

2025 CFA[®]
Exam Prep

SchweserNotes[™]

Financial Statement Analysis and
Equity Investments

Level I Book 2

KAPLAN  **SCHWESER**

Book 2: Financial Statement Analysis and Equity Investments

SchweserNotes™ 2025

Level I CFA®

KAPLAN  **SCHWESER**

SCHWESERNOTES™ 2025 LEVEL I CFA® BOOK 2: FINANCIAL STATEMENT ANALYSIS AND EQUITY INVESTMENTS

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Learning Outcome Statements (LOS)

27. Introduction to Financial Statement Analysis

The candidate should be able to:

- a. describe the steps in the financial statement analysis framework.
- b. describe the roles of financial statement analysis.
- c. describe the importance of regulatory filings, financial statement notes and supplementary information, management's commentary, and audit reports.
- d. describe implications for financial analysis of alternative financial reporting systems and the importance of monitoring developments in financial reporting standards.
- e. describe information sources that analysts use in financial statement analysis besides annual and interim financial reports.

28. Analyzing Income Statements

The candidate should be able to:

- a. describe general principles of revenue recognition, specific revenue recognition applications, and implications of revenue recognition choices for financial analysis.
- b. describe general principles of expense recognition, specific expense recognition applications, implications of expense recognition choices for financial analysis and contrast costs that are capitalized versus those that are expensed in the period in which they are incurred.
- c. describe the financial reporting treatment and analysis of non-recurring items (including discontinued operations, unusual or infrequent items) and changes in accounting policies.
- d. describe how earnings per share is calculated and calculate and interpret a company's basic and diluted earnings per share for companies with simple and complex capital structures including those with antidilutive securities.
- e. evaluate a company's financial performance using common-size income statements and financial ratios based on the income statement.

29. Analyzing Balance Sheets

The candidate should be able to:

- a. explain the financial reporting and disclosures related to intangible assets.
- b. explain the financial reporting and disclosures related to goodwill.
- c. explain the financial reporting and disclosures related to financial instruments.
- d. explain the financial reporting and disclosures related to non-current liabilities.
- e. calculate and interpret common-size balance sheets and related financial ratios.

30. Analyzing Statements of Cash Flows I

The candidate should be able to:

- a. describe how the cash flow statement is linked to the income statement and the balance sheet.
- b. describe the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data.
- c. demonstrate the conversion of cash flows from the indirect to direct method.
- d. contrast cash flow statements prepared under International Financial Reporting Standards (IFRS) and US generally accepted accounting principles (US GAAP).

31. Analyzing Statements of Cash Flows II

The candidate should be able to:

- a. analyze and interpret both reported and common-size cash flow statements.
- b. calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios.

32. Analysis of Inventories

The candidate should be able to:

- a. describe the measurement of inventory at the lower of cost and net realisable value and its implications for financial statements and ratios.

- b. calculate and explain how inflation and deflation of inventory costs affect the financial statements and ratios of companies that use different inventory valuation methods.
- c. describe the presentation and disclosures relating to inventories and explain issues that analysts should consider when examining a company's inventory disclosures and other sources of information.

33. Analysis of Long-Term Assets

The candidate should be able to:

- a. compare the financial reporting of the following types of intangible assets: purchased, internally developed, and acquired in a business combination.
- b. explain and evaluate how impairment and derecognition of property, plant, and equipment and intangible assets affect the financial statements and ratios.
- c. analyze and interpret financial statement disclosures regarding property, plant, and equipment and intangible assets.

34. Topics in Long-Term Liabilities and Equity

The candidate should be able to:

- a. explain the financial reporting of leases from the perspectives of lessors and lessees.
- b. explain the financial reporting of defined contribution, defined benefit, and stock-based compensation plans.
- c. describe the financial statement presentation of and disclosures relating to long-term liabilities and share-based compensation.

35. Analysis of Income Taxes

The candidate should be able to:

- a. contrast accounting profit, taxable income, taxes payable, and income tax expense and temporary versus permanent differences between accounting profit and taxable income.
- b. explain how deferred tax liabilities and assets are created and the factors that determine how a company's deferred tax liabilities and assets should be treated for the purposes of financial analysis.
- c. calculate, interpret, and contrast an issuer's effective tax rate, statutory tax rate, and cash tax rate.
- d. analyze disclosures relating to deferred tax items and the effective tax rate reconciliation and explain how information included in these disclosures affects a company's financial statements and financial ratios.

36. Financial Reporting Quality

The candidate should be able to:

- a. compare financial reporting quality with the quality of reported results (including quality of earnings, cash flow, and balance sheet items).
- b. describe a spectrum for assessing financial reporting quality.
- c. explain the difference between conservative and aggressive accounting.
- d. describe motivations that might cause management to issue financial reports that are not high quality and conditions that are conducive to issuing low-quality, or even fraudulent, financial reports.
- e. describe mechanisms that discipline financial reporting quality and the potential limitations of those mechanisms.
- f. describe presentation choices, including non-GAAP measures, that could be used to influence an analyst's opinion.
- g. describe accounting methods (choices and estimates) that could be used to manage earnings, cash flow, and balance sheet items.
- h. describe accounting warning signs and methods for detecting manipulation of information in financial reports.

37. Financial Analysis Techniques

The candidate should be able to:

- a. describe tools and techniques used in financial analysis, including their uses and limitations.
- b. calculate and interpret activity, liquidity, solvency, and profitability ratios.
- c. describe relationships among ratios and evaluate a company using ratio analysis.

- d. demonstrate the application of DuPont analysis of return on equity and calculate and interpret effects of changes in its components.
- e. describe the uses of industry-specific ratios used in financial analysis.
- f. describe how ratio analysis and other techniques can be used to model and forecast earnings.

38. Introduction to Financial Statement Modeling

The candidate should be able to:

- a. demonstrate the development of a sales-based pro forma company model.
- b. explain how behavioral factors affect analyst forecasts and recommend remedial actions for analyst biases.
- c. explain how the competitive position of a company based on a Porter's five forces analysis affects prices and costs.
- d. explain how to forecast industry and company sales and costs when they are subject to price inflation or deflation.
- e. explain considerations in the choice of an explicit forecast horizon and an analyst's choices in developing projections beyond the short-term forecast horizon.

39. Market Organization and Structure

The candidate should be able to:

- a. explain the main functions of the financial system.
- b. describe classifications of assets and markets.
- c. describe the major types of securities, currencies, contracts, commodities, and real assets that trade in organized markets, including their distinguishing characteristics and major subtypes.
- d. describe types of financial intermediaries and services that they provide.
- e. compare positions an investor can take in an asset.
- f. calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call.
- g. compare execution, validity, and clearing instructions.
- h. compare market orders with limit orders.
- i. define primary and secondary markets and explain how secondary markets support primary markets.
- j. describe how securities, contracts, and currencies are traded in quote-driven, order-driven, and brokered markets.
- k. describe characteristics of a well-functioning financial system.
- l. describe objectives of market regulation.

40. Security Market Indexes

The candidate should be able to:

- a. describe a security market index.
- b. calculate and interpret the value, price return, and total return of an index.
- c. describe the choices and issues in index construction and management.
- d. compare the different weighting methods used in index construction.
- e. calculate and analyze the value and return of an index given its weighting method.
- f. describe rebalancing and reconstitution of an index.
- g. describe uses of security market indexes.
- h. describe types of equity indexes.
- i. compare types of security market indexes.
- j. describe types of fixed-income indexes.
- k. describe indexes representing alternative investments.

41. Market Efficiency

The candidate should be able to:

- a. describe market efficiency and related concepts, including their importance to investment practitioners.
- b. contrast market value and intrinsic value.
- c. explain factors that affect a market's efficiency.
- d. contrast weak-form, semi-strong-form, and strong-form market efficiency.
- e. explain the implications of each form of market efficiency for fundamental analysis, technical analysis, and the choice between active and passive portfolio management.

- f. describe market anomalies.
- g. describe behavioral finance and its potential relevance to understanding market anomalies.

42. Overview of Equity Securities

The candidate should be able to:

- a. describe characteristics of types of equity securities.
- b. describe differences in voting rights and other ownership characteristics among different equity classes.
- c. compare and contrast public and private equity securities.
- d. describe methods for investing in non-domestic equity securities.
- e. compare the risk and return characteristics of different types of equity securities.
- f. explain the role of equity securities in the financing of a company's assets.
- g. contrast the market value and book value of equity securities.
- h. compare a company's cost of equity, its (accounting) return on equity, and investors' required rates of return.

43. Company Analysis: Past and Present

The candidate should be able to:

- a. describe the elements that should be covered in a thorough company research report.
- b. determine a company's business model.
- c. evaluate a company's revenue and revenue drivers, including pricing power.
- d. evaluate a company's operating profitability and working capital using key measures.
- e. evaluate a company's capital investments and capital structure.

44. Industry and Competitive Analysis

The candidate should be able to:

- a. describe the purposes of, and steps involved in, industry and competitive analysis.
- b. describe industry classification methods and compare methods by which companies can be grouped.
- c. determine an industry's size, growth characteristics, profitability, and market share trends.
- d. analyze an industry's structure and external influences using Porter's Five Forces and PESTLE frameworks.
- e. evaluate the competitive strategy and position of a company.

45. Company Analysis: Forecasting

The candidate should be able to:

- a. explain principles and approaches to forecasting a company's financial results and position.
- b. explain approaches to forecasting a company's revenues.
- c. explain approaches to forecasting a company's operating expenses and working capital.
- d. explain approaches to forecasting a company's capital investments and capital structure.
- e. describe the use of scenario analysis in forecasting.

46. Equity Valuation: Concepts and Basic Tools

The candidate should be able to:

- a. evaluate whether a security, given its current market price and a value estimate, is overvalued, fairly valued, or undervalued by the market.
- b. describe major categories of equity valuation models.
- c. describe regular cash dividends, extra dividends, stock dividends, stock splits, reverse stock splits, and share repurchases.
- d. describe dividend payment chronology.
- e. explain the rationale for using present value models to value equity and describe the dividend discount and free-cash-flow-to-equity models.
- f. explain advantages and disadvantages of each category of valuation model.
- g. calculate the intrinsic value of a non-callable, non-convertible preferred stock.
- h. calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.
- i. identify characteristics of companies for which the constant growth or a multistage dividend discount model is appropriate.

- j. explain the rationale for using price multiples to value equity, how the price to earnings multiple relates to fundamentals, and the use of multiples based on comparables.
- k. calculate and interpret the following multiples: price to earnings, price to an estimate of operating cash flow, price to sales, and price to book value.
- l. describe enterprise value multiples and their use in estimating equity value.
- m. describe asset-based valuation models and their use in estimating equity value.

READING 27

INTRODUCTION TO FINANCIAL STATEMENT ANALYSIS

MODULE 27.1: FINANCIAL STATEMENT ROLES



Video covering this content is available online.

LOS 27.a: Describe the steps in the financial statement analysis framework.

The **financial statement analysis framework**¹ sets out a generic set of steps for analysts to apply to a multitude of objectives when analyzing debt issues, equity securities, and corporate actions. The framework consists of six steps:

- Step 1: State the objective and context.* Determine what questions the analysis seeks to answer, the form in which this information needs to be presented, and what resources and how much time are available to perform the analysis.
 - Step 2: Gather data.* Acquire the company's financial statements and other relevant data on its industry and the economy. Ask questions of the company's management, suppliers, and customers, and visit company sites.
 - Step 3: Process the data.* Make any appropriate adjustments to the financial statements. Calculate ratios and perform statistical analysis. Prepare exhibits such as graphs and common-size balance sheets.
 - Step 4: Analyze and interpret the data.* Use the data to answer the questions stated in the first step. Decide what conclusions or recommendations the information supports.
 - Step 5: Report the conclusions or recommendations.* Prepare a report and communicate it to its intended audience. Be sure the report and its dissemination comply with the Code and Standards that relate to investment analysis and recommendations.
 - Step 6: Update the analysis.* Repeat these steps periodically, and change the conclusions or recommendations when necessary.
-

LOS 27.b: Describe the roles of financial statement analysis.

Financial reporting refers to the way companies show their financial performance to investors, creditors, and other interested parties by preparing and presenting financial

statements.

The role of **financial statement analysis** is to use the information in a company's financial statements, along with other relevant information, to make economic decisions. Examples of such decisions include whether to invest in the company's securities or recommend them to investors, whether to extend trade or bank credit to the company, and assigning credit ratings to a company's debt. Analysts use financial statement data to evaluate a company's past performance and current financial position to form opinions about the company's ability to earn profits and generate cash flow in the future. As part of this process, analysts will identify risk factors that affect the company's future profitability and position.



PROFESSOR'S NOTE

This reading deals with financial analysis for external users. Management also performs financial analysis in making everyday decisions. However, management may rely on internal financial information that is likely maintained in a different format and unavailable to external users.

LOS 27.c: Describe the importance of regulatory filings, financial statement notes and supplementary information, management's commentary, and audit reports.

Standard-setting bodies are professional organizations of accountants and auditors that establish financial reporting standards. **Regulatory authorities** are government agencies that have the legal authority to enforce compliance with financial reporting standards.

The two primary standard-setting bodies are the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). In the United States, the FASB sets forth the U.S. Generally Accepted Accounting Principles (U.S. GAAP). Outside the United States, the IASB establishes the International Financial Reporting Standards (IFRS). Other national standard-setting bodies exist as well. Some of the older IASB standards are referred to as the International Accounting Standards (IAS).

Regulatory authorities, such as the Securities and Exchange Commission (SEC) in the United States and the Financial Conduct Authority in the United Kingdom, are established by national governments.

Most national authorities belong to the **International Organization of Securities Commissions (IOSCO)**. Together, the members of IOSCO regulate more than 95% of the world's financial markets. IOSCO is not a regulatory body, but its members work together to improve cross-border cooperation and make national regulations and enforcement more uniform around the world. The IOSCO Objectives and Principles of Securities Regulation are based on three main objectives:

1. Protecting investors
2. Ensuring markets are fair, efficient, and transparent
3. Reducing systemic risk

IOSCO requires issuers to provide full, accurate, and timely disclosure of financial results, risk, and other information used in the decision-making process. It also requires accounting standards that are used to prepare financial statements to be of a high standard and internationally accepted.

The SEC's requirements for financial reporting by U.S. companies are shown in Figure 27.1 as an example of reporting requirements. The SEC has the responsibility of enforcing the Sarbanes-Oxley Act of 2002. The act prohibits a company's external auditor from providing certain additional paid services to the company, to avoid the conflict of interest involved, and to promote auditor independence. The act requires a company's executive management to certify that the financial statements are presented fairly and to include a statement about the effectiveness of the company's internal controls of financial reporting. Additionally, the external auditor must provide a statement confirming the effectiveness of the company's internal controls.

Proxy statements are issued to shareholders when there are matters that require a shareholder vote. These statements, which are also filed with the SEC, are a good source of information about the election of (and qualifications of) board members, compensation, management qualifications, and the issuance of stock options.

In the European Union (EU), each member state has its own securities regulations, but all countries in the EU are required to report using IFRS. The European Commission also has established the European Securities Commission, which advises the European Commission on securities regulation issues, and the European Securities and Market Authority (ESMA), which coordinates regulation within the EU.

Financial statement notes (footnotes) include disclosures that provide further details about the information summarized in the financial statements. Footnotes allow users to improve their assessments of the amount, timing, and uncertainty of the estimates reported in the financial statements. Footnotes do the following:

- They discuss the basis of presentation such as the fiscal period covered by the statements, whether IFRS or U.S. GAAP is adhered to, and the inclusion of consolidated entities.
- They provide information about accounting methods, assumptions, and estimates used by management.
- They provide additional information on information included in the primary financial statements and items such as business acquisitions or disposals, legal actions, employee benefit plans, contingencies and commitments, significant customers, related party transactions, position and performance of segments of the firm, and significant post balance sheet events.
- They are audited along with the primary financial statements.

Figure 27.1: SEC Required Filings

Form S-1. This is the registration statement filed before the sale of new securities to the public. The statement includes disclosures about the securities offered, audited financial statements (plus interim accounts, if the statement is filed more than three months after year-end), risk assessment, underwriter identification, and the estimated amount and use of the offering proceeds.

Form 10-K. This is the required annual filing that includes information about the business, risks, and its management, audited financial statements and disclosures, and disclosures about legal matters involving the firm. Information required in Form 10-K is similar to that which a firm typically provides in its annual report to shareholders. However, a firm's annual report is not a substitute for the required 10-K filing. Equivalent SEC forms for foreign issuers in the U.S. markets are Form 40-F for Canadian companies and Form 20-F for other foreign issuers.

Form 10-Q. U.S. firms are required to file this form quarterly, with updated interim financial statements (unlike Form 10-K, these statements do not have to be audited) and disclosures about certain events such as significant legal proceedings or changes in accounting policy. Non-U.S. companies are typically required to file the equivalent Form 6-K semiannually.

Form DEF-14A. When a company prepares a proxy statement for its shareholders before the annual meeting or other shareholder vote, it also files the statement with the SEC as Form DEF-14A.

Form 8-K. Companies must file this form to disclose material events including significant asset acquisitions and disposals, changes in management or corporate governance, or matters related to its accountants, its financial statements, or the markets in which its securities trade.

Form 144. A company can issue securities to certain qualified buyers without registering the securities with the SEC, but it must notify the SEC that it intends to do so.

Forms 3, 4, and 5 involve the beneficial ownership of securities by a company's officers and directors. Analysts can use these filings to learn about purchases and sales of company securities by corporate insiders.

Both U.S. GAAP and IFRS require companies to report segment data, but the required disclosure items are only a subset of the required disclosures for the company as a whole. Nonetheless, an analyst can prepare a more detailed analysis and forecast by examining the performance of business or geographic segments separately. Segment profit margins, asset utilization (turnover), and return on assets can be very useful in gaining a clear picture of a firm's overall operations. For forecasting, growth rates of segment revenues and profits can be used to estimate future sales and profits and to determine the changes in company characteristics over time.

A **business segment (operating segment)** is a portion of a larger company that accounts for more than 10% of the company's revenues, assets, or income. An operating segment should be distinguishable from the company's other lines of business in terms of the risk and return characteristics of the segment. Segments reported should account for a minimum of 75% of the firm's external sales.

The following must be disclosed for each segment within the financial statement notes:

- Revenue (external and between segments)
- A measure of profit or loss
- A measure of assets and liabilities

- Interest (revenue and expense)
- Acquisitions of PP&E and intangibles
- Depreciation and amortization
- Other noncash expenses
- Income tax expense
- Share of equity-accounted investments results

Geographic segments are also identified when they meet the size criterion given previously and the geographic unit has a business environment that is different from that of other segments or the remainder of the company's business.

For example, in its 2016 annual report, Boeing described its business segments as follows:²

- We are organized based on the products and services we offer. We operate in five principal segments:
 - Commercial Airplanes
 - Our Defense, Space & Security (BDS) business comprises three segments:
 - Boeing Military Aircraft (BMA)
 - Network & Space Systems (N&SS)
 - Global Services & Support (GS&S)
 - Boeing Capital (BCC)

Management commentary (also known as management report, operating and financial review, or **management discussion and analysis [MD&A]**) is one of the most useful sections of an annual report. IFRS guidance recommends that management commentary address the nature of the business, management's objectives, the company's past performance, the performance measures used, and the company's key relationships, resources, and risks. Analysts must be aware that some parts of management commentary may be unaudited.

For publicly held firms in the United States, the SEC requires management commentary to discuss trends and identify significant events and uncertainties that affect the firm's liquidity, capital resources, and results of operations. Management must also discuss the following:

- Effects of inflation and changing prices, if material
- Impact of off-balance-sheet obligations and contractual obligations, such as purchase commitments
- Accounting policies that require significant judgment by management
- Forward-looking expenditures and divestitures

An **audit** is an independent review of an entity's financial statements. Public accountants conduct audits and examine the financial reports and supporting records. The objective of an audit is to enable the auditor to provide an opinion on the fairness and reliability of the financial statements.

The independent certified public accounting firm employed by the board of directors is responsible for seeing that the financial statements conform to the applicable accounting standards. The auditor examines the company's accounting and internal control systems, confirms assets and liabilities, and generally tries to determine that there are no material errors in the financial statements. The auditor's report is an important source of information.

The **standard auditor's opinion** contains three parts and states the following:

1. Whereas the financial statements are prepared by management and are its responsibility, the auditor has performed an independent review.
2. Generally accepted auditing standards were followed, thus providing *reasonable assurance* that the financial statements contain no material errors.
3. The auditor is satisfied that the statements were prepared in accordance with accepted accounting principles and that the principles chosen and estimates made are reasonable. The auditor's report must also contain additional explanation when accounting methods have not been used consistently between periods.

An **unqualified opinion** (also known as an unmodified opinion or clean opinion) indicates that the auditor believes the statements are free from material omissions and errors. If the statements make any exceptions to the accounting principles, the auditor may issue a **qualified opinion** and explain these exceptions in the audit report. The auditor can issue an **adverse opinion** if the statements are not presented fairly or are materially nonconforming with accounting standards. If the auditor is unable to express an opinion (e.g., in the case of a scope limitation), a **disclaimer of opinion** is issued. Any opinion other than unqualified is sometimes referred to as a modified opinion.

The auditor's opinion will also contain an explanatory paragraph when a material loss is probable, but the amount cannot be reasonably estimated. These uncertainties may relate to the *going concern assumption* (the assumption that the firm will continue to operate for the foreseeable future), to the valuation or realization of asset values, or to litigation. This type of disclosure may be a signal of serious problems and may call for close examination by the analyst.

Internal controls are the processes by which the company ensures that it presents accurate financial statements. Internal controls are the responsibility of management. For publicly traded firms in the United States, the auditor must express an opinion on the firm's internal controls. The auditor can provide this opinion separately, or as the fourth element of the standard opinion.

An audit report must also contain a section communicating *key audit matters* (international reports) or *critical audit matters* (U.S.), which highlights accounting choices that are of greatest significance to users of financial statements. These would include accounting choices that require significant management judgments and estimates, how significant transactions during a period were accounted for, or choices that the auditor finds especially challenging or subjective—and which, therefore, have a significant likelihood of being misstated.

LOS 27.d: Describe implications for financial analysis of alternative financial reporting systems and the importance of monitoring developments in financial reporting standards.

While the IASB and FASB work together to harmonize changes to accounting standards, some significant differences between IFRS and U.S. GAAP still exist. Some major differences are outlined in Figure 27.2, but additional differences will be encountered in subsequent modules.

Figure 27.2: Significant Differences Between IFRS and U.S. GAAP

Basis for Comparison	U.S. GAAP	IFRS
Developed by	FASB	IASB
Based on	Rules	Principles
Inventory valuation	FIFO, LIFO, and weighted average	LIFO prohibited
Product development costs	Expensed	May be capitalized
Interest paid	CFO	CFO or CFF
Reversal of inventory write-downs	Prohibited	Allowed

The existence of differences between the two sets of standards require the analyst to exercise caution when making comparisons between firms operating in different jurisdictions.

As financial reporting standards continue to evolve, analysts need to monitor how these developments will affect the financial statements they use. An analyst should be aware of new products and innovations in the financial markets that generate new types of transactions. These might not fall neatly into the existing financial reporting standards. Analysts can use the financial reporting framework as a guide for evaluating what effect new products or transactions might have on financial statements.

To keep up to date on the evolving standards, an analyst can monitor professional journals and other sources, such as the IASB (www.ifrs.org) and FASB (www.fasb.org) websites. CFA Institute produces position papers on financial reporting issues through the CFA Institute Centre for Financial Market Integrity.

Finally, analysts must monitor company disclosures for significant accounting standards and estimates.

LOS 27.e: Describe information sources that analysts use in financial statement analysis besides annual and interim financial reports.

As well as regulated information provided by issuers in filings and financial statements, an analyst can also use additional information sources:

- Issuer sources:

- *Earnings calls*. Targeted at investors, analysts, and members of the media, earnings calls include presentations by the company's management and the opportunity for question-and-answer sessions. Firms often provide **earnings guidance** before they release their financial statements. After an earnings announcement, senior management may hold a conference call to answer questions and provide information to complement their regulatory filings.
- Ad hoc presentations and events that are similar in format to an earnings call
- Press releases focusing on major events relevant to the company
- Communications with management, investor relations, and company personnel

Analysts should note that these additional sources of information provided by issuers are unlikely to have been audited.

- **Public third-party sources:**
 - Free industry reports, whitepapers, and trade journals
 - Government agency-produced economic and industry statistics
 - Generalized and industry-specific media sources
 - Social media
- **Proprietary third-party sources:**
 - Analyst reports
 - Reports from data platforms such as Bloomberg, Wind, and FactSet
 - Reports from industry-specific agencies and consultancies
- **Proprietary primary research:**
 - Studies commissioned by the analyst
 - Hands-on experience with the company's products or services
 - Data and advice of technical specialists employed by the analyst

An analyst should also review pertinent information on economic conditions and the company's industry and compare the company to its competitors. The necessary information can be acquired from trade journals, statistical reporting services, and government agencies.



MODULE QUIZ 27.1

1. Which of the following statements *least accurately* describes a role of financial statement analysis?
 - A. Use the information in financial statements to make economic decisions.
 - B. Provide reasonable assurance that the financial statements are free of material errors.
 - C. Evaluate an entity's financial position and past performance to form opinions about its future ability to earn profits and generate cash flow.
2. Information about accounting estimates, assumptions, and methods chosen for reporting is *most likely* found in:
 - A. the auditor's opinion.
 - B. financial statement notes.
 - C. management discussion and analysis.
3. If an auditor finds that a company's financial statements have made a specific exception to applicable accounting principles, she is *most likely* to issue a:
 - A. dissenting opinion.

- B. cautionary note.
 - C. qualified opinion.
4. Information about elections of members to a company's board of directors is *most likely* found in:
- A. a 10-Q filing.
 - B. a proxy statement.
 - C. footnotes to the financial statements.
5. Which of these steps is *least likely* to be a part of the financial statement analysis framework?
- A. State the purpose and context of the analysis.
 - B. Determine whether the company's securities are suitable for the client.
 - C. Adjust the financial statement data and compare the company to its industry peers.
6. Which of the following is *least likely* to be a part of segment disclosure?
- A. Segment sales.
 - B. Segment cost of goods sold.
 - C. Segment earnings.
7. Which of the following sources of information is *most likely* to be classified as a proprietary third-party source?
- A. Research reports prepared by analysts.
 - B. Trade journals.
 - C. Statistics produced by government agencies.

KEY CONCEPTS

LOS 27.a

The framework for financial analysis has six steps:

1. State the objective of the analysis.
2. Gather data.
3. Process the data.
4. Analyze and interpret the data.
5. Report the conclusions or recommendations.
6. Update the analysis.

LOS 27.b

The role of financial reporting is to provide various users with useful information about a company's performance and financial position.

The role of financial statement analysis is to use the data from financial statements to support economic decisions.

LOS 27.c

Standard-setting bodies are private sector organizations that establish financial reporting standards. The two primary standard-setting bodies are the International Accounting Standards Board (IASB) and, in the United States, the Financial Accounting Standards Board (FASB).

Regulatory authorities are government agencies that enforce compliance with financial reporting standards. Regulatory authorities include the Securities and Exchange Commission (SEC) in the United States and the Financial Conduct Authority in the United Kingdom. Many national regulatory authorities belong to the International Organization of Securities Commissions (IOSCO).

Important information about accounting methods, estimates, and assumptions is disclosed in the footnotes to the financial statements and supplementary schedules. These disclosures also contain information about segment results, commitments and contingencies, legal proceedings, acquisitions or divestitures, issuance of stock options, and details of employee benefit plans.

Management commentary (management discussion and analysis) contains an overview of the company and important information about business trends, future capital needs, liquidity, significant events, and significant choices of accounting methods requiring management judgment.

The objective of audits of financial statements is to provide an opinion on the statements' fairness and reliability.

The auditor's opinion gives evidence of an independent review of the financial statements that verifies that appropriate accounting principles were used, that standard auditing procedures were used to establish reasonable assurance that the statements contain no material errors, and that management's report on the company's internal controls has been reviewed.

An auditor can issue an unqualified (clean) opinion if the statements are free from material omissions and errors, a qualified opinion that notes any exceptions to accounting principles, an adverse opinion if the statements are not presented fairly in the auditor's opinion, or a disclaimer of opinion if the auditor is unable to express an opinion.

A company's management is responsible for maintaining an effective internal control system to ensure the accuracy of its financial statements.

LOS 27.d

Reporting standards are designed to ensure that different firms' statements are comparable to one another and to narrow the range of reasonable estimates on which financial statements are based. This aids users of the financial statements who rely on them for information about the company's activities, profitability, and creditworthiness. An analyst needs to be aware of differences between IFRS and U.S. GAAP when comparing companies in different jurisdictions.

An analyst should be aware of evolving financial reporting standards and new products and innovations that generate new types of transactions.

LOS 27.e

Along with the annual financial statements, important information sources for an analyst include a company's quarterly and semiannual reports, proxy statements, press

releases, and earnings guidance, as well as information on the industry and peer companies from external sources.

ANSWER KEY FOR MODULE QUIZZES

Module Quiz 27.1

1. **B** This statement describes the role of an auditor, rather than the role of an analyst. The other responses describe the role of financial statement analysis. (LOS 27.b)
2. **B** Information about accounting methods and estimates is contained in the footnotes to the financial statements. (LOS 27.c)
3. **C** An auditor will issue a qualified opinion if the financial statements make any exceptions to applicable accounting standards and will explain the effect of these exceptions in the auditor's report. (LOS 27.c)
4. **B** Proxy statements contain information related to matters that come before shareholders for a vote, such as elections of board members. (LOS 27.c)
5. **B** Determining the suitability of an investment for a client is not one of the six steps in the financial statement analysis framework. The analyst would only perform this function if he also had an advisory relationship with the client. Stating the objective and processing the data are two of the six steps in the framework. The others are gathering the data, analyzing the data, updating the analysis, and reporting the conclusions. (LOS 27.a)
6. **B** Firms are not required to provide detailed financial statements for segments that would include line items such as cost of goods sold, but the following should be disclosed in the segment data:
 - Revenue (external and between segments)
 - A measure of profit or loss
 - A measure of assets and liabilities
 - Interest (revenue and expense)
 - Acquisitions of PP&E and intangibles
 - Depreciation and amortization
 - Other noncash expenses
 - Income tax expense
 - Share of equity-accounted investments results(LOS 27.c)
7. **A** Research reports provided by analysts are rarely in the public domain. Trade journals and government statistics are available publicly. (LOS 27.e)

¹ Hennie van Greuning and Sonja Brajovic Bratanovic, *Analyzing and Managing Banking Risk: Framework for Assessing Corporate Governance and Financial Risk*, International Bank for Reconstruction and Development, April 2003, p. 300.

² Boeing, *The Boeing Company 2016 Annual Report* (USA: 2017),
https://s2.q4cdn.com/661678649/files/doc_financials/annual/2016/2016-Annual-Report.pdf.

READING 28

ANALYZING INCOME STATEMENTS

MODULE 28.1: REVENUE RECOGNITION



Video covering this content is available online.

LOS 28.a: Describe general principles of revenue recognition, specific revenue recognition applications, and implications of revenue recognition choices for financial analysis.

In a sale of goods where the goods or services are exchanged for cash and returns are not allowed, the recognition of revenue is straightforward: it is recognized at the time of the exchange. The recognition of revenue is not, however, dependent on receiving cash payment. If a sale of goods is made on credit, revenue can be recognized at the time of sale—and an asset, **accounts receivable**, is created on the balance sheet. As a general rule, revenue is recognized in the period in which it is earned, which may not necessarily be the same as the period in which cash is collected from the customer. Revenue is reported net of any returns and allowances in the income statement (e.g., estimated warranty provisions and customer discounts).

If payment for the goods is received before the transfer of the goods or services, a liability, **unearned revenue**, is created when the cash is received (offsetting the increase in the asset *cash*). Revenue is recognized as the goods are transferred to the buyer. As an example, consider a magazine subscription. When the subscription is purchased, an unearned revenue liability is created, and as magazine issues are delivered, revenue is recorded and the liability is decreased.

Converged standards under IFRS and U.S. GAAP take a principles-based approach to revenue recognition issues. The central principle is that a firm should recognize revenue when it has transferred a good or service to a customer. This is consistent with the familiar accrual accounting principle that revenue should be recognized when earned.

The converged standards identify a five-step process¹ for recognizing revenue:

1. Identify the contract(s) with a customer.
2. Identify the separate or distinct performance obligations in the contract.
3. Determine the transaction price.
4. Allocate the transaction price to the performance obligations in the contract.
5. Recognize revenue when (or as) the entity satisfies a performance obligation.

The standard defines a **contract** as an agreement between two or more parties that specifies their obligations and rights. Collectability must be probable for a contract to exist, but *probable* is defined differently under IFRS and U.S. GAAP, so an identical activity could still be accounted for differently by IFRS and U.S. GAAP reporting firms.

A **performance obligation** is a promise to deliver a distinct good or service. A *distinct* good or service is one that meets the following criteria:

- The customer can benefit from the good or service on its own or combined with other resources that are readily available.
- The promise to transfer the good or service can be identified separately from any other promises.

A **transaction price** is the amount a firm expects to receive from a customer in exchange for transferring a good or service to the customer. A transaction price is usually a fixed amount, but it can also be variable (e.g., if it includes a bonus for early delivery).

A firm should recognize revenue only when it is highly probable that it will not have to reverse it. For example, a firm may need to recognize a liability for a refund obligation (and an offsetting asset for the right to returned goods) if revenue from a sale cannot be estimated reliably.

A firm recognizes revenue when the performance obligation is satisfied by transferring the control of the good or service from seller to buyer. Indicators that the customer has obtained control include physical possession by the customer, acceptance of the good or service by the customer, the customer taking on risk and benefits of ownership, the customer holding legal title, and the seller having a right of payment.

For long-term contracts, revenue is recognized based on a firm's progress toward completing a performance obligation over a period of time. Progress toward completion can be measured from the input side (e.g., using the percentage of completion costs incurred as of the statement date). Progress can also be measured from the output side, using engineering milestones or the percentage of total output delivered to date.

A performance obligation is satisfied over a period of time if any of the following three criteria are met:

1. The customer receives and benefits from the good or service over time as the supplier meets the obligations of the contract (e.g., service and maintenance contracts).
2. The supplier enhances an existing asset or creates a new asset that the customer controls over the period in which the asset is created or enhanced.
3. The asset has no alternative use for the supplier, and the supplier has the right to enforce payment for work completed to date (e.g., constructing equipment specific to the needs of a single customer).

The costs to secure a long-term contract, such as sales commissions, must be capitalized; that is, the expense for these costs is spread over the life of the contract.

The following summarizes some examples from IFRS 15 of appropriate revenue recognition under various circumstances.

EXAMPLE: Revenue recognition

1. Performance obligation and progress toward completion (long-term contracts)

A contractor agrees to build a warehouse for a price of \$10 million and estimates the total costs of construction at \$8 million. Although there are several *identifiable components* of the building (site preparation, foundation, electrical components, roof, etc.), these components are not *separate deliverables*, and the performance obligation is the completed building.

During the first year of construction, the builder incurs \$4 million of costs, 50% of the estimated total costs of completion. Based on this expenditure and a belief that the percentage of costs incurred represents an appropriate measure of progress toward completing the performance obligation, the builder recognizes \$5 million (50% of the transaction price of \$10 million) as revenue for the year.

During the second year of construction, the contractor incurred an additional \$2 million in costs.

The percentage of total costs incurred over the first two years is now ($\$4 \text{ million} + \2 million) / $\$8 \text{ million} = 75\%$. The total revenue to be recognized to date is $0.75 \times \$10 \text{ million} = \7.5 million . Because \$5 million of revenue had been recognized in Year 1, \$2.5 million ($= \$7.5 \text{ million} - \5 million) of revenue will be recognized in Year 2.

This treatment is consistent with the percentage of completion method previously in use, although the new standards do not call it that.

2. Acting as an agent

Consider a travel agent who arranges a first-class ticket for a customer flying to Singapore. The ticket price is \$10,000, made by nonrefundable payment at purchase, and the travel agent receives a \$1,000 commission on the sale. Because the travel agent is not responsible for providing the flight and bears no inventory or credit risk, they are *acting as an agent*. Because they are an agent, rather than a *principal*, they should report revenue equal to their commission of \$1,000, the net amount of the sale. If they were a principal in the transaction, they would report revenue of \$10,000, the gross amount of the sale, and an expense of \$9,000 for the ticket. Note that while gross profit is the same (\$1,000) regardless of selling as a principal or agent, the gross profit margin is very different. If treated as a principal, the margin would be $\$1,000 / \$10,000 = 10\%$, but as an agent, the margin would be $\$1,000 / \$1,000 = 100\%$.

3. Franchising and licensing

Consider a fast food company that both operates restaurants and grants franchisees rights to operate restaurants using its brand name under license, and supplies franchisees with some products used in daily operations. As well as charging a license fee, the company also receives a royalty fee of 2% of the franchisee's turnover. Accounting standards require revenue to be split into

categories that have similar characteristics (nature, amounts, timings, and risk factors).

The fast food company would disaggregate revenue into these categories:

- Revenue from company-owned restaurants
- Franchise royalties and fees
- Revenue from supplies to franchises (equipment and food materials)

Franchise fees often grant the franchisee the right to operate over numerous periods and would initially be treated as deferred revenue. Subsequently, it would be amortized to revenue in the income statement over the life of the franchise contract period.

Royalty fees would be included periodically in the franchisor's accounts when they become contractually payable by the franchisee under the terms of the contract.

4. **Service versus license**

Consider a software supplier that allows customers to purchase a license and install the software on their own machines, or subscribe to a cloud-based solution with access over the internet.

If customers purchase a license and install the software on their own systems, IFRS allows for two treatments:

a. The software supplier will report revenue over the life of the contract.

Criteria:

- The software supplier will continue to update and enhance the software over the term of the license.
- Customers will be exposed to potential benefits or negative impacts from updates and enhancements.
- Updates and enhancements do not result in a transfer of goods or services.

b. The software supplier will report revenue at the outset of the contract.

Criteria:

- The license grants the customer the right to use the software as it exists at the start of the contract ("sold as is").
- A separate contract exists for enhancements and updates to the software. The revenue for support services will be recognized when provided (typically over the life of the contract).

If customers access the software without taking physical possession of the software (i.e., cloud-based access), the contract is for a service, and revenue should be recognized over the life of the contract.

5. **Bill-and-hold agreements**

Bill-and-hold agreements are a type of sales agreement that involves the customer paying for goods ahead of shipping. Typically, when a customer pays ahead of delivery, the revenue is treated as deferred, but revenue may be recorded before shipping if the supplier can demonstrate that its performance obligations are complete and the customer has control over the good. IFRS criteria include the

following: the customer asked for the arrangement, the goods are identified as belonging to the customer, the goods are complete and ready for transfer to the customer, and the goods cannot be redirected to another customer.

Required disclosures under the converged standards include the following:

- Contracts with customers by category
- Assets and liabilities related to contracts, including balances and changes
- Outstanding performance obligations and the transaction prices allocated to them
- Management judgments used to determine the amount and timing of revenue recognition, including any changes to those judgments



MODULE QUIZ 28.1

1. The first step in the revenue recognition process is to:
 - A. determine the price.
 - B. identify the contract.
 - C. identify the obligations.
2. A contractor agrees to build a bridge for a total price of \$10 million. The project is expected to take four years to complete, at a total cost of \$6.5 million. After Year 1, costs of \$2.5 million have been incurred, and a further \$1 million in costs are incurred in Year 2. The client pays \$2 million in each of the first two years. The amount of revenue the contractor should recognize in Year 2 is *closest* to:
 - A. \$1.54 million.
 - B. \$2.00 million.
 - C. \$5.38 million.
3. A realtor sells one of its client's houses for \$1.4 million, earning a commission of 3%. The costs to the realtor associated with the sale are \$15,000. What is the realtor's gross profit for this transaction?
 - A. \$27,000.
 - B. \$42,000.
 - C. \$1,385,000.

MODULE 28.2: EXPENSE RECOGNITION



Video covering this content is available online.

LOS 28.b: Describe general principles of expense recognition, specific expense recognition applications, implications of expense recognition choices for financial analysis and contrast costs that are capitalized versus those that are expensed in the period in which they are incurred.

Expenses are subtracted from revenue to calculate net income. According to the IASB, expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets, or incurrence of liabilities that result in decreases in equity other than those relating to distributions to equity participants.²

If the financial statements were prepared on a cash basis, neither revenue recognition nor expense recognition would be an issue. The firm would simply recognize cash

received as revenue and cash payments as expense.

Under the accrual method of accounting, expense recognition is in the period in which the economic benefits of the expenditure are consumed. Three different methods are used to achieve this: the matching principle, expensing as incurred, and capitalization.

Using the **matching principle**, expenses to generate revenue are recognized in the same period as the revenue. Inventory provides a good example. Assume that inventory is purchased during the fourth quarter of one year and sold during the first quarter of the following year. Using the matching principle, both the revenue and the expense (cost of goods sold) are recognized in the first quarter of the second year, when the inventory is sold—not the period in which the inventory was purchased. Another example are goods that are sold with a warranty period. The estimated cost of repairing or replacing faulty goods under the warranty must be estimated and deducted from revenue at the time of sale, rather than when the actual costs are incurred.

Capitalization is an application of the matching principle whereby costs are initially capitalized as assets on the balance sheet and then expensed, using depreciation or amortization, to the income statement over the asset's life as its benefits are consumed. Property, plant, and equipment (PP&E) and intangible assets with finite lives are examples of this.

Not all expenses can be directly tied to revenue generation. These costs are known as **period costs**. Period costs, such as administrative costs, are expensed in the period incurred. For example, if a firm has occupied a leased premise, one year's worth of rent should be expensed to the income statement regardless of whether the rent has been paid.

An accounting policy that recognizes expenses later rather than sooner is seen as aggressive, while a policy that recognizes expenses earlier is conservative. Expensing is, therefore, more conservative than capitalization.

EXAMPLE: Inventory and the matching principle

Imagine a trading company that simply buys and resells goods. If the firm had 100 units of sales during the accounting period, we would expect to see cost of goods sold reflect 100 units of cost if we apply the matching principle. If the firm had 20 units of beginning inventory at the start of the year and purchased a further 90 units, the total number of units available for sale would be 110. The matching concept, therefore, requires the company to remove 10 units that are unsold from the income statement and store them in the balance sheet as a current asset (ending inventory). These 10 units will become the next period's beginning inventory.

Matching Cost of Goods Sold to the Number of Units Sold