management.

This book takes an activist's perspective. Active investors do not assume that the market is efficient. Rather, active investors challenge the market price with sound analysis, checking whether that price is a fair price. Indeed, they exploit what is perceived to be mispricing in the market to earn superior returns. Active investors adopt the creed of fundamental analysts: price is what you pay, value is what you get. They believe that one can pay too much for a share, so active investors seek to gain an appreciation of value independently of price. Whether or not the market is efficient, you will find this perspective engaging.

The Overview

Chapter 1 introduces you to financial statement analysis and fundamental analysis, and it sets the stage for the rest of the book. Chapter 2 introduces you to the financial statements. The remainder of the book is divided into five parts.

Part I (Chapters 3–6) develops the thinking that is necessary to do fundamental analysis. It integrates finance concepts with accounting concepts and shows you how the structure of accounting can be exploited for valuation analysis. Good thinking about valuation is captured in a valuation model, so this part of the book ends with an accrual accounting valuation model that provides your framework for the practical analysis that follows in the rest of the book. Alternative models are discussed as competing technologies, so you develop an appreciation of the strengths and weaknesses of alternative approaches.

Part II (Chapters 7–12) lays out the financial statement analysis that, guided by the valuation model, identifies value generation in a business and provides information for forecasting. In this part of the book you will see the lens being focused on the business.

Part III (Chapters 13–16) deals with forecasting. The value of a firm and its shares is based on the payoffs it is expected to yield investors; thus, using the information from the financial statement analysis, this part of the book shows you how to forecast payoffs. The forecasting is developed within a financial statement framework so that forecasting is an exercise in pro forma financial statement analysis. The analysis then shows how to convert forecasts into valuations of firms and their strategies.

Part IV (Chapters 17–19) deals with accounting issues that arise with the use of accounting-based valuation. It shows how to accommodate different accounting methods for measuring earnings and how to analyze the quality of the accounting used in financial statements.

Part V (Chapters 20 and 21) lays out a fundamental analysis of risk, both equity risk and credit risk.

Putting It All Together: A Tool Kit for Analysts and Managers

If you envision yourself putting together a tool kit for analyzing financial statements and valuing businesses and business strategies, consider this book your guide. As a professional analyst or a strategic thinker, you want to be using the best technologies available; this book will help you sort out the good methods from the poor ones. You want methods that are practical as well as conceptually sound.

As you read the text, you will learn the following:

- How fundamental value (or "intrinsic" value) is ascertained.
- How to analyze business strategies to understand the value that they add.
- How to perform financial statement analysis.
- How financial statements are used to value firms.
- What a good equity research report looks like.
- How to evaluate business strategies.
- How to prepare business forecasts.
- How "fundamentals" such as dividends, cash flows, earnings, and book values are used in valuation.
- What determines a firm's price-earnings ratio.
- What determines a firm's price-to-book ratio.
- How to analyze the quality of the accounting in financial reports.
- How to analyze business risk from financial statements.
- How to analyze credit risk.

Using the Book

Background Requirements

To comprehend the text material, you should have a basic course in financial accounting and a basic course in finance. A second course in financial accounting and a course in investments or corporate finance will be helpful but not necessary. Indeed, you may find yourself motivated to take those courses after reading this book.

Chapter Features

The text is written with features designed to enhance your efforts in learning the material. Each chapter of the book begins with a **flow chart** that lays out the material covered in the chapter and connects that material to the preceding and upcoming chapters. This chart will help you clearly see where you've been, where you are going, and how it all ties together. Each chapter also opens with **The Analyst's Checklist,** which has two lists, one covering the conceptual points in the chapter and the other a set of tasks that you should be able to perform after working the chapter. This outlines the goals of the chapter, setting out the road to mastery of the material at hand. Each chapter concludes with **The Analyst's Tool Kit,** a convenient resource complete with page references, which summarizes the analysis tools in the chapter—perfect for studying and review.

End-of Chapter Material

Each chapter ends with a set of concept questions, exercises, and minicases. Working through this material will enhance your understanding considerably. These problems are designed not so much to test you, but to further your learning with practical analysis. Each problem makes a point. **Concept questions** reinforce the thinking in the chapter. **Exercises,** most involving actual companies, highlight specific issues covered in the chapter. **Minicases,** designed for classroom discussion, are more contextual and encompass a broader set of issues, some involving ambiguity. They are written more concisely than full cases so that you do not have to handle a large amount of detail, and classroom time is used more efficiently to make the point. However, the minicases require considerable analysis and insight, providing stimulus for group discussion.

As with the chapter material, the exercises and minicases often use the same real-world companies to make different points in different parts of the book. To help you refer back to earlier material on the same company, the exercises and minicases are marked with an easy-to-identify **Real World Connection** tagline.

Website Reinforcement

The material in the text is supplemented with further analysis on the book's website at www.mhhe.com/penman. The website links you to firms' financial statements and to many other sources of financial information. You will also find engines to screen and analyze stocks and to help you build your own valuation models and analysis tools. The flow chart at the beginning of each chapter of the text refers you to the website, which, in turn, links you to further resources on the internet.

Additional Resources

The book is accompanied by ancillaries that support the teaching and learning process:

- **Solutions Manual** provides detailed solutions to the end-of-chapter material.
- **Text website** (www.mhhe.com/penman), as previously noted.
- **eVal** is an Excel spreadsheet application that performs comprehensive financial and valuation analyses. It imports corporate financial data from various sources, conducts ratio and cash flow analyses, and guides the user through the steps of forecasting and valuation by using both residual income and discounted cash flow techniques. Woven through the program are hyperlinks to an electronic textbook and to useful sites on the internet. **eVal** is the work of Russell Lundholm and Richard Sloan, both at the University of Michigan Business School. Contact your McGraw-Hill/Irwin representative for more information.