

Chapter 2 Introduction to Financial Statement Analysis

I. Learning Objectives

- **2-1** Define the periodic reports required by the provincial securities commissions and the SEC; briefly describe GAAP and the auditor's role along with listing the five major financial statements required under IFRS for publicly traded firms; compare IFRS to US GAAP.
- 2-2 Define depreciation, book value, and goodwill.
- **2-3** Discuss the difference between book value of shareholders' equity and market value of shareholders' equity; explain why the two numbers are almost never the same.
- **2-4** Compute the following measures, and describe their usefulness in assessing firm performance: the market-to-book ratio, debt-equity ratio, the enterprise value, earnings per share, operating margin, EBIT, net profit margin, accounts receivable days, accounts payable days, EBITDA, interest coverage ratio, return on equity, return on assets and price-earnings ratio.
- **2-5** Describe the importance of ensuring that valuation ratios are consistent with one another in terms of the inclusion of debt in the numerator and the denominator.
- **2-6** Distinguish between cash flow, as reported on the statement of cash flows, and accrual-based income, as reported on the income statement; discuss the importance of cash flows to investors, relative to accrual-based income.
- **2-7** Explain the importance of the notes to the financial statements.
- **2-8** List and describe the financial scandals described in the text, along with the new legislation designed to reduce that type of fraud.

II. Chapter Overview

This chapter reviews the five main financial statements and discusses some useful financial ratios. The chapter closes with a look at some recent financial scandals.

2.1 The Disclosure of Financial Information

This section briefly describes the interim financial reports required by provincial securities commissions and the SEC. It defines GAAP, the role of an auditor and the five statements IFRS requires public companies to produce: the balance sheet, the income statement, the statement of cash flows, the statement of shareholders' equity and the statement of comprehensive income. It includes a summary of steps taken toward standardizing financial statements across countries via International Financial Reporting Standards (IFRS) while comparing US GAAP to IFRS.

2.2 The Balance Sheet

The balance sheet lists the firm's assets and liabilities. This section describes current assets, long-term assets, current liabilities and long-term liabilities, with examples of major components of each. The authors emphasize the difference between market value and book value of equity, and give some specific reasons why the two are seldom the same. Example 2.1 illustrates a case in which they're different.

Tools for analyzing the balance sheet include:

- a. the market-to-book ratio, which is often used to classify firms as value stocks or growth stocks.
- b. the debt-equity ratio, a measure of the firm's leverage.

- c. enterprise value, which assesses the value of underlying business assets, not including cash (Example 2.2 shows how enterprise value is calculated).
- d. current and quick ratios, which are sometimes used to assess the firm's working capital position.

2.3 The Income Statement

The income statement lists the firm's revenues and expenses over a period of time. Earnings per share (and diluted earnings per share) are often calculated to assess the size of net income relative to that of similar firms. Profitability ratios, such as operating margin and net profit margin, are often used to measure the fraction of revenues that is available to common shareholders. Example 2.3 shows calculations of profitability and valuation ratios.

Some examples of ratios that use both income statement and balance sheet items are working capital ratios, such as accounts receivable days (or average collection period), inventory days, and accounts payable days. Leverage is often assessed using ratios such as interest coverage, which is also a mixed ratio. Investment returns are measured by return on equity or return on assets, although these measures are both flawed in their use of book value measures. Valuation ratios include the price-earnings ratio.

2.4 The Statement of Cash Flows

The statement of cash flows converts accrual-based income into cash flow. Cash flows are separated into operating activities, investment activities, and financing activities. Example 2.4 shows the impact of depreciation on cash flows.

2.5 Other Financial Statement Information

The management discussion and analysis provides management's interpretation of the planned activities of the firm. The statement of shareholders' equity provides detailed information about additions to or reductions in the shareholders' equity accounts. Notes to the financial statements are an integral part of the statements, as they show detail about share-based compensation plans, leases, principal payments on debt, and many other items. Example 2.5 uses a note to the financial statement reporting sales by product category to find the sales unit with the highest growth.

2.6 Accounting Manipulation

Abuse of financial reporting rules does occur, Enron and WorldCom being two of the most notorious examples from the past decade. Enron sold assets at inflated prices to other firms, together with a promise to buy back assets at an even higher future price. Worldcom reclassified \$3.85 billion in expenses as long-term investment. The U.S. Sarbanes-Oxley Act, passed in 2002, holds CFOs and CEOs accountable for the firm's financial statements. Canadian regulators adopted similar measures in 2005.

Text Section	Problems	Activity Description	Text Reference
2.1	1 and 2	Types of financial statements and disclosure of information	Pages 20-21
2.2	4 and 6	The Balance Sheet and Enterprise Value	Example 2.1, Equations 2.3 and 2.4
2.3	9 - 12	The Income Statement	Table 2.2, Equation 2.10, mismatched ratios and Pages 27-32
2.4	15,16* and 17	The Statement of Cash Flows	Pages 32-35 and Example 2.4
2.5	Bonus 1	Other Financial Statement Information	Pages 35-37
2.6	Bonus 2	Sarbanes Oxley Act	Page 39

III. MyFinanceLab Activities

* Note: there is no exact text reference for problem 16.

IV. Spreadsheet Solutions in Excel

The following problems for Chapter 2 have spreadsheet versions of the problems available: 2-9 and 2-10.

These spreadsheets are available on the Instructor's Resource CD-ROM or can be downloaded from the Pearson online catalogue at www.pearsoncanada.ca. If you do not have a login and password for this website, contact your Pearson sales representative.