

# Financial Statement Analysis

## LEARNING OUTCOMES

### Introduction to Financial Statement Analysis

*The candidate should be able to:*

- describe the roles of financial reporting and financial statement analysis
- describe the roles of the statement of financial position, statement of comprehensive income, statement of changes in equity, and statement of cash flows in evaluating a company's performance and financial position
- describe the importance of financial statement notes and supplementary information—including disclosures of accounting policies, methods, and estimates—and management's commentary
- describe the objective of audits of financial statements, the types of audit reports, and the importance of effective internal controls
- identify and describe information sources that analysts use in financial statement analysis besides annual financial statements and supplementary information
- describe the steps in the financial statement analysis framework

### Financial Reporting Standards

*The candidate should be able to:*

- describe the objective of financial reporting and the importance of financial reporting standards in security analysis and valuation
- describe the roles of financial reporting standard-setting bodies and regulatory authorities in establishing and enforcing reporting standards
- describe the International Accounting Standards Board's conceptual framework, including qualitative characteristics of financial reports, constraints on financial reports, and required reporting elements

- describe general requirements for financial statements under International Financial Reporting Standards (IFRS)
- describe implications for financial analysis of alternative financial reporting systems and the importance of monitoring developments in financial reporting standards

### **Understanding Income Statements**

#### ***The candidate should be able to:***

- describe the components of the income statement and alternative presentation formats of that statement
- describe general principles of revenue recognition and accounting standards for revenue recognition
- calculate revenue given information that might influence the choice of revenue recognition method
- describe general principles of expense recognition, specific expense recognition applications, and implications of expense recognition choices for financial analysis
- describe the financial reporting treatment and analysis of non-recurring items (including discontinued operations, unusual or infrequent items) and changes in accounting policies
- contrast operating and non-operating components of the income statement
- describe how earnings per share is calculated and calculate and interpret a company's earnings per share (both basic and diluted earnings per share) for both simple and complex capital structures
- contrast dilutive and antidilutive securities and describe the implications of each for the earnings per share calculation
- formulate income statements into common-size income statements
- evaluate a company's financial performance using common-size income statements and financial ratios based on the income statement
- describe, calculate, and interpret comprehensive income
- describe other comprehensive income and identify major types of items included in it

### **Understanding Balance Sheets**

#### ***The candidate should be able to:***

- describe the elements of the balance sheet: assets, liabilities, and equity
- describe uses and limitations of the balance sheet in financial analysis
- describe alternative formats of balance sheet presentation
- contrast current and non-current assets and current and non-current liabilities
- describe different types of assets and liabilities and the measurement bases of each
- describe the components of shareholders' equity
- demonstrate the conversion of balance sheets to common-size balance sheets and interpret common-size balance sheets
- calculate and interpret liquidity and solvency ratios

### **Understanding Cash Flow Statements**

#### ***The candidate should be able to:***

- compare cash flows from operating, investing, and financing activities and classify cash flow items as relating to one of those three categories given a description of the items
- describe how non-cash investing and financing activities are reported

- contrast cash flow statements prepared under International Financial Reporting Standards (IFRS) and US generally accepted accounting principles (US GAAP)
- compare and contrast the direct and indirect methods of presenting cash from operating activities and describe arguments in favor of each method
- describe how the cash flow statement is linked to the income statement and the balance sheet
- 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
- demonstrate the conversion of cash flows from the indirect to direct method
- analyze and interpret both reported and common-size cash flow statements
- calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios

### Financial Analysis Techniques

*The candidate should be able to:*

- describe tools and techniques used in financial analysis, including their uses and limitations
- identify, calculate, and interpret activity, liquidity, solvency, profitability, and valuation ratios
- describe relationships among ratios and evaluate a company using ratio analysis
- demonstrate the application of DuPont analysis of return on equity and calculate and interpret effects of changes in its components
- calculate and interpret ratios used in equity analysis and credit analysis
- explain the requirements for segment reporting and calculate and interpret segment ratios
- describe how ratio analysis and other techniques can be used to model and forecast earnings

### Inventories

*The candidate should be able to:*

- contrast costs included in inventories and costs recognised as expenses in the period in which they are incurred
- describe different inventory valuation methods (cost formulas)
- calculate and compare cost of sales, gross profit, and ending inventory using different inventory valuation methods and using perpetual and periodic inventory systems
- calculate and explain how inflation and deflation of inventory costs affect the financial statements and ratios of companies that use different inventory valuation methods
- explain LIFO reserve and LIFO liquidation and their effects on financial statements and ratios
- demonstrate the conversion of a company's reported financial statements from LIFO to FIFO for purposes of comparison
- describe the measurement of inventory at the lower of cost and net realisable value
- describe implications of valuing inventory at net realisable value for financial statements and ratios
- describe the financial statement presentation of and disclosures relating to inventories
- explain issues that analysts should consider when examining a company's inventory disclosures and other sources of information

- calculate and compare ratios of companies, including companies that use different inventory methods
- analyze and compare the financial statements of companies, including companies that use different inventory methods

### **Long-Lived Assets**

#### ***The candidate should be able to:***

- compare the financial reporting of the following types of intangible assets: purchased, internally developed, acquired in a business combination
- explain and evaluate how capitalising versus expensing costs in the period in which they are incurred affects financial statements and ratios
- describe the different depreciation methods for property, plant, and equipment and calculate depreciation expense
- describe how the choice of depreciation method and assumptions concerning useful life and residual value affect depreciation expense, financial statements, and ratios
- explain and evaluate how impairment, revaluation, and derecognition of property, plant, and equipment and intangible assets affect financial statements and ratios
- describe the different amortisation methods for intangible assets with finite lives and calculate amortisation expense
- describe how the choice of amortisation method and assumptions concerning useful life and residual value affect amortisation expense, financial statements, and ratios
- describe the revaluation model
- explain the impairment of property, plant, and equipment and intangible assets
- explain the derecognition of property, plant, and equipment and intangible assets
- describe the financial statement presentation of and disclosures relating to property, plant, and equipment and intangible assets
- analyze and interpret financial statement disclosures regarding property, plant, and equipment and intangible assets
- compare the financial reporting of investment property with that of property, plant, and equipment
- identify and contrast costs that are capitalised and costs that are expensed in the period in which they are incurred

### **Income Taxes**

#### ***The candidate should be able to:***

- describe the differences between accounting profit and taxable income and define key terms, including deferred tax assets, deferred tax liabilities, valuation allowance, taxes payable, and income tax expense
- 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
- calculate income tax expense, income taxes payable, deferred tax assets, and deferred tax liabilities, and calculate and interpret the adjustment to the financial statements related to a change in the income tax rate
- calculate the tax base of a company's assets and liabilities
- evaluate the effect of tax rate changes on a company's financial statements and ratios
- identify and contrast temporary versus permanent differences in pre-tax accounting income and taxable income

- explain recognition and measurement of current and deferred tax items
- describe the valuation allowance for deferred tax assets—when it is required and what effect it has on financial statements
- 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
- identify the key provisions of and differences between income tax accounting under International Financial Reporting Standards (IFRS) and US generally accepted accounting principles (GAAP)

### **Non-Current (Long-Term) Liabilities**

*The candidate should be able to:*

- determine the initial recognition, initial measurement and subsequent measurement of bonds
- describe the effective interest method and calculate interest expense, amortisation of bond discounts/premiums, and interest payments
- explain the derecognition of debt
- describe the role of debt covenants in protecting creditors
- describe the financial statement presentation of and disclosures relating to debt
- explain motivations for leasing assets instead of purchasing them
- explain the financial reporting of leases from a lessee's perspective
- explain the financial reporting of leases from a lessor's perspective
- compare the presentation and disclosure of defined contribution and defined benefit pension plans
- calculate and interpret leverage and coverage ratios

### **Financial Reporting Quality**

*The candidate should be able to:*

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

### **Applications of Financial Statement Analysis**

*The candidate should be able to:*

- evaluate a company's past financial performance and explain how a company's strategy is reflected in past financial performance
- demonstrate how to forecast a company's future net income and cash flow
- describe the role of financial statement analysis in assessing the credit quality of a potential debt investment

- describe the use of financial statement analysis in screening for potential equity investments
- explain appropriate analyst adjustments to a company's financial statements to facilitate comparison with another company