CENGAGE

10th Edition

Financial Reporting, Financial Statement Analysis, and Valuation

Wahlen • Baginski • Bradshaw

SUMMARY OF KEY FINANCIAL STATEMENT RATIOS

(Indicates Page in Text Where Ratio Is Initially Discussed)

PROFITABILITY RATIOS

Return on Assets (ROA)

$$= \frac{\text{Net Income Attributable to Common Shareholders} + (1 - \text{Tax Rate})(\text{Interest Expense}) + \text{Noncontrolling Interest in Earnings}}{\text{Average Total Assets}}$$

(Page 201)

Profit Margin for ROA

$$= \frac{\text{Net Income Attributable to Common Shareholders} + (1 - \text{Tax Rate})(\text{Interest Expense}) + \text{Noncontrolling Interest in Earnings}}{\text{Sales}}$$

(Page 206)

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Average Total Assets}}$$

(Page 206)

Return on Common Equity (ROCE)

$$= \frac{\text{Net Income} - \text{Noncontrolling Interest in Earnings} - \text{Preferred Stock Dividends}}{\text{Average Common Shareholders' Equity}}$$

(Page 207)

$$\text{Profit Margin for ROCE} = \frac{\text{Net Income} - \text{Noncontrolling Interest in Earnings} - \text{Preferred Stock Dividends}}{\text{Sales}}$$

(Page 213)

$$\text{Capital Structure Leverage} = \frac{\text{Average Total Assets}}{\text{Average Common Shareholders' Equity}}$$

(Page 213)

FINANCIAL FLEXIBILITY

$$\text{ROCE} = \text{Operating ROA} + (\text{Leverage} \times \text{Spread})$$

(Page 288)

$$\text{Operating ROA} = \frac{\text{Net Income Attributable to Common Shareholders} + (1 - \text{Tax Rate})(\text{Interest Expense}) + \text{Noncontrolling Interest in Earnings}}{\text{Average Net Operating Assets}}$$

(Page 288)

$$\text{Leverage} = \frac{\text{Average Financing Obligations}}{\text{Average Common Shareholders' Equity}}$$

(Page 292)

$$\text{Spread} = \text{Operating ROA} - \text{Net Borrowing Rate}$$

(Page 292)

$$\text{Net Borrowing Rate} = \frac{\text{Net Financing Expense (After Tax)}}{\text{Average Financing Obligations}}$$

(Page 292)

RISK RATIOS

Short-Term Liquidity Risk

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$
(Page 295)

$$\text{Quick Ratio} = \frac{\text{Cash and Cash Equivalents} + \text{Short-Term Investments} + \text{Accounts Receivable}}{\text{Current Liabilities}}$$
(Page 296)

$$\text{Operating Cash Flow to Current Liabilities Ratio} = \frac{\text{Cash Flow from Operations}}{\text{Average Current Liabilities}}$$
(Page 297)

$$\text{Accounts Receivable Turnover} = \frac{\text{Sales}}{\text{Average Accounts Receivable}}$$
(Page 297)

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventories}}$$
(Page 297)

$$\text{Accounts Payable Turnover} = \frac{\text{Purchases}}{\text{Average Accounts Payable}}$$
(Page 297)

Long-Term Solvency Risk

$$\text{Liabilities to Assets Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$
(Page 301)

$$\text{Liabilities to Shareholders' Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Shareholders' Equity}}$$
(Page 301)

$$\text{Long-Term Debt to Long-Term Capital Ratio} = \frac{\text{Long-Term Debt}}{\text{Long-Term Debt} + \text{Total Shareholders' Equity}}$$
(Page 301)

$$\text{Long-Term Debt to Shareholders' Equity Ratio} = \frac{\text{Long-Term Debt}}{\text{Total Shareholders' Equity}}$$
(Page 301)

Interest Coverage Ratio (Net Income Basis)

$$= \frac{\text{Net Income} + \text{Interest Expense} + \text{Income Tax Expense} + \text{Net Income Attributable to Noncontrolling Interests}}{\text{Interest Expense}}$$
(Page 303)

Interest Coverage Ratio (Cash Flow Basis)

$$= \frac{\text{Cash Flow from Operations} + \text{Cash Payments for Interest (including imputed interest)} + \text{Cash Payments for Income Taxes}}{\text{Cash Payments for Interest}}$$
(Page 303)

$$\text{Operating Cash Flow to Total Liabilities Ratio} = \frac{\text{Cash Flow from Operations}}{\text{Average Total Liabilities}}$$
(Page 304)

10E

Financial Reporting, Financial Statement Analysis, and Valuation

A Strategic Perspective

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For our students,

with thanks for permitting us to take the journey with you

For Clyde Stickney and Paul Brown,

with thanks for allowing us the privilege to carry on their legacy of teaching through this book

For our families, with love,

Debbie, Jessica and Ailsa, Jaymie, Aaron and Esther, Lynn, Drew, Rachel, Sophia, Lily, and Ella, Marie and Charlie, Kim, Ben, and Lucy

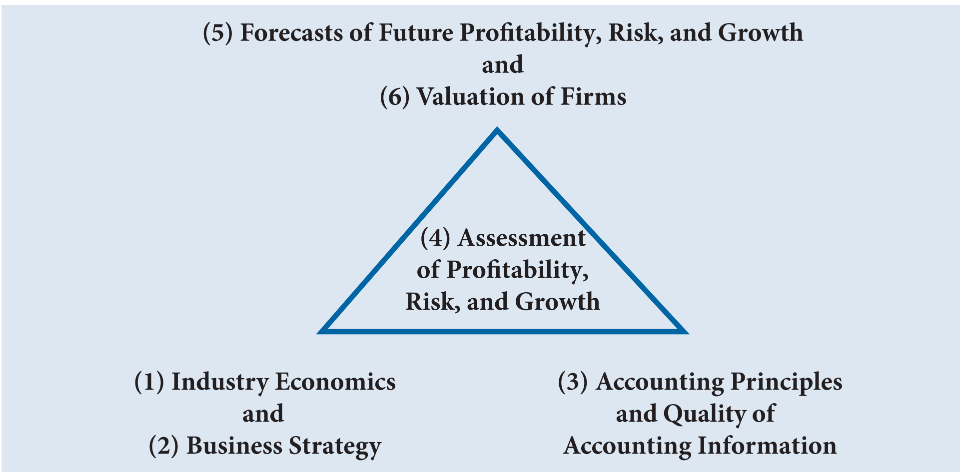
Jim Steve MARK

PREFACE

The process of financial reporting, financial statement analysis, and valuation helps investors and analysts understand a firm's profitability, risk, and growth; use that information to forecast future profitability, risk, and growth; and ultimately to value the firm, enabling intelligent investment decisions. This process is central to the role of accounting, financial reporting, capital markets, investments, portfolio management, and corporate management in the world economy. When conducted with care and integrity, financial statement analysis and valuation are fascinating and rewarding activities that can create tremendous value for society. However, as past financial crises in our capital markets reveal, when financial statement analysis and valuation are conducted carelessly or without integrity, they can create enormous loss of value in the capital markets and trigger deep recession in even the most powerful economies in the world. The stakes are high.

Given the profound importance of financial reporting, financial statement analysis, and valuation, and given changing accounting rules and enhanced regulations in the capital markets, this textbook provides you with a principled and disciplined approach for analysis and valuation. This textbook explains and demonstrates a thoughtful and thorough six-step framework you can use for financial statement analysis and valuation. You should begin an effective analysis of a set of financial statements with an evaluation of **(1)** the economic characteristics and competitive conditions of the industries in which a firm competes and **(2)** the particular strategies the firm executes to compete in each of these industries. Your analysis should then move to **(3)** assessing how well the firm's financial statements reflect the economic effects of the firm's strategic decisions and actions. Your assessment requires an understanding of the accounting principles and methods used to create the financial statements, the relevant and reliable information that the financial statements provide, and the appropriate adjustments that you might make to improve the quality of that information. Note that, in this text, we help you embrace financial reporting and financial statement analysis based on U.S. Generally Accepted Accounting Principles (GAAP) as well as International Financial Reporting Standards (IFRS) used by companies in many of the world's strongest economies, including the European Union, the United Kingdom, Japan, and Canada. Next, you should **(4)** assess the profitability, risk, and growth of the firm using financial statement ratios and other analytical tools and then **(5)** forecast the firm's future profitability, risk, and growth, incorporating information about expected changes in the economics of the industry and the firm's strategies. Finally, you can **(6)** value the firm using various valuation methods, making an investment decision by comparing likely ranges of your value estimate to the observed market value. This six-step process forms the conceptual and pedagogical framework for this book, and it is a principled and disciplined approach you can use for intelligent analysis and valuation decisions.

All textbooks on financial statement analysis include step (4), assessing the profitability, risk, and growth of a company. Textbooks differ, however, with respect to their emphases on the other five steps. Consider the following depiction of these steps.



Our view is that these six steps must form an integrated approach for effective and complete financial statement analysis. We have therefore structured and developed this book to provide balanced, integrated coverage of all six elements. We sequence our study by beginning with industry economics and firm strategy, moving to a general consideration of GAAP and IFRS and the quality of accounting information, and providing a structure and tools for the analysis of profitability, risk, and growth. We then examine specific accounting issues and the determinants of accounting quality and conclude with forecasting and valuation. We anchor each step in the sequence on the firm's profitability, risk, and growth, which are the fundamental drivers of value. We continually relate each part to those preceding and following it to maintain this balanced, integrated perspective.

The premise of this book is that you will learn financial statement analysis most effectively by performing the analysis on actual companies. The book's narrative sets forth the important concepts and analytical tools and demonstrates their application using the financial statements of **Clorox**. Each chapter contains a set of questions, exercises, problems, and cases based primarily on financial statement data of actual companies. Each chapter also contains an integrative case involving **Walmart** so you can apply the tools and methods throughout the text. A financial statement analysis package (FSAP) is available to aid you in your analytical tasks (discussed later).

Some of the Highlights of This Edition

In the 10th edition, the author team of James Wahlen, Stephen Baginski, and Mark Bradshaw continues to improve on the foundations established by Clyde Stickney and Paul Brown. Clyde Stickney, the original author of the first three editions of this book and coauthor of the fourth, fifth, and sixth editions, is enjoying his well-earned retirement. Paul Brown, a coauthor of the fourth, fifth, and sixth editions, recently announced his retirement as the president of Monmouth University. Jim, Steve, and Mark are internationally recognized research scholars and award-winning teachers in accounting, financial statement analysis, and valuation. They continue to bring many fresh new ideas and insights to produce a new edition with a strong focus on thoughtful and disciplined fundamental analysis, a broad and deep coverage of accounting issues including IFRS, and expanded analysis of companies within a global economic environment.

The next section highlights the content of each chapter. Listed below are some of the major highlights in this edition that impact all chapters or groups of chapters.

1. As in prior editions, the 10th edition uses a "golden thread" case company in each chapter. We now illustrate and highlight each step of the analysis in each chapter using the financial statements of **Clorox**. **The financial statements and disclosures of Clorox provide an excellent setting for teaching financial statements analysis because most students are familiar with the company; it has an effective strategy; and it has many important accounting, analysis, and valuation issues.** In the material at the end of each chapter, we also use **Walmart** as a "golden thread" case company.
2. **The exposition of each chapter has been further streamlined.** Known for being a well-written, accessible text, this edition presents each chapter in more concise, direct discussion, so you can get the key insights quickly and efficiently. To achieve the streamlining, some highly technical (mainly accounting-related) material has been moved to online appendices that students may access at www.cengagebrain.com.
3. Many chapters include **quick checks**, so you can be sure you have obtained the key insights from reading each section. In addition, each section and each of the end-of-chapter questions, exercises, problems, and cases is **cross-referenced to learning objectives**, so you can be sure that you can implement the critical skills and techniques associated with each of the learning objectives.
4. The chapters on profitability analysis (**Chapter 4**) and risk analysis (**Chapter 5**) continue to provide **disaggregation of return on common equity** into profitability, efficiency, and leverage, as well as an alternative partition into operating versus financing components.
5. The book's companion website, www.cengagebrain.com, contains an **updated Appendix D** with descriptive statistics on 20 commonly used financial ratios computed over the past 10 years for 48 industries. These ratios data enable you to benchmark your analyses and forecasts against industry averages.

6. The chapters on accounting quality continue **to provide broad coverage of accounting for financing, investing, and operating activities**. **Chapter 6** discusses the determinants of accounting quality, how to evaluate accounting quality, and how to adjust reported earnings and financial statements to cleanse low-quality accounting items. Then the discussion proceeds across the primary business activities of firms in the natural sequence in which the activities occur—raising financial capital, investing that capital in productive assets, and operating the business. **Chapter 7** discusses accounting for financing activities. **Chapter 8** describes accounting for investing activities, and **Chapter 9** deals with accounting for operating activities. Detailed examples of foreign currency translation and accounting for various hedging activities have been moved to online appendices.
7. The chapters on accounting quality continue to provide **more in-depth analyses of both balance sheet and income statement quality**.
8. Each chapter includes **relevant discussion of current U.S. GAAP and IFRS, how U.S. GAAP compares to IFRS**, and how you should deal with such differences in financial statement analysis. **New material includes recent major changes in accounting standards dealing with revenue recognition, leasing, and investments in securities.** End-of-chapter materials contain many problems and cases involving non-U.S. companies, with **application of financial statement analysis techniques to IFRS-based financial statements**.
9. Each chapter provides references to specific standards in U.S. GAAP using the **FASB Codification system**.
10. The chapters provide a number of **relevant insights from empirical accounting research**, pertinent to financial statement analysis and valuation.
11. The end-of-chapter material for each chapter contains portions of an **updated, integrative case applying the concepts and tools discussed in that chapter to Walmart**.
12. Each chapter contains **new or substantially revised and updated end-of-chapter material, including new problems and cases**. This material is relevant, real-world, and written for maximum learning value.
13. The Financial Statement Analysis Package (**FSAP**) available with this book has been **made more user-friendly**.

Overview of the Text

This section briefly describes the content and highlights of each chapter.

Chapter 1—Overview of Financial Reporting, Financial Statement Analysis, and Valuation. This chapter introduces you to the six interrelated sequential steps in financial statement analysis that serve as the organization structure for this book. It presents you with several frameworks for understanding the industry economics and business strategy of a firm and applies them to **Clorox**. It also reviews the purpose, underlying concepts, and content of each of the three principal financial statements, including those of non-U.S. companies reporting using IFRS. This chapter also provides the rationale for analyzing financial statements in capital market settings, including showing you some very compelling results from an empirical study of the association between unexpected earnings and market-adjusted stock returns as well as empirical results showing that fundamental analysis can help investors generate above-market returns. Our examination of the course syllabi of users of the previous edition indicated that most courses require students to engage in such a project. This appendix guides you in how to proceed, where to get information, and so on.

In addition to the new integrative case involving **Walmart**, the chapter includes an updated version of a case involving **Nike**.

Chapter 2—Asset and Liability Valuation and Income Recognition. This chapter covers three topics we believe you need to review from previous courses before delving into the more complex topics in this book.

- First, we discuss the link between the valuation of assets and liabilities on the balance sheet and the measurement of income. We believe that you will understand topics such as revenue recognition and accounting for marketable securities, derivatives, pensions, and other topics more easily when you examine them with an appreciation for the inherent trade-off of a balance sheet versus income statement perspective. This chapter also reviews the trade-offs faced by accounting standard setters, regulators, and corporate managers who attempt to simultaneously provide both reliable and relevant financial statement information. We also examine whether firms should recognize value changes immediately in net income or delay their recognition, sending them temporarily through other comprehensive income.
- Second, we present a framework for analyzing the dual effects of economic transactions and other events on the financial statements. This framework relies on the balance sheet equation to trace these effects through the financial statements. Even students who are well grounded in double-entry accounting find this framework helpful in visually identifying the effects of various complex business transactions, such as corporate acquisitions, derivatives, and leases. We use this framework in subsequent chapters to present and analyze transactions, as we discuss various GAAP and IFRS topics.

$\mathbf{A_{BEG}} =$	$\mathbf{L_{BEG}}$	+	$\mathbf{CC_{BEG}}$	+	$\mathbf{AOCI_{BEG}}$	+	$\mathbf{RE_{BEG}}$
$+\Delta$**A**	$+\Delta$**L**		$+\Delta$**Stock**		**+OCI**		**+NI** **−D**
$\mathbf{A_{END}} =$	$\mathbf{L_{END}}$	+	$\mathbf{CC_{END}}$	+	$\mathbf{AOCI_{END}}$	+	$\mathbf{RE_{END}}$

[BEG = Beginning, END = End, A=Assets, L=Liabilities, CC=Contributed Capital, AOCI=Accumulated Other Comprehensive Income, RE=Retained Earnings, Stock=Common and Preferred Capital Stock Accounts, OCI=Other Comprehensive Income, NI=Net Income, and D=Dividends.]

- Third, we discuss the measurement of income tax expense, particularly with regard to the treatment of temporary differences between book income and taxable income. Virtually every business transaction has income tax consequences, and it is crucial that you grasp the information conveyed in income tax disclosures.

The end-of-chapter materials include various asset and liability valuation problems involving **Biosante Pharmaceuticals**, **Prepaid Legal Services**, and **Nike**, as well as the integrative case involving **Walmart**.

Chapter 3—Income Flows versus Cash Flows: Understanding the Statement of Cash Flows. Chapter 3 reviews the statement of cash flows and presents a model for relating the cash flows from operating, investing, and financing activities to a firm's position in its life cycle. The chapter demonstrates procedures you can use to prepare the statement of cash flows when a firm provides no cash flow information. The chapter also provides new insights that place particular emphasis on how you should use information in the statement of cash flows to assess earnings quality.

The end-of-chapter materials utilize cash flow and earnings data for a number of companies including **Tesla**, **Amazon**, **Kroger**, **Coca-Cola**, **Texas Instruments**, **Sirius XM Radio**, **Apollo Group**, and **AerLingus**. A case (Prime Contractors) illustrates the relation between earnings and cash flows as a firm experiences profitable and unprofitable operations and changes its business strategy. The classic W. T. Grant case illustrating the use of earnings and cash flow information to assess solvency risk and avoid bankruptcy has been moved to an online appendix.

Chapter 4—Profitability Analysis. This chapter discusses the concepts and tools for analyzing a firm's profitability, integrating industry economic and strategic factors that affect the interpretation of financial ratios. It applies these concepts and tools to the analysis of the profitability of **Clorox**. The analysis of profitability centers on the rate of return on assets and its disaggregated components, the rate of return on common shareholders' equity and its disaggregated components, and earnings per share. The chapter contains a section on alternative profitability measures, including a discussion of "street earnings." This chapter also considers analytical tools unique to certain industries, such as airlines, service firms, retailers, and technology firms.

A number of problems and exercises at the end of the chapter cover profitability analyses for companies such as **Nucor Steel**, **Hershey**, **Microsoft**, **Oracle**, **Dell**, **Sun Microsystems**, **Texas Instruments**, **Hewlett Packard**, **Georgia Pacific**, **General Mills**, **Abercrombie & Fitch**, **Hasbro**, and many others. The integrative case examines **Walmart's** profitability.

Chapter 5—Risk Analysis. This chapter begins with a discussion of recently required disclosures on the extent to which firms are subject to various types of risk, including unexpected changes in commodity prices, exchange rates, and interest rates and how firms manage these risks. The chapter provides new insights and discussion about the benefits and dangers associated with financial flexibility and the use of leverage. This edition shows you how to decompose return on common equity into components that highlight the contribution of the inherent profitability of the firm's assets and the contribution from the strategic use of leverage to enhance the returns to common equity investors. The chapter provides you an approach to in-depth financial statement analysis of various risks associated with leverage, including short-term liquidity risk, long-term solvency risk, credit risk, bankruptcy risk, and systematic and firm-specific market risk. This chapter also describes and illustrates the calculation and interpretation of risk ratios and applies them to the financial statements of **Clorox**, focusing on both short-term liquidity risk and long-term solvency risk. We also explore credit risk and bankruptcy risk in greater depth.

A unique feature of the problems in Chapters 4 and 5 is the linking of the analysis of several companies across the two chapters, including problems involving **Hasbro**, **Abercrombie & Fitch**, and **Walmart**. In addition, other problems focus on risk-related issues for companies like **Coca-Cola**, **Delta Air Lines**, **VF Corporation**, **Best Buy**, **Circuit City**, **Whole Foods**, **The Tribune Company**, and **The Washington Post**. Chapter-ending cases involve risk analysis for **Walmart** and classic cases on credit risk analysis **(Massachusetts Stove Company)** and bankruptcy prediction **(Fly-By-Night International Group)**.

Chapter 6—Accounting Quality. This chapter provides an expanded discussion of the quality of income statement and balance sheet information, emphasizing faithful representation of relevant and substantive economic content as the key characteristics of high quality, useful accounting information. The chapter also alerts you to the conditions under which managers might likely engage in earnings management. The discussion provides a framework for accounting quality analysis, which is used in the discussions of various accounting issues in Chapters 7 through 9. We consider several financial reporting topics that primarily affect the persistence of earnings, including gains and losses from discontinued operations, changes in accounting principles, other comprehensive income items, impairment losses, restructuring charges, changes in estimates, and gains and losses from peripheral activities. The chapter concludes with an assessment of accounting quality by separating accruals and cash flows and an illustration of Beneish's (1999) multivariate model for identifying potential financial statement manipulators.

Chapter-ending materials include problems involving **Nestlé**, **Checkpoint Systems**, **Rock of Ages**, **Vulcan Materials**, **Northrop Grumman**, **Intel**, **Enron**, **Socket Mobile**, **Harley-Davidson**, **Chipotle**, **and Sunbeam**. End-of-chapter materials also include an integrative case involving the analysis of **Walmart's** accounting quality.

Chapter 7—Financing Activities. This chapter has been structured along with Chapters 8 and 9 to discuss accounting issues in their natural sequence—raising financial capital, investing the capital in productive assets, and then managing the operations of the business. Chapter 7 discusses the accounting principles and practices under U.S. GAAP and IFRS associated with firms' financing activities. The chapter begins by describing the financial statement reporting of capital investments by owners (equity issues) and distributions to owners (dividends and share repurchases), and the accounting for equity issued to compensate employees (stock options, stock appreciation rights, and restricted stock). The chapter demonstrates how shareholders' equity reflects the effects of transactions with non-owners that flow through the income statement (net income) and those that do not (other comprehensive income). The chapter then describes the financial reporting for long-term debt (bonds, notes payable, operating and finance lease liabilities, and troubled debt), hybrid securities (convertible bonds, preferred stock), and derivatives used to hedge interest rate risk (an online appendix provides specific examples of accounting for interest rate swaps). Throughout the chapter, we highlight the differences between U.S. GAAP and IFRS in the area of equity and debt financing.

In addition to various questions and exercises, the end-of-chapter material includes problems probing accounting for various financing alternatives, **Ford Motor** Credit's securitization of receivables, and stock-based compensation at **Coca-Cola** and **Eli Lilly**. End-of-chapter cases include the integrative case involving **Walmart** and a case on stock compensation at **Oracle**.

Chapter 8—Investing Activities. This chapter discusses various accounting principles and methods under U.S. GAAP and IFRS associated with a firm's investments in long-lived tangible assets, intangible assets, and financial instruments. The chapter demonstrates the accounting for a firm's investments in tangible productive assets including property, plant, and equipment, including the initial decision to capitalize or expense and the use of choices and estimates to allocate costs through the depreciation process. The chapter demonstrates alternative ways that firms account for intangible assets, highlighting research and development expenditures, software development expenditures, and goodwill, including the exercise of judgment in the allocation of costs through the amortization process. The chapter reviews and applies the rules for evaluating the impairment of different categories of long-lived assets, including goodwill. The chapter then describes accounting and financial reporting of intercorporate investments in securities (trading securities, available-for-sale securities, held-to-maturity securities, and noncontrolled affiliates) and corporate acquisitions. The chapter reviews accounting for variable-interest entities, including the requirement to consolidate them with the firm identified as the primary beneficiary. Finally, an online appendix to the chapter addresses foreign investments by preparing a set of translated financial statements using the all-current method and the monetary/nonmonetary method and describing the conditions under which each method best portrays the operating relationship between a U.S. parent firm and its foreign subsidiary.

The end-of-chapter questions, exercises, problems, and cases include a problem involving **Molson Coors Brewing Company** and its variable interest entities, an integrative application of the chapter topics to **Walmart**, and a case involving Disney's acquisition of Marvel Entertainment.

Chapter 9—Operating Activities. Chapter 9 discusses how financial statements prepared under U.S. GAAP or IFRS capture and report the firm's operating activities. The chapter opens with a discussion of how financial accounting measures and reports the revenues and expenses generated by a firm's operating activities, as well as the related assets, liabilities, and cash flows. This discussion reviews the criteria for recognizing revenue and expenses under the accrual basis of accounting and applies these criteria to various types of businesses. The revenue recognition discussion is based on the new revenue recognition standard. The chapter analyzes and interprets the effects of FIFO versus LIFO on financial statements and demonstrates how to convert the statements of a firm from a LIFO to a FIFO basis. The chapter identifies the working capital investments created by operating activities and the financial statement effects of credit policy and credit risk. The chapter also shows how to use the financial statement and note information for corporate income taxes to analyze the firm's tax strategies, pensions, and other post-employment benefits obligations using footnote disclosures from **Clorox's** Form 10-K. The chapter provides a discussion of how a firm uses derivative instruments to hedge the risk associated with commodities and with operating transactions denominated in foreign currency, and an online appendix provides specific examples to illustrate hedge accounting.

The end-of-chapter problems and exercises examine revenue and expense recognition for a wide variety of operating activities, including revenues for software, consulting, transportation, construction, manufacturing, and others. End-of-chapter problems also involve **Coca-Cola's** tax notes and pension disclosures and include the integrative **Walmart** case.

Chapter 10—Forecasting Financial Statements. This chapter describes and illustrates the procedures you should use in preparing forecasted financial statements. This material plays a central role in the valuation of companies, discussed throughout Chapters 11 through 14. The chapter begins by giving you an overview of forecasting and the importance of creating integrated and articulated financial statement forecasts. It then demonstrates the preparation of projected financial statements for **Clorox**. The chapter also demonstrates how to get forecasted balance sheets to balance and how to compute implied statements of cash flows from forecasts of balance sheets and income statements. The chapter also discusses forecast shortcuts analysts sometimes take, and when such forecasts are reliable and when they are not. The Forecast and Forecast Development spreadsheets within FSAP provide templates you can use to develop and build your own financial statement forecasts.

Short end-of-chapter problems illustrate techniques for projecting key accounts for firms like **Home Depot**, **Intel**, **Hasbro**, and **Barnes and Noble**, determining the cost structure of firms like **Nucor Steel and Sony**, and dealing with irregular changes in accounts. Longer problems and cases include the integrative **Walmart** case and a classic case involving the projection of financial statements to assist the Massachusetts Stove Company in its strategic decision to add gas stoves to its wood stove line. The problems and cases specify the assumptions you should make to illustrate the preparation procedure. We link and use these longer problems and cases in later chapters that rely on these financial statement forecasts in determining share value estimates for these firms.

Chapter 11—Risk-Adjusted Expected Rates of Return and the Dividends Valuation Approach. Chapters 11 through 14 form a unit in which we demonstrate various approaches to valuing a firm. Chapter 11 focuses on fundamental issues of valuation that you will apply in all of the valuation chapters. This chapter provides you with a discussion of the measurement of the cost of debt and equity capital and the weighted average cost of capital, as well as the dividends-based valuation approach. The chapter also discusses various issues of valuation, including forecasting horizons, projecting long-run continuing dividends, and computing continuing (sometimes called terminal) value. The chapter describes and illustrates the internal consistency in valuing firms using dividends, free cash flows, or earnings. We place particular emphasis on helping you understand that the different approaches to valuation are simply differences in perspective (dividends capture wealth distribution, free cash flows capture wealth realization in cash, and earnings represent wealth creation), and that these approaches should produce internally consistent estimates of value. In this chapter we demonstrate the cost-of-capital measurements and the dividends-based valuation approach for **Clorox**, using the forecasted amounts from **Clorox** financial statements discussed in Chapter 10. The chapter also presents techniques for assessing the sensitivity of value estimates, varying key assumptions such as the cost of capital and long-term growth rate. The chapter also discusses and illustrates the cost-of-capital computations and dividends valuation model computations within the Valuation spreadsheet in FSAP. This spreadsheet takes the forecast amounts from the Forecast spreadsheet and other relevant information and values the firm using the various valuation methods discussed in Chapters 11 through 14.

End-of-chapter material includes the computation of costs of capital across different industries and companies, including **Whirlpool**, **IBM**, and **Target Stores**, as well as short dividends valuation problems for companies like **Royal Dutch Shell**. Cases involve computing costs of capital and dividends-based valuation of **Walmart**, and **Massachusetts Stove Company** from financial statement forecasts developed in Chapter 10's problems and cases.

Chapter 12—Valuation: Cash-Flow Based Approaches. Chapter 12 focuses on valuation using the present value of free cash flows. This chapter distinguishes valuation using free cash flows to all debt and equity stakeholders and valuation using free cash flows to common equity shareholders and the settings where one or the other measure of free cash flows is appropriate for valuation. The chapter also considers and applies techniques for projecting free cash flows and measuring the continuing value after the forecast horizon. The chapter applies both of the discounted free cash flows valuation methods to **Clorox**, demonstrating how to use the forecasted amounts from **Clorox's** projected financial statements (discussed in Chapter 10) to measure the free cash flows to all debt and equity stakeholders, as well as the free cash flows to common equity. The chapter also presents techniques for assessing the sensitivity of value estimates, varying key assumptions such as the costs of capital and long-term growth rates. The chapter also explains and demonstrates the consistency of valuation estimates across different approaches and shows that the dividends approach in Chapter 11 and the free cash flows approaches in Chapter 12 should and do lead to identical value estimates for **Clorox**. The Valuation spreadsheet in FSAP uses projected amounts from the Forecast spreadsheet and other relevant information and values the firm using both of the free cash flows valuation approaches.

Updated shorter problem material asks you to compute free cash flows from financial statement data for companies like **3M** and **Dick's Sporting Goods**. Problem material also includes using free cash flows to value firms in leveraged buyout transactions, such as **May Department Stores**, **Experian Information Solutions**, and **Wedgewood Products**. Longers and cases material include the valuation of **Walmart**, **Coca-Cola**, and **Massachusetts Stove Company**.

The chapter also introduces the Holmes Corporation case, which is an integrated case relevant for Chapters 10 through 13 in which you select forecast assumptions, prepare projected financial statements, and value the firm using the various methods discussed in Chapters 11 through 13. This case can be analyzed in stages with each chapter or as an integrated case after Chapter 13.

Chapter 13—Valuation: Earnings-Based Approaches. Chapter 13 emphasizes the role of accounting earnings in valuation, focusing on valuation methods using the residual income approach. The residual income approach uses the ability of a firm to generate income in excess of the cost of capital as the principal driver of a firm's value in excess of its book value. We apply the residual income valuation method to the forecasted amounts for **Clorox** from Chapter 10. The chapter also demonstrates that the dividends valuation methods, the free cash flows valuation methods, and the residual income valuation methods are consistent with a fundamental valuation approach. In the chapter we explain and demonstrate that these approaches yield identical estimates of value for **Clorox**. The Valuation spreadsheet in FSAP includes valuation models that use the residual income valuation method.

End-of-chapter materials include various problems involving computing residual income across different firms, including **Abbott Labs**, **IBM**, **Target Stores**, **Microsoft**, **Intel**, **Dell**, **Southwest Airlines**, **Kroger**, and **Yum! Brands**. Longer problems also involve the valuation of other firms such as **Steak 'n Shake** in which you are given the needed financial statement information. Longer problems and cases enable you to apply the residual income approach to **Coca-Cola**, **Walmart**, and **Massachusetts Stove Company**, considered in Chapters 10 through 12.

Chapter 14—Valuation: Market-Based Approaches. Chapter 14 demonstrates how to analyze and use the information in market value. In particular, the chapter describes and applies market-based valuation multiples, including the market-to-book ratio, the price-to-earnings ratio, and the price-earnings-growth ratio. The chapter illustrates the theoretical and conceptual approaches to market multiples and contrasts them with the practical approaches to market multiples. The chapter demonstrates how the market-to-book ratio is consistent with residual ROCE valuation and the residual income model discussed in Chapter 13. The chapter also describes the factors that drive market multiples, so you can adjust multiples appropriately to reflect differences in profitability, growth, and risk across comparable firms. An applied analysis demonstrates how you can reverse engineer a firm's stock price to infer the valuation assumptions that the stock market appears to be making. We apply all of these valuation methods to **Clorox**. The chapter concludes with a discussion of the role of market efficiency, as well as striking evidence on using earnings surprises to pick stocks and form portfolios (the Bernard and Thomas post-earnings announcement drift anomaly) as well as using value-to-price ratios to form portfolios (the Frankel and Lee investment strategy), both of which appear to help investors generate significant above-market returns.

End-of-chapter materials include problems involving computing and interpreting market-to-book ratios for pharmaceutical companies, **Enron**, **Coca-Cola**, and **Steak 'n Shake** and the integrative case involving **Walmart**.

Appendices. Appendix A includes the financial statements and notes for **Clorox** used in the illustrations throughout the book. Appendix B, available at www.cengagebrain.com, provides the **Clorox** management's discussion and analysis of operations, which we use when interpreting **Clorox** financial ratios and in our financial statement projections. Appendix C presents the output from FSAP for **Clorox**, including the Data spreadsheet, the Analysis spreadsheet (profitability, growth, and risk ratio analyses), the Forecasts and Forecast Development spreadsheets, and the Valuations spreadsheet. Appendix D, also available online, provides descriptive statistics on 20 financial statement ratios across 48 industries over the years 2010 to 2019.

Chapter Sequence and Structure

Our own experience and discussions with other professors suggest there are various approaches to teaching a financial statement analysis course, each of which works well in particular settings. We have therefore designed this book for flexibility with respect to the sequence of chapter assignments. The following diagram sets forth the overall structure of the book.

Chapter 1: Overview of Financial Reporting, Financial Statement Analysis, and Valuation

Chapter 2: Asset and Liability Valuation and Income Recognition | **Chapter 3: Income Flows versus Cash Flows**

Chapter 4: Profitability Analysis | **Chapter 5: Risk Analysis**

Chapter 6: Accounting Quality

Chapter 7: Financing Activities | **Chapter 8: Investing Activities** | **Chapter 9: Operating Activities**

Chapter 10: Forecasting Financial Statements

Chapter 11: Risk-Adjusted Expected Rates of Return and the Dividends Valuation Approach

Chapter 12: Valuation: Cash-Flow-Based Approaches | **Chapter 13: Valuation: Earnings-Based Approaches**

Chapter 14: Valuation: Market-Based Approaches

The chapter sequence follows the six steps in financial statement analysis discussed in Chapter 1. Chapters 2 and 3 provide the conceptual foundation for the three financial statements. Chapters 4 and 5 present tools for analyzing the financial statements. Chapters 6 through 9 describe how to assess the quality of accounting information under U.S. GAAP and IFRS and then examine the accounting for financing, investing, and operating activities. Chapters 10 through 14 focus primarily on forecasting financial statements and valuation.

Some schools teach U.S. GAAP and IFRS topics and financial statement analysis in separate courses. Chapters 6 through 9 are an integrated unit and sufficiently rich for the U.S. GAAP and IFRS course. The remaining chapters will then work well in the financial statement analysis course. Some schools leave the topic of valuation to finance courses. Chapters 1 through 10 will then work well for the accounting prelude to the finance course. Some instructors may wish to begin with forecasting and valuation (Chapters 10 through 14) and then examine data issues that might affect the numbers used in the valuations (Chapters 6 through 9). This textbook is adaptable to other sequences of the various topics.

Overview of the Ancillary Package

The Financial Statement Analysis Package (FSAP) is available on the companion website for this book (www.cengagebrain.com) to all purchasers of the text. The package performs various analytical tasks (common-size and rate of change financial statements, ratio computations, risk indicators such as the Altman-Z score and the Beneish manipulation index), provides a worksheet template for preparing financial statements forecasts, and applies amounts from the financial statement forecasts to valuing a firm using the valuation methods demonstrated in this book. A user manual for FSAP is embedded within FSAP.

New to the 10th edition of *Financial Reporting, Financial Statement Analysis, and Valuation* is MindTap. MindTap is a platform that propels students from memorization to mastery. It gives you complete control of your course, so you can provide engaging content, challenge every learner, and build student confidence. Customize interactive syllabi to emphasize priority topics, then add your own material or notes to the eBook as desired. This outcomes-driven application gives you the tools needed to empower students and boost both understanding and performance.

Access Everything You Need in One Place
Cut down on prep with the preloaded and organized MindTap course materials. Teach more efficiently with interactive multimedia, assignments, quizzes, and more. Give your students the power to read, listen, and study on their phones, so they can learn on their terms.

Empower Students to Reach Their Potential
Twelve distinct metrics give you actionable insights into student engagement. Identify topics troubling your entire class and instantly communicate with those struggling. Students can track their scores to stay motivated towards their goals. Together, you can be unstoppable.

Control Your Course—and Your Content
Get the flexibility to reorder textbook chapters, add your own notes, and embed a variety of content including Open Educational Resources (OER). Personalize course content to your students' needs. They can even read your notes, add their own, and highlight key text to aid their learning.

Get a Dedicated Team, Whenever You Need Them
MindTap isn't just a tool; it's backed by a personalized team eager to support you. We can help set up your course and tailor it to your specific objectives, so you'll be ready to make an impact from day one. Know we'll be standing by to help you and your students until the final day of the term.

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BRIEF CONTENTS

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