Understanding Financial Management: A Practical Guide
Guideline Answers to the Concept Check Questions

Chapter 2
Interpreting Financial Statements

Concept Check 2.1

1. **Which stakeholders need to interpret a firm's financial statements?**

   Anyone with a financial stake in a firm should be interested in understanding that firm's financial statements. This would include those who provide capital to the firm (shareholders and lenders), customers, suppliers, managers, and employees (both current employees and retirees who are receiving pensions from the firm). Local public officials may have a keen interest in understanding a firm's health because of the jobs that a firm provides in the region. In addition, competitors, investment analysts, and potential investors need to understand a firm's financial statements.

2. **How can a firm's top management use its financial statements to make important decisions?**

   The information in financial statements can provide important information. Managers carefully assess data from these financial statements when making important investment, financing, and working capital policy decisions. Firms may use data from financial statements to determine incentives and rewards for a firm's managers. These managers may use the financial data in these statements to allocate capital investments within a firm's various segments or divisions. Divisional managers use financial statement data to implement changes to improve the performance of their respective divisions.

3. **What are the four financial statements issued by a firm?**

   The four financial statements include the firm's balance sheet, income statement, statement of cash flows, and statement of retained earnings.

   - A *balance sheet* reports a firm's assets, liabilities, and owner's equity at the end of a reporting period.
   - An *income statement* summarizes the revenues earned and the associated expenses incurred during the reporting period.
   - A *statement of cash flows* summarizes changes in a firm's cash position during a reporting period. The three classifications of cash flows are operating cash flows, investing cash flows, and financing cash flows.
   - A *statement of retained earnings* summarizes changes in the shareholders' equity during the reporting period.

4. **How often are financial statements produced?**

Firms typically prepare these statements quarterly. Public corporations file three quarterly reports each year and the firm's year-end annual report replaces the fourth quarterly report. Many analysts and users concentrate on a firm's fiscal year-end statements. New legislation in the US requires a firm to file annual statements within 60 days of the company's year-end and quarterly statements within 35 days of the close of the quarter.

Concept Check 2.2

1. **What is the basic accounting identity followed in a firm's balance sheet?**

The basic accounting identity is as follows: Assets = Liabilities + Owners' Equity. The basis of this identity is historic costs (book value amounts) in a firm's financial statements. This identity also holds in market value terms: the market value of a firm's assets is equal to the market value of the firm's liabilities plus the market value of a firm's equity. In fact, one way to think of the market value of a firm's equity is as the residual: the market value of a firm's equity is equal to the market value of the firm's assets less the market value of the firm's liabilities.

2. **An analyst suggests that firms should use market value amounts on the balance sheet. What are some of the advantages and disadvantages of this approach?**

If measured accurately, the use of market values would provide a more accurate depiction of a firm's financial situation than using book values. Reporting the market value of a firm's assets would also help analysts determine the intrinsic value of the equity for some firms. Unfortunately, determining the market value of many assets is subjective and difficult, especially for older factories and equipment and for many intangible assets. Market values can also fluctuate substantially in a short period.

3. **Why may items based on historical cost differ from their market values?**

As asset's book value based on the historic cost principle may differ from its market value because of inflation and deprecation. Firms depreciate assets over their estimated useful lives using well-defined accounting depreciation techniques such as straight-line depreciation and accelerated methods. Since these accounting methods generate depreciation amounts that differ from the actual economic depreciation of that asset during a given period, book values of depreciable assets in financial statements generally differ from actual market values. In addition, using an historic cost basis for valuing assets does not allow for changes in price levels caused by inflation. Inflation often causes reported book values in a firm's financial statements to understate market values.

Concept Check 2.3

1. **Why should analysts pay close attention to a firm's operating income?**

   Operating income provides an important indication of a firm's profitability from its basic ongoing operations before considering other revenue or expenses related to selling and administrative activities, investments and financing, taxes, and irregular items such as gains and losses from sales of divisions. Examining the trends in a firm's operating income may provide both a good indication of its past continuing operations and a basis for extrapolating future operating profitability.

2. **Why may a firm's net income differ from its net cash flow?**

   A firm's net income may differ from its net cash flow for a given period because: (1) most firms use an accrual accounting process; (2) income statements often include several non-cash expenses such as depreciation; and (3) taxes on a firm's income statement do not represent the actual taxes paid during the period.

3. **Some users of financial statements become frustrated that firms use varying formats for the income statements and balance sheets. What would be the advantages and disadvantages of requiring all firms to use the same format?**

   If all firms used the same format for preparing their financial statements, analysts would have an easier time making comparisons between similar firms and computing some financial ratios. However, firms are very different and often very complex. A one-size fits all format for financial statements would not likely accommodate all firms very well. For example, the income statement expenses for manufacturing firms, retail firms, and service-oriented firms are quite different. Forcing all three types of firms to use the same format would not be helpful.

4. **If a firm reports a wide difference between its basic and diluted earnings per share, should this difference concern investors? Why or why not?**

   The difference between basic and diluted earnings per share results from potentially dilutive securities (convertible securities, stock options, and warrants) issued by the firm. Assuming that a firm potentially converts these securities to shares of common stock in the future, this may dilute future reported basic earnings per share. However, in efficient capital markets, investors have probably already analyzed this information and reflected it in the current stock price.

5. **How can the choice of depreciation methods affect a firm's income statement and balance sheet? Give several examples.**

   Firms have considerable leeway in determining the depreciation expense on their income statement. A firm can choose a more aggressive depreciation approach by using straight-line depreciation over a very long period with an optimistically large estimated salvage value. This approach is aggressive in the sense that it will lead to a relatively small depreciation amount and therefore a higher reported net income in the early years

compared with accelerated methods. With lower depreciation amounts, the reported book values of assets on the firm's balance sheet will also generally be higher. The opposite effect occurs with firms that use more *conservative* (accelerated) depreciation approaches: higher depreciation amounts, lower net income, and generally lower book values of assets on the firm's balance sheet in the early years. A conservative depreciation approach would more aggressively depreciate the asset over a shorter period with an accelerated approach (and little or no estimated salvage value). With accelerated depreciation, the firm will report lower depreciation amounts in the later years of the asset's life compared with straight-line depreciation. Yet, with continued purchases of other new plant and equipment (at higher prices due to inflation) that will be depreciated using accelerated depreciation methods, the depreciation amounts on the firm's income statement will likely continue to rise.

Concept Check 2.4

1. **What are the three major sections of a firm's statement of cash flows?**

   The three major sections of a firm's statement of cash flows are: (1) cash flows from operations (CFO), (2) cash flows from investing (CFI), and (3) cash flows from financing (CFF).

   - *Operating cash flows* include the cash generated from sales and cash used for the firm's production process. The indirect (bottom-up) method begins with net income from the income statement, adds back any non-cash charges such as depreciation and amortization, then adds back any increases in current liabilities and subtracts any decreases in current assets to obtain the firm's operating cash flow for the period.
   - *Investing cash flows* include any purchases of plant and equipment, as well as purchases of other subsidiaries or divisions of other firms. The sale of any (non-cash) assets by the firm help to offset these investing cash outflows.
   - *Financing cash flows* include payment of interest and principal on debt, payment of dividends to common and preferred shareholders, and repurchases of stock. The proceeds received from any new issues of debt or stock help to offset these financing cash outflows.

2. **If depreciation is a non-cash item, why is it included in a firm's statement of cash flows?**

   Using the indirect method, but not the direct method, depreciation appears as part of operating cash flows. The cash flows from operations of the statement of cash flows starts with the net earnings (income) from the firm's income statement for the given period. In the income statement, the appropriate procedure is to subtract depreciation, which is a tax-deductible, *non-cash expense*, as an expense to arrive at net income. The indirect method adds back any non-cash charges such as depreciation in calculating cash flow from operations.

3. **Morgan Development Corp. (MDC) has reported negative net cash flow from operations and negative net cash flow from investing activities for each of the last five years. However, MDC's cash balances have remained stable during the period because of a large positive net cash flow from financing activities. Under what conditions or situations would this cause concern for investors?**

   Investors are unlikely to continue financing MDC's operating and investing cash flow deficits indefinitely. At some point, the firm's operations would need to generate more cash than it burns. Prolonged negative cash flows from operations will likely lead to serious financial difficulty for MDC.

4. **Why is having a positive cash flow from operations important to a firm?**

   For most firms, long-term profitability comes from investing in long-lived fixed assets that the firm operates over long periods. The value of a firm derives largely from the expected future net (after-tax) cash flows from operating these fixed assets that represent the core aspect of the firm's business.

Concept Check 2.5

1. **What information does a statement of retained earnings provide?**

   The statement of retained earnings shows how the book value of stockholders' equity changes over time. The statement reports the firm's net income for the period, dividends paid, and the resulting retained earnings for the period plus any stock repurchases or new issues. Making these changes to the retained earnings at the beginning of the period provides the retained earnings at the end of the reporting period.

2. **Will the value for stockholders' equity on a firm's statement of retained earnings reflect the actual market value of the firm's equity? Why or why not?**

   The value of stockholders' equity on a firm's statement of retained earnings will typically not reflect the market value of that firm's equity. Stockholders' equity on the statement of retained earnings represents the book value of the equity. The basis for determining retained earnings is the price received when the firm issued the stock in addition to any undistributed accumulated retained earnings. The firm also makes adjustments for stock repurchases. The basis for determining the market value of a firm's equity is the price at which investors are willing to buy and sell the firm's common stock in the capital markets.

Concept Check 2.6

1. **What is a common-size financial statement?**

   A common-size financial statement is a statement prepared on a relative (percentage) basis. A common-size balance sheet expresses all balance sheet items for a given period such as a year as a percentage of total assets for that period. A common-size income statement expresses each income statement item as a percentage of net sales for a given period.

2. **How are vertical common-size balance sheets and income statements constructed?**

   A common-size balance sheet for a given period is constructed by dividing all items by the total assets for that period. Thus, all items are reported as a percentage of total assets. A common-size income statement for a given period is constructed by dividing all items by net sales for that year. Thus, all items are reported as a percentage of net sales.

3. **How do common-size statements help provide a better understanding of a firm's financial condition?**

   Common-size statements help analysts compare financial data across firms and time. By presenting each item on a balance sheet as a percentage of total assets and each item on an income statement as a percentage of total sales, these common-size statements allow analysts to detect trends more easily. Common-size income statements enable analysts to evaluate relationships between sales and specific revenues and expenses and to compare the performance for one year with that for other years. For example, a firm's income statement may show gross profit increasing over the past three years, but it a common-size income statement might show that gross profit has actually declined as a percentage of sales. In addition, common-size statements allow analysts to compare firms that have different amounts of total assets and sales. Finally, common-size analysis provides a quick way to view certain financial rations such as gross profit margin, operating profit margin, and net profit margin.

Concept Check 2.7

1. **What important information do firms disclose in the Notes to Financial Statements?**

   In the Notes to Financial Statements, firms disclose important information about how they prepared the financial statements. In addition, these notes provide information about the firm not contained in the financial statements including accounting policies, long-term debt structure, income taxes, employee stock plans, leases, contingencies, and acquisitions.

Concept Check 2.8

1. **What is meant by the term quality of earnings?**

   Quality of earnings commonly refers to the degree of conservativeness and clarity in a firm's reported earnings. Firms have considerable leeway in some of their accounting methods. Those practices that tend to result in the underreporting of income through delayed recognition of revenues and accelerated recognition of expenses and losses lead to high earnings quality. For example, the method that a company uses to value inventory and depreciate assets can affect its earnings. Using FIFO inventory valuation during a period of rising prices and straight-line depreciation generally leads to higher reported net income. Analysts often contend, however, that earnings quality is generally lower quality than for a similar firm that uses conservative approaches, specifically LIFO inventory accounting and accelerated depreciation. In addition, firms have some discretion in the amount and the content of the information they disclose. In general, the greater the degree of transparency of information disclosed, the higher is the quality of earnings.

2. **What are some of the common methods used by managers that may boost current reported earnings and thereby lower a firm's quality of earnings?**

   As discussed above, using FIFO inventory valuation, assuming rising prices, and straight-line depreciation over a long period will boost current reported earnings and lower a firm's earnings quality. Firms may also use *front-end loading* to report income for a current period that should be spread over several future periods. In addition, firms may use inappropriate *restructuring charges* and *reserve accounts* to distort or manipulate current earnings (to smooth or temporarily boost them). Finally, firms with substantial stock options outstanding that are currently out-of-the money (have no intrinsic value) may have lower earnings quality if holders are likely to exercise these options in the future.

Concept Check 2.9

1. **What are some of the differences in international accounting standards and the US GAAP?**

   In the United States, firms may use certain accounting methods (depreciation) for reporting purposes and for tax purposes. This practice is not the norm internationally. Differences exist internationally in terms of the degree of rigidity and flexibility. For example, the use of reserve accounts in Germany allows accountants much greater flexibility in financial reporting that is not common in most countries.

2. **What are some important financial reforms that will likely be adopted in the near future?**

   Two key areas of potential future reforms include accounting for off-balance sheet financing and the need to create a firewall between the auditing and consulting services provided by professional accounting firms.