Chapter 2
Introduction to Financial Statement Analysis

■ Answers to Chapter 2 Review Questions

1. Firms disclose financial statements to communicate financial information to the investment community.

2. Anyone interested in a firm can look to the financial statements for information. This includes:
   - *Shareholders:* Checking the profitability and performance of the firm.
   - *Lenders:* Looking for information about the credit-worthiness of the firm.
   - *Suppliers:* Will this firm be a dependable customer?
   - *Competitors:* Seeking sales and profitability of the competition.
   - *Management:* How well are we running the firm?

3. Every public company is required to produce four financial statements: the *balance sheet,* the *statement of comprehensive income* (which includes the *income statement*), the *statement of cash flows,* and the *statement of changes in equity.*

4. The purpose of the balance sheet is to show the financial position of the firm at a specific point in time.

5. The balance sheet can show how well the firm is managing the assets and financing the operations of the firm.

6. The purpose of the income statement is to report the firm's revenues, expenses, and earnings. It shows the profitability of the firm over a specific period of time.

7. The balance sheet shows the financial situation of a firm at a given point in time, while the income statement shows the financial performance of the firm during the period leading up to the balance sheet date. The statements are linked through the retained earnings account on the balance sheet, which shows the cumulative profits of the firm during its existence.

8. The DuPont Identity takes the return on equity (ROE) and breaks it into three components: net profit margin, asset turnover, and asset multiplier. The DuPont Identity equation is below:

$$\text{Return on Equity} = \text{Net Profit Margin} \times \text{Asset Turnover} \times \text{Equity Multiplier}$$

$$\frac{\text{Net Income}}{\text{Shareholder Equity}} = \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Shareholder Equity}}$$

   The DuPont Identity is useful to managers, as it identifies three drivers that the manager can use to affect ROE.

9. The income statement measures the profits of the firm, while the statement of cash flows measures how cash moves in and out of the firm. These are not necessarily the same, as many non-cash flow transactions are included in the income statement (such as depreciation), while other cash flow transactions are not included in the income statement (such as investment in working capital and property, plant, and equipment).

10. Yes, a firm with positive net income can run out of cash. A rapidly growing firm, which is investing heavily in working capital and property, plant, and equipment, can have positive net income on the income statement but show negative cash flows from operating and investing activities.

11. Management's discussion contains their analysis of the performance of the firm and identifies the risks that the business faces. The notes to the financial statements often clarify and augment the information used and reported in the financial statements.

12. Enron utilized off-balance sheet transactions to inflate profits and hide liabilities.

■ Answers to Chapter 2 Concept Review Questions

1. What is the role of an auditor?
   Investors also need some assurance that the financial statements are prepared accurately. Corporations are required to hire a neutral third party, known as an auditor, to check the annual financial statements, ensure they are prepared according to GAAP, and provide evidence to support the reliability of the information.

2. What are the four financial statements that all public companies must produce?
   Every public company is required to produce four financial statements: the *balance sheet,* the *statement of comprehensive income* (which includes the *income statement*)*,* the *statement of cash flows,* and the *statement of changes in equity.*

3. What is depreciation designed to capture?
   Because equipment tends to wear out or become obsolete over time, companies will reduce the value recorded for this equipment through a yearly deduction called depreciation according to a depreciation schedule that depends on an asset's life span. Depreciation is not an actual cash expense that the firm pays; it is a way of recognizing that buildings and equipment wear out and thus become less valuable the older they get.

4. The book value of a company's assets usually does not equal the market value of those assets. What are some reasons for this difference?
   Many of the assets listed on the balance sheet are valued based on their historical cost rather than their true value today. An office building is listed on the balance sheet according to its historical cost less its accumulated depreciation. But the actual value of the office building today may be very different than this amount; in fact, it may be much more valuable. A second, and probably more important, problem is that *many of the firm's valuable assets are not captured on the balance sheet.* Consider, for example, the expertise of the firm's employees, the firm's reputation in the marketplace, the relationships with customers and suppliers, and the quality of the management team. All these assets add to the value of the firm but do not appear on the balance sheet. For these reasons, the book value of equity is an inaccurate assessment of the actual value of the firm's equity.

5. What does a high debt-equity ratio tell you?
The debt-equity ratio is a common ratio used to assess a firm's leverage. Because of the difficulty of interpreting the book value of equity, the book debt-equity ratio is not especially useful. We will see later in the text, a firm's market debt-to-equity ratio has important consequences for the risk and return of its stock.

6. What is a firm's enterprise value?
The enterprise value of a firm assesses the value of the underlying business assets, unencumbered by debt and separate from any cash and marketable securities. We compute it as follows:
Enterprise Value = Market Value of Equity + Debt – Cash

7. What do a firm's earnings measure?
The income statement shows the flow of revenues and expenses generated by those assets and liabilities between two dates

8. What is meant by dilution?
I n the cases of stock options and convertible bonds, because there will be more total shares to divide the same earnings, this growth in the number of shares is referred to as dilution. Firms disclose the potential for dilution from options they have awarded by reporting diluted EPS which shows the earnings per share the company would have if the stock options were exercised.

9. How can a financial manager use the DuPont Identity to assess the firm's ROE?
A financial manager looking for ways to increase ROE could turn to the DuPont Identity to assess the drivers behind its current ROE.

10. How do you use the price-earnings (P/ E) ratio to gauge the market value of a firm?
Analysts and investors use a number of ratios to gauge the market value of the firm The P/ E ratio is a simple measure that is used to assess whether a stock is over- or under-valued, based on the idea that the value of a stock should be proportional t o the level of earnings it can generate for its shareholders.

11. Why does a firm's net income not correspond to cash earned?
There are two reasons that net income does not correspond to cash earned. First, there are non-cash entries on the income statement, such as depreciation and amortization. Second, certain uses, such as the purchase of a building or expenditures on inventory, and sources of cash, such as the collection of accounts receivable, are not reported on the income statement.

12. What are the components of the statement of cash flows?
The components roughly correspond to the three major jobs of the financial manager.
    1 . Operating activity starts with net income from the income statement. It then adjusts this number by adding back all non-cash entries related to the firm's operating activities.
    2 . Investment activity lists the cash used for investment.
    3 . Financing activity shows the flow of cash between the firm and its investors.

13. Where do off-balance sheet transactions appear in a firm's financial statements?
Management must also discuss any important risks that the firm faces or issues that may affect the firm's liquidity or resources. Management is also required to disclose any off-balance sheet transactions , which are transactions or arrangements that can have a material impact on the firm's future performance yet do not appear on the balance sheet.

14. What information do the notes to financial statements provide?
    In addition to the four financial statements, companies provide extensive notes with additional details on the information provided in the statements. For example, the notes document important accounting assumptions that were used in preparing the statements. They often provide information specific to a firm's subsidiaries or its separate product lines. They show the details of the firm's stock-based compensation plans for employees and the different types of debt the firm has outstanding. Details of acquisitions, spinoffs, leases, taxes, and risk management activities are also given. The information provided in the notes is often very important to a full interpretation of the firm's financial statements.

15. Describe the transactions Enron used to increase its reported earnings.
    Enron sold assets at inflated prices to other firms (or, in many cases, business entities that Enron's CFO Andrew Fastow had created), together with a promise to buy back those assets at an even higher future price. Thus, Enron was effectively borrowing money, receiving cash today in exchange for a promise to pay more cash in the future. But Enron recorded the incoming cash as revenue and then, in a variety of ways, hid the promises to buy the assets back. [10] In the end, much of Enron's revenue growth and profits in the late 1990s were the result of this type of manipulation.

16. What is the Sarbanes-Oxley Act?
    In 2002, the U.S. Congress passed the Sarbanes-Oxley Act (SOX), which requires, among other things, that CEOs and CFOs certify the accuracy and appropriateness of their firm's financial statements and increases the penalties against them if the financial statements later prove to be fraudulent. While SOX contains many provisions, the overall intent of the legislation was to improve the accuracy of information given to both boards and to shareholders. SOX attempted to achieve this goal in three ways: (1) by overhauling incentives and independence in the auditing process, (2) by stiffening penalties for providing false information, and (3) by forcing companies to validate their internal financial control processes.