Test Questions and Solutions

Chapter 1

True-False

1. A basic understanding of financial statements is needed due to ongoing financial turmoil and major corporate failures.

2. The SEC requires all companies, both public and private, to file annually a Form 10-K report.

3. Financial statements are currently prepared according to generally accepted accounting principles in the U.S.

4. The FASB was given Congressional authority to write accounting rules.

5. The goal of the International Accounting Standards Board is the adoption of uniform international accounting standards.

6. In 2006, the IASB and the FASB agreed to work on all major projects jointly.

7. Annual reports of public companies can only be found on the SEC's EDGAR database.

8. A corporate annual report contains three basic financial statements.

9. The notes to financial statements, while helpful, are not an integral part of the statements.

10. Management is responsible for the preparation of the financial statements, including the notes, and the auditor's report attests to the fairness of the presentation.

11. The Sarbanes-Oxley Act eliminated the need for internal auditors.

12. An unqualified auditor's report states that the financial statements present fairly the financial position, results of operation, and the cash flows of the entity.

13. The Sarbanes-Oxley Act of 2002 requires all members of management as well as directors to certify the accuracy of the financial statements.

14. Despite the enactment of the Sarbanes-Oxley Act of 2002, corruption and unethical behavior continued in the 2000s.

15. The management discussion and analysis is of potential interest to the analyst because it contains information that cannot be found in the financial data.

16. The management discussion and analysis should contain a discussion of the commitments for capital expenditures, the purpose of such commitments, and expected sources of funding.

17. The shareholders' letter from the CEO of a firm offers factual information needed to analyze the financial statements.

18. The proxy statement offers information about such items as corporate governance, audit-related matters, directors and executive compensation, and related party transactions.

19. Publicity in the media can impact a firm’s financial performance.

20. Conglomerates operating in diversified lines of business are required to create separate annual reports for each line of business.

21. Accounting choices and estimates rarely have a significant impact on financial statement numbers.

22. The accrual basis of accounting means that revenues are recognized when the sale is made rather than when cash is received.

23. United States accounting rules have been perceived as being less complex than international standards.

24. The matching principle requires that expenses be matched with the generation of revenues in order to determine net income for an accounting period.

25. Examples of discretionary items include repairs and maintenance, research and development and advertising.

Multiple Choice

1. Which report is not required to be filed by public companies to the SEC?
    a. Annual reports (Form 10-K).
    b. Financial Reporting Rulings.
    c. A prospectus for any new security offering.
    d. Quarterly reports (From 10-Q).

2. The globalization of business activity has resulted in which of the following?
    a. Increased corruption and unethical behavior.
    b. A uniform set of accounting rules in all countries.
    c. The FASB and IASB working jointly on a project to converge accounting standards.
    d. The requirement that U.S. firms use international accounting rules as of 2006.

3. What basic financial statements can be found in a corporate annual report?
    a. Balance sheet, income statement, statement of shareholders' equity, and statement of cash flows.
    b. Balance sheet, auditor's report and income statement.
    c. Earnings statement and statement of retained earnings.
    d. Statement of cash flows and five-year summary of key financial data.

4. What information can be found on a balance sheet?
    a. Information to support that assets equal liabilities.
    b. The profit or loss for the accounting period.
    c. The reasons for changes in the cash account.
    d. The financial position on a particular date; i.e. assets, liabilities and shareholders' equity.

5. What information can be found on an income statement?
    a. The financing and investing activities during an accounting period.
    b. Cash inflows and cash outflows.
    c. A reconciliation of the beginning and ending balances of all revenue accounts.
    d. Revenues, expenditures, net profit or loss and net profit or loss per share.

6. What information can be found on a statement of stockholders' equity?
    a. A reconciliation of the cash account and the retained earnings account.
    b. A reconciliation of the beginning and ending balances of all accounts that appear in the stockholders' equity section of the balance sheet.
    c. A reconciliation of the operating, investing and financing activities of a firm.
    d. A reconciliation of net profit or loss and the cash account.

7. What item is not included in the notes to the financial statements?
    a. Details about inventory and property, plant and equipment.
    b. Information about major acquisitions or divestitutures.
    c. The management discussion and analysis.
    d. A summary of the firm's accounting policies.

8. What type of audit report indicates that the financial statements have not been presented fairly?
    a. A disclaimer of opinion.
    b. An unqualified report.
    c. A qualified report.
    d. An adverse opinion.

9. What type of audit report indicates that the financial statements have been presented fairly?
    a. An unqualified report.
    b. A disclaimer of opinion.
    c. A qualified report.
    d. An adverse opinion.

10. What does Section 404 of the Sarbanes-Oxley Act of 2002 require?
    a. The external auditors must create an adequate internal control structure for the firm being audited.
    b. The external auditors must approve of all internal auditors hired by a firm.
    c. The inclusion of an internal control report in the annual report.
    d. The external auditors need to perform internal audit services.

11. Why does the management discussion and analysis help the analyst?
    a. It contains information that cannot be found in the financial data.
    b. It provides predictions of all future financial statement numbers.
    c. It outlines the accounting choices made by the firm.

d. It explains the market valuation of the firm's stock.

12. Which of the following items would not be discussed in the management discussion and analysis?
    a. Commitments for capital expenditures.
    b. The market value of all assets.
    c. The internal and external sources of liquidity.
    d. A breakdown of sales increases into price and volume components.

13. What item is probably the least useful when analyzing financial statements?
    a. Management discussion and analysis.
    b. The notes to the financial statements.
    c. The statement of cash flows.
    d. Public relations materials.

14. What document is required by the SEC to solicit shareholder votes?
    a. Proxy statement.
    b. Five-year summary.
    c. Shareholders' letter.
    d. Prospectus.

15. What types of information cannot be found in the financial statements?
    a. Details about officer and employee retirement, pension, and stock option plans.
    b. Pending legal proceedings.
    c. Reputation of the firm, morale of employees and prestige in the community.
    d. Disclosures about segments of an enterprise.

16. How are revenues and expenses recognized under the accrual basis of accounting?
    a. Revenues are recognized when cash is received and expenses are recognized when cash is paid.
    b. Revenues and expenses are recognized equally over a twelve month period.
    c. Revenues and expenses are recognized based on the choices of management.
    d. Revenues are recognized in the accounting period when the sale is made and expenses are recognized in the period in which they relate to the sale of the product.

17. Which of the following statements is true?
   a. GAAP-based financial statements are prepared according to the "cash" rather than the "accrual" basis of accounting.
   b. Accounting choices and estimates can have a significant impact on the outcome of financial statement numbers.
   c. The accrual method means that the expense is recognized after the cash is paid out.
   d. The purpose of the accrual method is to attempt to "match" assets with liabilities in appropriate accounting periods.

18. In what industries would it be expected that companies would spend a significant amount on research and development activities?
   a. Health.
   b. Clothes retailer.
   c. Auto.
   d. Both (a) and (c).

19. Which of the following items is NOT discretionary in nature?
   a. Union wages.
   b. Repairs and maintenance.
   c. Research and development.
   d. Advertising.

20. Which of the following could be detrimental to a firm's sales and earnings?
   a. Using the matching principle when recording revenues and expenses.
   b. Deferring repairs and maintenance on equipment.
   c. Investing in research and development.
   d. Increasing discretionary expenses.

For each of the following items indicate where you would most likely find the information.

   a. Balance sheet.
   b. Income statement.
   c. Statement of stockholders' equity.
   d. Statement of cash flows.
   e. Notes to the financial statements.
   f. Auditor's report.

g. Management's discussion and analysis.

21. Revenues.

22. Detailed information about the term, cost and maturity of debt.

23. Changes to the company's equity accounts.

24. An unqualified opinion.

25. Assets.

26. Attestation to the fairness of financial statements.

27. Discussion of the company's liquidity.

28. Cash inflows from investing activities.

29. A breakdown of sales increases into price and volume components.

30. Summary of significant accounting policies.

Short Answer

1. Write a short essay explaining the importance of financial statements and their accompanying notes.

2. List and describe the four basic financial statements included in a corporate annual report.

3. Discuss the similarities and differences between a company's Form 10-K and an annual report created especially to send to the stockholders.

4. Explain the importance of reading the notes to the financial statements.

5. Discuss the role of the SEC, the FASB, and the IASB.

6. Define the following terms related to the auditor's report: unqualified, qualified, adverse, and disclaimer of opinion.

7. According to the textbook "Internal auditors have become the 'rock stars' of the accounting industry." Explain what this means.
8. How did the Sarbanes-Oxley Act of 2002 change the regulatory model for auditors?

9. Explain how Congress addressed the issue of auditor independence in the Sarbanes-Oxley Act of 2002.

10. What regulations were included as part of the Sarbanes-Oxley Act of 2002 that should encourage CEOs and CFOs to act ethically?

11. Explain what types of information can be learned from the management discussion and analysis about liquidity? capital resources? operations?

12. What types of information are necessary to evaluate a company but cannot be found in the financial statements?

13. How can management affect the quality of financial statements?

14. What are discretionary items and why are they important to the operating success of a firm?

Solutions - Chapter 1

True-False

1. T	6. T	11. F	16. T	21. F
2. F	7. F	12. T	17. F	22. T
3. T	8. F	13. F	18. T	23. F
4. F	9. F	14. T	19. T	24. T
5. T	10. T	15. T	20. F	25. T

Multiple Choice

1. b	6. b	11. a	16. d	21. b	26. f
2. c	7. c	12. b	17. b	22. e	27. g
3. a	8. d	13. d	18. d	23. c	28. d
4. d	9. a	14. a	19. a	24. f	29. g
5. d	10. c	15. c	20. b	25. a	30. e

Short Answer

1. Financial statements and their accompanying notes contain a wealth of useful information regarding the financial position of a company, the success of its operations, the policies and strategies of management, and insight into its future performance. The objective of the financial statement user is to find and interpret this information to answer questions about the company, such as the following:

- Would an investment generate attractive returns?
- What is the degree of risk inherent in the investment?
- Should existing investment holdings be liquidated?
- Will cash flows be sufficient to service interest and principal payments to support the firm's borrowing needs?
- Does the company provide a good opportunity for employment, future advancement, and employee benefits?
- How well does this company compete in its operating environment?
- Is this firm a good prospect as a customer?

2. The balance sheet shows the financial position—assets, liabilities, and stockholders' equity—of the firm on a particular date, such as the end of a quarter or a year.

The income statement presents the results of operations—revenues, expenses, net profit or loss and net profit or loss per share—for the accounting period.

The statement of shareholders' equity reconciles the beginning and ending balances of all accounts that appear in the shareholders' equity section of the balance sheet.

The statement of cash flows provides information about the cash inflows and outflows from operating, investing, and financing activities during an accounting period.

3. The annual report and the Form 10-K generally include the company's four financial statements, notes to the financial statements and other items such as the management's discussion and analysis, auditor's report, five-year summary of selected financial data and market data. The annual report may contain public relations material that the Form 10-K does not, such as colored photographs, charts and, a letter to the shareholders from the CEO. The Form 10-K presents information in a specific order as required by the SEC that may not be included in an annual report created separately.

4. The notes to the financial statements are an integral part of the financial statements and must be read to thoroughly understand the statements. The notes include important information such as a summary of the firm's accounting policies and any changes to those policies during the reporting period, details about particular asset, liability, and equity accounts, major acquisitions or divestitures, officer and employee retirement, pension and stock option plans, leasing arrangements, the term, cost, and maturity of debt, pending legal proceedings, income taxes, contingencies and commitments, quarterly results of operations, and operating segments.

5. The SEC regulates U. S. companies that issue securities to the public and requires the issuance of a prospectus for any new security offering. The SEC also requires regular filing of annual reports, quarterly reports and other reports depending on particular circumstances. Congress has given the SEC authority to set accounting policies, although the SEC has largely delegated the role of rulemaking to the FASB.

The FASB is a private sector organization. The board issues rules and interpretations of those rules after a lengthy deliberation process. The board has no authority to enforce its rules, however, the SEC and FASB work closely and the SEC has generally enforced the rules that the FASB writes.

The role of the IASB is to work toward creating a set of international generally accepted accounting principles that will have worldwide acceptance in our global society. This would allow companies to list securities in any market without having to prepare multiple sets of financial statements.

6. An unqualified report states that the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows for the accounting period, in conformity with GAAP. A qualified report reveals a departure from GAAP. An adverse opinion is rendered when the departure from GAAP affects numerous accounts and financial statements so that the financial statements have not been presented fairly in accordance with GAAP. A disclaimer of opinion means the auditor cannot evaluate the fairness of the financial statements and therefore expresses no opinion on them.

7. Internal auditors have become the "rock stars" of the accounting industry as a result of the Sarbanes-Oxley Act of 2002 (SOX). Section 404 of the act requires companies to include in their annual reports a statement regarding the effectiveness of internal controls and the disclosure of any material weaknesses in a firm's internal controls system. This requirement has greatly boosted the need for internal auditors and SOX compliance specialists, but more importantly, has enhanced the value of the internal audit function within companies, as businesses have strengthened internal controls in response to SOX.

8. Prior to the passage of the Sarbanes-Oxley Act of 2002, auditors followed a self-regulatory model. Title I of the act established the Public Company Accounting Oversight Board (PCAOB), a private, nonprofit organization, which has been given the authority to register, inspect, and discipline auditors of all publicly owned companies; however, the SEC appoints the board members and has ultimate oversight of the PCAOB. In addition, the PCAOB now has the authority to write auditing rules, quality control and ethics standards.

9. Title II of the Sarbanes-Oxley Act of 2002 addresses the area of auditor independence, prohibiting audit firms from providing certain nonaudit services when conducting an external audit of a firm. Prohibited services include

bookkeeping, design and implementation of financial information systems, valuation and appraisal services, actuarial services, internal audit services, management or human resource functions, and broker, dealer, or investment banking services. Title II also encourages auditor independence by requiring the rotation of audit partners every five years if the audit partner is the primary partner responsible for a particular audit client. Another issue relating to auditor independence occurs when a company hires its chief financial officer (CFO) or other finance personnel from the ranks of the external audit firm. Section 206 of Title II inserts a one-year waiting period before an employee from the external audit firm may go to work for a client in the position of CEO, CFO, controller or any equivalent executive officer position, any financial oversight role and any person preparing financial statements.

10. Titles III and IV of the Sarbanes-Oxley Act of 2002 focus on corporate responsibility while Title IX attaches harsher penalties for violations. Section 302 requires that the chief executive officer and the chief financial officer of a publicly owned company certify the accuracy of the financial statements. An officer who certifies a report that is later found to be inaccurate could face up to $1 million in fines and/or a jail sentence of up to 10 years according to Section 906. These two sections work in conjunction with Section 404 (discussed previously) to encourage CEOs and CFOs to take responsibility for strong internal controls to prevent accounting fraud and financial statement misrepresentation.

11. The management discussion and analysis includes a discussion of the favorable and unfavorable trends and significant events or uncertainties in the areas of liquidity, capital resources, and results of operations. With regard to liquidity the analyst can expect to find a discussion of the internal and external sources of liquidity and any material deficiencies in liquidity and how they will be remedied. The discussion of capital resources should include commitments for capital expenditures, the purpose of such commitments, and expected funding sources, as well as anticipated changes in the mix and cost of financing resources. Information about the results of operations should include unusual or infrequent transactions that affect income from continuing operations, events that cause material changes in the relationship between costs and revenues, and a breakdown of sales increases into price and volume components.

12. Some of the items needed to evaluate a company that are missing from the financial statements are intangibles such as employee relations with management, morale and efficiency of employees, the reputation of the firm with its customers, its prestige in the community, the effectiveness of management, provisions for

management succession, and potential exposure to changes in regulations such as environmental or food and drug enforcement. Publicity in the media also affects the public perception of the firm and can impact the financial performance of the company.

13. Management has considerable discretion within the overall framework of GAAP, allowing for the potential manipulation of the financial statement numbers. The potential exists for management to manipulate the bottom line and other accounts in the financial statements. Although accounting rules provide guidelines helpful in making accounting allocations, these rules are not always precise. The timing of revenue and expense recognition can be based on arbitrary managerial decisions. Management may choose to cut costs in critical areas such as repairs and maintenance, research and development, advertising, and capital expansion with the sole purpose of increasing the bottom line, but at the expense of long-term profitability in the firm.

14. Discretionary expenses are those items that management exercises control with regard to the budget level and timing of the expenditures. Examples of discretionary expenses include repair and maintenance of machinery and equipment, marketing and advertising, research and development, and capital expansion. Each choice regarding these discretionary items has both an immediate and a long-term impact on profitability, perhaps not in the same direction. A company might elect to defer plant maintenance in order to boost current period earnings; ultimately, the effect of such a policy could be detrimental. For some industries, such as beverages and retail marketing, advertising and marketing expenditures are essential to gaining and maintaining market share. Research and development can be critical for ongoing success of industries such as computing and electronics, health and auto.

The financial analyst should carefully scrutinize management's policies with respect to these discretionary items through an examination of expenditure trends (absolute and relative amounts) and comparison with industry competitors. Such an analysis can provide insight into a company's existing strengths and weaknesses and contribute to an assessment of its ability to perform successfully in the future.

Chapter 2

True-False

1. The balance sheet shows the financial position of a company n a particular date.

2. Consolidated statements are the combined financial statements of separate legal entities when the parent controls 100% of the subsidiary.

3. A common size balance sheet expresses each item on the balance sheet as a percentage of either total assets or total liabilities.

4. Current assets include those assets expected to be converted into cash within one year or operating cycle.

5. Marketable securities should be valued at fair market value.

6. Marketable securities are also referred to as short-term investments.

7. Accounts receivable are balances owed to suppliers.

8. When analyzing accounts receivable and the allowance for doubtful accounts it is helpful to assess the relationship between the growth rates of sales, accounts receivable, and the allowance for doubtful accounts.

9. A decline in accounts receivable when sales are increasing is a red flag that the firm is not collecting cash from its customers.

10. Inventory valuation is based on an assumption regarding the flow of goods and has nothing to do with the actual order in which products are sold.

11. Using FIFO during a period of inflation would result in net income being overstated relative to the LIFO method.

12. The straight-line depreciation method allocates an equal amount of depreciation expense to each year of the depreciation period.

13. Most manufacturing firms use the accelerated depreciation method while retailers use the straight-line depreciation method for financial reporting purposes.

14. Goodwill arises when one company acquires another company for a price in excess of the fair market value of the net identifiable assets acquired.

15. Accounts payable are short-term obligations that arise from credit extended by suppliers for the purchase of goods and services.

16. Accrued liabilities are a result of paying for an expense prior to the recognition of the expense.

17. Companies that are paid in advance for services or products record a liability on the receipt of cash referred to as unearned revenue or deferred credits.

18. Temporary differences are a result of recording revenues or expenses on financial statements in an accounting period different from when these items are recorded on the firm's tax return.

19. A deferred tax asset is recorded when expenses are recorded on the income statement but not allowed to be deducted for tax purposes until a later accounting period.

20. A capital lease affects only the income statement.

21. The commitments and contingencies account listed on a balance sheet is meant to draw attention to the fact that required disclosures can be found in the notes to the financial statements.

22. Contingencies refer to the amounts owed by companies to settle lawsuits.

23. The retained earnings account is increased (decreased) by net income (loss) and increased by dividends each year.

24. The retained earnings account is the sum of every dollar a company has earned since its inception, less any payments made to shareholders in the form of cash or stock dividends.

25. Items related to the quality of financial reporting on the balance sheet, such as off-balance-sheet financing, should be assessed when analyzing this financial statement.

Multiple Choice

1. Which item below does not describe a balance sheet?
   a. Assets = Liabilities + Stockholders' Equity.
   b. Financial position at a point in time.
   c. Assets – Liabilities = Stockholders' Equity.
   d. Assets + Liabilities = Stockholders' Equity.

2. Which of the following statements is false?
   a. Annual reports must include three-year audited balance sheets and two-year audited income statements.
   b. The balance sheet is prepared on a particular date.
   c. Interim statements are generally prepared quarterly.
   d. When a parent company owns more than 50% of the voting stock of a subsidiary, the financial statements are consolidated for both entities.

3. Which of the following statements about a common-size balance sheet is true?
   a. Each item on a common-size balance sheet is expressed as a percentage of sales.
   b. The common-size balance sheet reveals the composition of expenses relative to revenues.
   c. The common-size balance sheet reveals the capital and debt structure of the firm.
   d. Each item on a common-size balance sheet is expressed as a percentage of net income.

4. What are current assets?
   a. Assets purchased within the last year.
   b. Assets which will be used within the next month.
   c. Assets are the net working capital of the firm.
   d. Assets expected to be converted into cash within one year or operating cycle.

5. How are marketable securities valued on the balance sheet?
   a. Historical cost.
   b. At cost or fair value depending on how the securities are classified.
   c. Market value.
   d. At fair value with the difference between cost and fair value reported as revenue.

6. What does the term “net realizable value” mean with regard to the accounts receivable account?

   a. The gross amounts owed by customers for credit purchases.
   b. Total accounts receivable plus an amount estimated for bad debts.
   c. The allowance for doubtful accounts less bad debt expense.
   d. Actual amounts of accounts receivable less an allowance for doubtful accounts.

7. Which of the following items would not be considered when analyzing accounts receivable and allowance for doubtful accounts?

   a. The relationship among changes in sales, accounts receivable and the allowance for doubtful accounts.
   b. A comparison of actual write-offs relative to amounts recognized as bad debts.
   c. The relationship between accounts receivable, inventory , and accounts payable.
   d. An analysis of the “Valuation and Qualifying Accounts” schedule required in the Form 10-K.

8. The inventory of a retail company is comparable to which type of inventory of a manufacturing company?

   a. Finished goods.
   b. Work in process.
   c. Supplies.
   d. Raw materials.

9. Which type of firm would carry little or no inventory?

   a. A manufacturing firm.
   b. A retail firm.
   c. A service firm.
   d. A wholesale firm.

10. If a company chooses the LIFO method of inventory valuation, which inventory will appear as ending inventory on the balance sheet?

   a. The last inventory purchased.
   b. The first inventory purchased.
   c. An average of all inventory purchased.
   d. The actual inventory which has not been sold.

Assume the following purchases of inventory for ABC Company and use this information to answer questions 11through 13:

Purchase #	Purchase Price
1	$3
2	$4
3	$5
4	$6
5	$7

11. Assume ABC sells two items and uses the FIFO method of inventory valuation. What amount would appear in ending inventory on the balance sheet?
    a. $7
    b. $15
    c. $18
    d. $25

12. Assume ABC sells three items and uses the LIFO method of inventory valuation. What amount would appear for cost of goods sold on the income statement?
    a. $18
    b. $12
    c. $15
    d. $25

13. Assume ABC uses the average cost method of inventory valuation. What unit cost would be used to determine the amount in ending inventory or cost of goods sold?
    a. $3
    b. $5
    c. $7
    d. $25

14. Which of the following statements is true?
    a. Land should be depreciated over the period of time it benefits the firm.
    b. Accelerated depreciation must be used for financial reporting purposes.
    c. Fixed assets are reported at historical cost plus accumulated depreciation.
    d. The total amount of depreciation over the asset's life is the same regardless of depreciation method, although the rate of depreciation varies.

15. Which of the following statements is false?
    a. Goodwill arises when one company acquires another company for a price in excess of the fair market value of the net identifiable assets acquired.
    b. Goodwill should be depreciated.
    c. Goodwill must be evaluated annually to determine if there has been a loss of value.
    d. If the carrying value of goodwill exceeds the fair value, the excess book value must be written off as an impairment expense.

16. Which of the following would cause the recognition of a liability?
    a. Credit extended by suppliers.
    b. Receipt of cash in advance for services.
    c. Recognition of expense prior to the actual payment of cash.
    d. All of the above.

17. Which items would be classified as liabilities?
    a. Accounts payable, unearned revenue, pension liabilities.
    b. Common stock, retained earnings, bonds payable.
    c. Commitments and contingencies, additional paid-in capital, notes payable.
    d. Deferred taxes, accrued expenses, treasury stock.

18. What causes the creation of a deferred tax account on the balance sheet?
    a. Permanent differences in income tax accounting.
    b. The use of the straight-line method of depreciation for both reporting and tax purposes.
    c. Temporary differences in the recognition of revenue and expense for taxable income relative to reported income.
    d. Municipal bond revenue and life insurance premiums on officers.

19. Which statement best describes the retained earnings account?
    a. The retained earnings account is equal to the cash account less dividends paid.
    b. Retained earnings are funds a company has chosen to reinvest in the operations of a business rather than pay out to stockholders in dividends.
    c. Retained earnings represent unused cash of the firm.
    d. The retained earnings account is the measurement of all distributed earnings.

20. Which item would be included in the account "Accumulated other comprehensive income (expense)"?

a. Treasury stock.
b. Preferred stock.
c. Foreign currency translation adjustments.
d. Additional paid-in capital.

How would each of the following items be classified on the balance sheet?

a. Current assets.
b. Long-term assets.
c. Current liabilities.
d. Long-term liabilities.
e. Stockholders' equity.

21. Accounts payable.

22. Inventory.

23. Additional paid-in capital.

24. Bonds payable.

25. Equipment.

26. Marketable securities.

27. Current maturities of long-term debt.

28. Retained earnings.

29. Accounts receivable.

30. Accumulated depreciation.

Short Answer/Problem

1. What is the balancing equation? Explain each of the components of the equation and give examples of each component.

2. Using the following information analyze the accounts receivable and the allowance for doubtful accounts for this company:

	2011	2010
Sales	$6,700	$7,500
Accounts receivable, net	202	320
Allowance for doubtful accounts	3	12

3. The following calculations have been made for Coos Company:

	Growth Rate
Net sales	10.5%
Total accounts receivable	21.3%
Allowance for doubtful accounts	2.6%

	Current Year	Prior Year
Allowance for doubtful accounts as a percentage of total accounts receivable	3.8%	5.4%

a. Analyze the accounts receivable and allowance for doubtful accounts.
b. What other information would be useful for the analysis completed in part a?

4. Using the following excerpts from the most recent annual report of Health Supplements, Inc., a leading manufacturer of nutritional supplements, analyze the accounts receivable and allowance for doubtful accounts. Be sure to show all calculations and write a thorough interpretation of those calculations.

(dollars in thousands)	*2011*	*2010*
Net sales	$97,128	$99,612
Accounts receivable - less allowance for doubtful accounts of $20 at June 30, 2011 and $217 June 30, 2010	$ 5,264	$12,839

Concentrations of Credit Risk

Credit risk with respect to receivables is concentrated with our three largest customers, whose receivable balances collectively represented 75% of gross accounts receivable at June 30, 2011 and 79% at June 30, 2010. Concentrations of

credit risk related to the remaining accounts receivable balances are limited due to the number of customers comprising our remaining customer base.

Health Supplements, Inc.
Valuation And Qualifying Accounts
For the Years Ended June 30, 2011, 2010 and 2009

	Balance at beginning of period	Charged to expenses	Deductions	Balance at end of period
Allowance for doubtful accounts				
2011	$217	($41)	($156)	$20
2010	$221	$57	($61)	$217
2009	$132	$101	($12)	$221

5. a. Explain how inventory is valued if the FIFO method is used.
b. Explain how inventory is valued if the LIFO method is used.
c. Why would a manager choose the FIFO method during an inflationary period?
d. Why would a manager choose the LIFO method during an inflationary period?

6. If a firm chooses to use the FIFO method of inventory valuation instead of the LIFO method, explain the impact of deflation on the amounts shown on the balance sheet for inventory and on the income statement for cost of goods sold.

7. Using the following information calculate the ending inventory balance and the cost of goods sold expense that would be reported at the end of the year if the following inventory valuation methods are used:

a. FIFO
b. LIFO
c. Average cost

	Units	Purchase Price
Beginning inventory	8	$5
Purchase #1	10	$6
Purchase #2	14	$7

Purchase #3	12	$6
Sales	40	

8. Using the following information calculate the ending inventory balance and the cost of goods sold expense that would be reported at the end of the year if the following inventory valuation methods are used:

a. FIFO
b. LIFO
c. Average cost

	Units	Purchase Price
Beginning inventory	20	$12
Purchase #1	100	$11
Purchase #2	85	$10
Purchase #3	90	$ 9
Sales	235	

9. The Presto Company purchases equipment for $20,000. Management estimates that the equipment will have a useful life of five years and no salvage value.

a. Calculate depreciation expense and the book value of the equipment at the end of the first year using the straight-line method of depreciation.
b. Calculate depreciation expense and the book value at the end of the first year using the double-declining balance method of depreciation.

10. Brown Co. purchased a piece of equipment last year for $500,000. Management estimates that the equipment will have a useful life of five years and no salvage value. The depreciation expense recorded for tax purposes will be $120,000 this year (Year 2). The company uses the straight-line method of depreciation for reporting purposes.

a. Calculate the amount of depreciation expense for reporting purposes this year (Year 2).
b. What will be the net book value of the equipment reported on the balance sheet at the end of this year (Year 2)?
c. Will a deferred tax asset or liability be created as a result of the depreciation recorded for tax and financial reporting purposes?

d. What amount will be added to the deferred tax account as a result of the depreciation timing difference?

11. InDebt Corporation has a $200,000 note outstanding with a 10% annual rate of interest due in semiannual installments on March 31 and September 30. What amount will be shown as accrued interest on a December 31 balance sheet?

12. Hoffman's Hotel has total revenue of $900,000; expenses other than depreciation of $400,000; depreciation expense for tax purposes of $250,000; and depreciation expense of $180,000 for reporting purposes. The tax rate is 35%. Calculate net income for reporting purposes and tax purposes and also calculate the deferred tax liability.

13. Write a short essay explaining the difference between an operating and a capital lease.

14. Explain why the account titles "Commitments and Contingencies" appears on a balance sheet without a corresponding dollar amount.

15. Brian's Building Company reported the following amounts on their financial statements this year:

Total assets	$56,000
Total liabilities	$32,000
Net income	$ 7,500
Beginning retained earnings	$ 9,800
Ending retained earnings	$10,400

a. Calculate total stockholders' equity.
b. Calculate the amount of dividends that were most likely paid this year.

16. StoreMart had the following balancing equation at the end of last year:

Assets = Liabilities + Stockholders' Equity

$100,000=$65,000+ $35,000

During the year StoreMart increased assets by $20,000 and added debt in the amount of $7,000. The only stockholders' equity account that changed was retained earnings. If no dividends were paid, how much net income was generated this year?

17. Using the information below for Jumbo Corporation, calculate the amount of dividends Jumbo most likely paid to common stockholders in 2010, 2011, and 2012.

Retained earnings balances		Net income	
January 1, 2010	$500		
December 31, 2010	$760	2010	$450
December 31, 2011	$875	2011	$325
December 31, 2012	$950	2012	$240

18. Why would a firm repurchase their own shares of common stock?

19. The following list of balance sheet accounts with corresponding amounts is available for Green Co. at the end of the year. Classify the accounts using the following headings: current assets, long-term assets, current liabilities, long-term liabilities, and stockholders' equity. (Hint: You can check your answer using the balance sheet equation.)

Accounts payable	29	Cash	25
Short-term investments	22	Common stock	1
Deferred taxes, current	6	Treasury stock	(4)
Property & Equip., net	67	Prepaid expenses	3
Accounts receivable	11	Inventories	13
Long-term debt	20	Add'l. paid-in capital	51
Current portion of long-term debt	5	Retained earnings	45

20. Using the following balance sheet, prepare a common size balance sheet:

Assets		Liabilities and stockholders' equity	
Current assets		Current liabilities	
Cash	5	Accounts payable	29
Short-term investments	15	Current portion of	

Accounts receivable	21	long-term debt	9
Inventory	23	Total current liabilities	38
Prepaid expenses	3	Long-term liabilities	
Deferred taxes, current	6	Long-term debt	45
Total current assets	73	Total liabilities	83
Long-term assets		Stockholders' equity	
Property & equipment	67	Common stock and PIC	52
Goodwill	13	Retained earnings	25
Long-term investments	5		
Other assets	2	Total stockholders' equity	77
Total assets	160	Total liabilities and equity	160

21. Analyze the following common size balance sheet:

	2011	2010
Current assets:		
Cash	3%	5%
Accounts receivable	20	18
Inventory	35	30
Total current assets	58%	53%
Property, plant and equipment	30	40
Other assets	12	7
Total assets	100%	100%
Current liabilities:		
Accounts payable	25%	20%
Short-term debt	38	33
Total current liabilities	63%	53%
Long-term debt	22	17
Total liabilities	85%	70%
Common stock and paid in capital	14	20
Retained earnings	1	10
Total stockholders' equity	15%	30%
Total liabilities and stockholders' equity	100%	100%

Solutions - Chapter 2

True-False

1. T	6. T	11. T	16. F	21. T
2. F	7. F	12. T	17. T	22. F
3. F	8. T	13. F	18. T	23. F
4. T	9. F	14. T	19. T	24. T
5. F	10. T	15. T	20. F	25. T

Multiple Choice

1. d	6. d	11. c	16. d	21. c	26. a
2. a	7. c	12. a	17. a	22. a	27. c
3. c	8. a	13. b	18. c	23. e	28. e
4. d	9. c	14. d	19. b	24. d	29. a
5. b	10. b	15. b	20. c	25. b	30. b

Short Answer/Problem

1. The balancing equation is: Assets = Liabilities + Stockholders' Equity
Assets are items owned and are organized on the balance sheet according to how they are utilized. Current assets are those assets expected to be converted into cash within one year or operating cycle, whichever is longer. Examples include cash, accounts receivable, inventory, and prepaid expenses. Assets not used up in the ebb and flow of annual business operations include property, plant, and equipment, intangible assets, and long-term investments.

Liabilities are what a firm owes to outsiders. Current liabilities are those debts due within one year or operating cycle, whichever is longer and include accounts payable, short-term notes payable, current maturities of long-term debt, accrued liabilities, and unearned revenue. Liabilities due in more than one year include long-term debt, capital lease obligations and pension and postretirement benefits.

Stockholders' equity represents the ownership interests in the company or the residual interest in assets that remains after deducting liabilities. Examples of stockholders' equity accounts include common stock, additional paid-in capital, retained earnings, preferred stock, treasury stock, and accumulated other comprehensive income.

2.

	2011	2010
Allowance for doubtful accts. / Accts. Receivable + Allow.	1.5%	3.6%

Growth rates:		
	Sales	(10.7%)
	Accts. Receivable (net)	(36.9%)(A/R, gross, 38.3%)
	Allowance for doubt. accts.	(75.0%)

Sales for this company have decreased so it is expected that the accounts receivable and allowance for doubtful accounts would also decrease. Accounts receivable has decreased at a faster rate than sales while the allowance for doubtful accounts has decreased at a faster rate than accounts receivable. The percentage of estimated bad accounts has dropped by more than a percentage point relative to the prior year. Possible explanations for this inconsistency could be:

1. the company has tightened its credit policy,
2. prior bad debt estimates were too high and the company is correcting for this, or
3. management has intentionally reduced bad debts to report a higher net income.

3. Sales, accounts receivable and the allowance for doubtful accounts have all grown, but not proportionately. The allowance account increased only slightly, and as a percentage of total accounts receivable, the allowance account has declined from 5.4% to 3.8%. This is not a normal pattern. Possible explanations are that management overestimated the account in prior years and is now correcting for that overestimation; customers are not defaulting as anticipated and management is adjusting the allowance account accordingly, or management is reducing the allowance account in order to decrease bad debt expense and increase net income in the current year.

Other information that would be useful to the analyst would be the valuation schedule required by the SEC and any notes or information in the management's discussion and analysis related to accounts receivable and bad debts.

4.

	2011	2010
Allowance for doubtful accts. / Accts. Receivable + Allow.	0.4%	1.7%

Growth rates:	Sales	(2.5%)
	Accts. Receivable (net)	(59.0%)(A/R, gross, 59.5%)
	Allowance for doubt. accts.	(90.8%)

Health Supplements, Inc. experienced a minimal decrease in sales in 2011; however, both the accounts receivable and allowance for doubtful accounts dropped significantly. The estimated percentage of bad debt relative to total accounts receivable has declined from 1.7% in 2010 to 0.4% in 2011, indicating management is expecting to collect nearly all of their accounts receivable in the future.

According to notes, Health Supplements, Inc. has three large customers that make up 75% of accounts receivable at the end of 2011. This is risky for the firm as a default by any one of those customers would be detrimental to the financial health of the firm. If Health Supplements, Inc. has performed high quality credit checks of the three largest customers and believe that there is little risk of default, then this could explain the decline in the allowance for doubtful accounts.

On the other hand, looking at the valuation schedule offers a different picture. In 2009 the allowance account was more than adequate for the minimal bad debts the firm actually wrote-off. In 2010 and 2011 actual write-offs increased each year by 408% and 156%, respectively. The current balance in the allowance account at the end of 2011 is $20, while write-offs for that year totaled $156. It is suspicious that the firm credited the bad debt expense account, which resulted in an increase to net income for 2011, when actual bad debts are rising significantly each year. It is possible that the firm intentionally understated the allowance account to make a poor earnings year look better.

5. a. The FIFO method assumes the first units purchased are the first units sold during an accounting period; therefore, the ending inventory would consist of the last units purchased during that accounting period.

b. The LIFO method assumes that the items purchased last are the first sold; therefore the ending inventory would consist of the first units purchased.

c. A manager may choose the FIFO method during a period of inflation in order to report higher earnings. Since the first units purchased would be included in cost of goods sold and they would be at lower relative prices, a higher earnings amount will result.

d. A manager may choose the LIFO method during a period of inflation in order to reduce taxes. Since the last units would be reported as cost of goods sold, they would reflect higher costs, thus reducing reported earnings. Lower earnings results in lower taxes and frees more cash for the firm.

6. During deflation costs of products are declining, therefore, the first goods purchased or produced would be valued at higher costs than those goods purchased or produced last. Firms using FIFO would have inventory values on the balance sheet at lower amounts compared to inventory valued using the LIFO method since the last goods purchased or produced would still be in inventory when using FIFO. On the income statement the cost of goods sold using FIFO would have the higher costs, relative to LIFO since the first goods are assumed to be sold first when using FIFO.

7. Total units available for sale 44
Units sold 40
Units in ending inventory 4

Cost of units purchased:
8 units x $5 = $40
10 units x $6 = $60
14 units x $7 = $98
12 units x $6 = $72
44 units $270 (average cost = $6.14 per unit)

a. FIFO Ending inventory = 4 units x $6 = $ 24
Cost of goods sold expense = $246

b. LIFO Ending inventory = 4 units x $5 = $ 20
Cost of goods sold expense = $250

c. Average cost Ending inventory = 4 units x $6.14 = $ 24.56
Cost of goods sold expense = $245.44

8. Total units available for sale 295
Units sold 235
Units in ending inventory 60

Cost of units purchased:

20 units x $12 =	$ 240	
100 units x $11 =	$1,100	
85 units x $10 =	$ 850	
90 units x $ 9 =	$ 810	
295 units	$3,000	(average cost = $10.17 per unit)

a. FIFO Ending inventory = 60 units x $9 = $ 540
Cost of goods sold expense = $2,460

b. LIFO Ending inventory = 20 units x $12 = $ 240
40 units x $11 = $ 440
$ 680
Cost of goods sold expense = $2,320

c. Average cost Ending inventory = 60 units x $10.17 = $ 610.20
Cost of goods sold expense = $2,389.80

9. a. $\frac{\$20,000}{5 \text{ years}}$ = $4,000 per year

Book value = $20,000 - $4,000 = $16,000

b. $20,000 x (2 x .20) = $8,000

Book value = $20,000 - $8,000 = $12,000

10. a. $\frac{\$500,000}{5 \text{ years}}$ = $100,000 per year

b. $500,000 – 100,000 – 100,000 = $300,000

c. Deferred tax liability.

d. $120,000 – 100,000 = $20,000

11. $200,000 x .10 x 3/12 = $5,000

12.

	Tax	Reporting
Revenue	$900,000	$900,000
Expenses	(650,000)	(580,000)
Earnings before tax	$250,000	$320,000
Tax expense (× .35)	(87,500)	(112,000)
Net income	$ 162,500	$208,000

Deferred tax liability = $112,000 - $87,500 = $24,500

13. A capital lease occurs when the lease is in substance a purchase rather than a lease. If a lease contract meets any one of four criteria—transfers ownership to the lessee, contains a bargain purchase option, has a lease term of 75% or more of the leased property's economic life, or has minimum lease payments with a present value of 90% or more of the property's fair value—the lease must be capitalized by the lessee according to the requirements of FASB. Leases not meeting one of the four criteria are treated as operating leases.

Operating leases require the lessee to record rent expense when payments are made on the lease. Even though there is a contractual obligation to make lease payments under an operating lease, since GAAP does not require the lessee to record a debt obligation on the balance sheet, the operating lease is referred to as off-balance-sheet financing.

Capital leases affect both the balance sheet and the income statement.An asset and a liability are recorded on the lessee's balance sheet equal to the present value of the lease payments to be made under the contract. The asset account reflects what is, in essence, the purchase of an asset; and the liability is the obligation incurred in financing the purchase. Each lease payment is apportioned partly to reduce the outstanding liability and partly to interest expense. The asset account is amortized with amortization expense recognized on the income statement, just as a purchased asset would be depreciated.

Disclosures about operating and capital leases can be found in the notes to the financial statements, often under both the property, plant, and equipment note and the commitments and contingencies note.

14. This account is meant to draw the attention to the user that required disclosures can be found in the notes to the financial statements. Commitments

refer to contractual agreements which will have a significant impact on the firm in the future. Since the balance sheet does not report future information on the face, the amounts of the future commitments are reported in the notes. Contingencies refer to potential liabilities of the firm. Generally the firm cannot reasonably predict the outcome and/or the amount of the future liability which is why no amount is reported on the balance sheet.

15. a. Total stockholders' equity = $56,000 - $32,000 = $24,000

b. Dividends paid = $9,800 + $7,500 - $10,400 = $6,900

16. $120,000 = $72,000 + $35,000 + Net income
Net income = $13,000

17.

	Beginning retained earnings	+	net income	-	**dividends**	=	Ending retained earnings
2010	500	+	450	-	**190**	=	760
2011	760	+	325	-	**210**	=	875
2012	875	+	240	-	**165**	=	950

18. Firms often repurchase shares of their own stock for a variety of reasons that include meeting requirements for employee stock option and retirement plans, building shareholdings for potential merger needs, increasing earnings per share by reducing the number of shares outstanding in order to build investor confidence, preventing takeover attempts by reducing the number of shareholders, and as an investment use of excess cash holdings.

19.

Current assets		Current liabilities	
Cash	25	Accounts payable	29
Short-term investments	22	Current portion of	
Accounts receivable	11	long-term debt	5
Inventory	13	Total current liabilities	34
Prepaid expenses	3	Long-term liabilities	
Deferred taxes, current	6	Long-term debt	20
Total current assets	80	Total liabilities	54

Long-term assets			
Property & equipment	67	Stockholders' equity	
		Common stock	1
		Add'l. paid-in capital	51
		Treasury stock	(4)
		Retained earnings	45
		Total stockholders' equity	93
Total assets	147	Total liabilities and equity	147

20.

Assets		Liabilities and stockholders' equity	
Current assets		Current liabilities	
Cash	3%	Accounts payable	18
Short-term investments	10	Current portion of long-term debt	6
Accounts receivable	13		
Inventory	14	Total current liabilities	24%
Prepaid expenses	2	Long-term liabilities	
Deferred taxes, current	4	Long-term debt	28
Total current assets	46%	Total liabilities	52%
Long-term assets		Stockholders' equity	
Property & equipment	42	Common stock and PIC	32
Goodwill	8	Retained earnings	16
Long-term investments	3		
Other assets	1	Total stockholders' equity	48%
Total assets	100%	Total liabilities and equity	100%

21. By looking at the common size balance sheet, one can see that there have been structural changes in the components of the balance sheet equation. Cash and fixed assets have decreased, while accounts receivable, inventory and other assets have increased. The increase in the current assets could be a result of expansion; however, this is not supported when looking at the decline in property, plant and equipment. The company is using more debt, both current and long-term, which has caused a significant decline in the equity accounts. It is possible that the firm is operating at a loss given the large decline in retained earnings, although this may be just a result of the mathematical change in the debt accounts relative to equity accounts. The changes in the common size balance sheet warrant further

investigation of the actual dollars on the financial statements and a thorough reading of the notes to the financial statement and the management discussion and analysis.

Chapter 3

True-False

1. The terms income, earnings, and profit are used interchangeably.

2. Earnings reported on the income statement is the same as cash generated during the accounting period.

3. A multiple-step income statement presents several intermediate profit measures.

4. The common size income statement expresses each income statement item as a percentage of net sales.

5. In general, higher quality earnings result when sales volume increases and sales prices increase with inflation.

6. The FIFO method of inventory valuation generally results in the matching of current costs and current revenues, especially during inflation.

7. Gross profit is equal to net sales plus cost of goods sold.

8. The gross profit margin and cost of goods sold percentage are complements of each other and always add to 100%.

9. If the cost of goods sold percentage increases, this means that the cost to acquire products has increased.

10. Sales volume changes in firms with high fixed costs will result in stable gross profit margins.

11. Selling and administrative expenses include such items as advertising, salaries, and interest expense.

12. The amount and trend of each operating expense should be evaluated as well as its relationship to the volume of activity that is relevant to the expense.

13. Impairment charges are the expenses recognized to record a decline in value of a long-term asset.

14. Gross profit margin does not impact operating profit margin.

15. Operating profit measures the overall performance of the company's operations separate from items that are not directly related to operations.

16. Since other income or expense items are not part of daily operations there is no need to analyze these accounts.

17. The equity method of accounting should be used when the parent company owns 100% of the voting stock in its subsidiaries.

18. Use of the equity method somewhat distorts earnings in the sense that income is recognized even though no cash may ever be received.

19. The effective tax rate is calculated by dividing operating profit by income tax expense.

20. Users of financial statements need to distinguish between earnings increasing due to core operations versus items such as tax rate deductions.

21. Discontinued operations, extraordinary items, and gains or losses on sales of plant assets are special items that must be disclosed separately on the income statement.

22. Earnings per common share is the net cash available to common stockholders for each share of stock owned.

23. Changes in the number of common stock shares outstanding will impact the computation of earnings per share.

24. Total comprehensive income must now be disclosed on the face of the income statement.

25. The statement of stockholders' equity details the transactions that affect all balance sheet accounts during an accounting period.

Multiple Choice

1. What can be found on an income statement?
   a. Assets, revenues and expenses.
   b. Revenues, expenses and net profit (loss).
   c. Revenues, expenses, and stockholders' equity.
   d. Assets, liabilities and stockholders' equity.

2. What are the two basic formats of the income statement?
   a. Multiple-step and single-step.
   b. Cash basis and single-step.
   c. Accrual basis and single-step.
   d. Accrual basis and multiple-step.

3. Which of the following is not an acceptable method to report total comprehensive income?
   a. On the face of the income statement.
   b. In a separate statement of comprehensive income.
   c. In the equity section of the balance sheet.
   d. In the statement of stockholders' equity.

4. Why is the common-size income statement valuable to the analyst?
   a. The common-size income statement shows the relative magnitude of revenues and expenses to total assets.
   b. The common-size income statement allows the analyst to compare the firm to itself from year-to-year, but not to its competitors.
   c. The common-size income statement shows the relative magnitude of revenues and expenses relative to profits.
   d. The common-size income statement shows the relative magnitude of expenses relative to net sales.

5. What could be the cause of an increase in a firm's sales number?
   a. The firm has decreased prices.

b. Fewer units of product have been sold.
c. The firm has increased prices and volume of sales.
d. The firm has decreased prices and volume of sales.

6. Which of the following statements is true?
    a. Only service companies report both cost of goods sold and gross profit.
    b. Cost of goods sold is the largest expense item for many firms.
    c. Cost of goods sold is not affected by the choice of inventory valuation method.
    d. Cost of goods sold equals gross profit.

7. Of what value is the calculation of gross profit margin?
    a. The gross profit margin helps the analyst assess the capital structure of the firm.
    b. The gross profit margin allows the analyst to determine if the firm has been affected by inflation.
    c. The gross profit margin indicates the profitability of a firm after considering all operating expenses.
    d. The gross profit margin is the first step of profit measurement indicating how much profit the firm generates after deducting cost of goods sold.

8. When will volume changes cause volatility in the gross profit margin?
    a. If cost of goods sold includes fixed costs which do not vary proportionately with volume changes.
    b. In industries with little capital.
    c. In industries having no fixed costs.
    d. If cost of goods sold includes costs that vary proportionately with volume changes.

9. How should gross profit margin be analyzed for firms having more than one revenue source?
    a. The overall gross profit margin should be calculated for all revenue sources.
    b. Gross profit margin cannot be analyzed if a firm has multiple revenue sources.
    c. A separate gross profit margin for each revenue source should be calculated.

d. The gross profit margins from each revenue source should be calculated and then averaged.

10. Which items below would be classified as operating expenses?
    a. Depreciation, capital leases, operating profit.
    b. Interest expense, interest income, rent expense.
    c. Accounts payable, lease payments, depreciation.
    d. Advertising, selling and administrative, repairs and maintenance.

11. Which of the following statements is false?
    a. It is important to analyze operating expenses over which management exercises discretion and that have considerable impact on the firm's profitability.
    b. Impairment charges do not need to be analyzed since they are generally a non-recurring expense.
    c. Operating expenses should be tracked in terms of trends, absolute amounts, relationship to sales, and relationship to industry competitors.
    d. Operating expenses can be easily analyzed by preparing a common-size income statement.

12. What is another term frequently used when referring to operating profit?
    a. Earnings before interest and taxes (EBIT).
    b. Earnings before interest, taxes, depreciation and amortization (EBITDA).
    c. Net profit.
    d. Earnings before interest (EBI).

13. Which of the items below would be analyzed separate from operating profit?
    a. Salaries, interest expense, equity losses.
    b. Equity earnings, discontinued operations, interest income.
    c. Research and development, dividend income, interest expense.
    d. Advertising, cost of goods sold, selling and administrative expenses.

14. Which of the following statements is true?
    a. Equity earnings is an internal source of cash.
    b. Equity earnings are recorded when investment ownership is over 50%.

c. Equity earnings may never result in the actual receipt of cash.
d. Equity earnings are recorded when investment ownership is 100%.

15. How is it possible for a U.S. firm to have an effective tax rate that is less than the U.S. federal statutory tax rate?
a. The firm has expenses that are not deductible for tax purposes.
b. Tax rates in foreign countries where the firm operates are higher.
c. Tax rates in foreign countries where the firm operates are lower.
d. It is not possible for a firm to have an effective tax rate different from the U.S. federal statutory tax rate.

16. How is a firm's average income tax rate calculated?
a. Income taxes divided by earnings before income taxes.
b. Income taxes divided by net income.
c. Income taxes divided by sales.
d. Income taxes divided by gross profit.

17. What is the required reporting for discontinued operations?
a. The results of discontinued operations should be reported as an extraordinary item.
b. The gain or loss on the disposal should be reported in comprehensive income.
c. The operating results of discontinued operations should be reported as part of continuing operations and any gain or loss on disposal should be disclosed separately from continuing operations.
d. The operating results of discontinued operations should be reported separately from continuing operations and any gain or loss on disposal should be also be disclosed separately from continuing operations.

18. What information can be found on a statement of shareholders' equity?
a. Details of assets and liabilities.
b. A reconciliation of beginning to ending cash..
c. Detail of changes in equity accounts.
d. Assets = Liabilities + Stockholders' Equity.

Use the following information for Gray Co. to answer questions 19 and 20.

	2011	2010
Sales	400	400
COGS	250	200
Operating expenses	80	70
Income taxes	22	40

19. Gray Co.'s gross profit, operating profit and net profit margins for 2011 are:
    a. 50.0%, 32.5%, 22.5% respectively.
    b. 37.5%, 17.5%, 12.0%, respectively.
    c. 62.5%, 50.0%, 22.5%, respectively.
    d. 62.5%, 17.5%, 12.0%, respectively.

20. Gray Co.'s average tax rates for 2011 and 2010 are:
    a. 5.5% and 10.0%
    b. 27.5% and 57.1%
    c. 45.8% and 44.4%.
    d. 31.4% and 30.8%.

In which section of the income statement should the following items be classified?
    a. Net sales.
    b. Operating expenses.
    c. Other revenue/expense.
    d. Special items.

21. Salaries expense.

22. Revenues.

23. Marketing expenses.

24. Discontinued operations.

25. Interest expense.

26. Interest income.

27. Sales returns.

28. Extraordinary gain.

29. Depreciation expense.

30. Research and development.

Short Answer/Problem

1. Explain the differences between the multiple-step and single-step format of the income statement. Which format is best for analysis? Why?

2. What items should the analyst assess when analyzing the trend of a firm's sales number?

3. Explain what would cause the gross profit margin to increase or decrease in a firm.

4. Discuss the importance of analyzing operating expense categories such as repairs and maintenance, advertising, and research and development.

5. Explain the possible reasons for net profit margin to decrease if operating profit margin is stable.

6. Explain how a firm should account for an investment in another firm's common stock if the amount owned is:

a. 1 percent.
b. 35 percent.
c. 60 percent.

7. What would cause the basic earnings per common share amount to increase or decrease?

8. What is comprehensive income?

9. Prepare a multiple-step income statement for ABC Company from the following data:

Cost of goods sold	$450
Interest expense	30
Depreciation expense	120
Net sales	990
Interest income	80
Income tax expense	70
Advertising expense	100
General and administrative expenses	150

10. Prepare an income statement using the following information:

Gross profit margin	42%
Cost of goods sold	$5,800
Tax rate	30%
Operating profit	$600

11. Using the following information prepare a common size income statement:

Net sales	$1,000
Cost of goods sold	600
Gross profit	$ 400
General and administrative expenses	250
Selling expenses	120
Operating profit	$ 30
Income tax expense	10
Net profit	$ 20

12. The following information is available for Brown Theater Company. Analyze the gross profit margin making any calculations deemed necessary.

	2012	2011	2010
Movie ticket sales	$ 500	$ 450	$420
Concession sales	800	600	500
Total sales	$1,300	$1,050	$920
Movie rental expense	480	400	380
Cost of concession products	350	300	280
Gross profit	$ 470	$ 350	$260

13. Explain the possible causes of the trends in the following data:

	Year 1	Year 2	Year 3
Gross profit margin	45%	41%	38%
Operating profit margin	12%	14%	15%
Net profit margin	5%	20%	8%

14. Use the following information to analyze the PQ Company. Calculate any profit measures deemed necessary in order to discuss the profitability of the company.

PQ Company Income Statements
For the Years Ended Dec. 31, 2012 and 2011

	2012	2011
Net sales	$174,000	$167,000
COGS	114,000	115,000
Gross profit	$ 60,000	$ 52,000
General and administrative expenses	54,000	46,000
Operating profit	$ 6,000	$ 6,000
Interest expense	(1,000)	(1,000)
Earnings before taxes	$ 5,000	$ 5,000
Income taxes	2,000	2,000
Net income	$ 3,000	$ 3,000

15. Bright Company purchased 20% of the voting common stock of Bulb Company on January 1 and paid $400,000 for the investment. Bulb Company reported earnings of $300,000 for the fiscal year ended December 31. Cash dividends were paid during the year in the amount of $20,000.

a. Calculate the investment income and the ending balance in the investment account on the balance sheet for Bright Company on December 31 using the cost method.
b. Calculate the investment income and the ending balance in the investment account on the balance sheet for Bright Company on December 31 using the equity method.

16. Analyze the common size income statements below for Key Company:

(in percent)	2012	2011
Net sales	100	100
COGS	57	52

Gross margin	43	48
Research and development	5	8
Selling, general and administrative	21	27
Restructuring, asset impairments and other charges	1	1
Income/(loss) from operations	16	12
Interest expense	(2)	(1)
Income/(loss) before taxes	14	11
Provision for/(benefit from) income taxes	4	5
Net income/(loss)	10	6

17. Analyze the common size income statements below for Toby Company:

	2012	2011
Net sales	100%	100%
COGS	54	63
Gross margin	46%	37%
Research and development	14	20
Selling, general and administrative	5	9
Restructuring, asset impairments and other charges	1	8
Income/(loss) from operations	26%	0%
Interest expense	(1)	(2)
Income/(loss) before taxes	25%	(2%)
Provision for/(benefit from) income taxes	8	0
Net income/(loss)	17%	(2)%

Sales growth	80%
Operating cost growth	31%

Solutions - Chapter 3

True-False

1. T	6. F	11. F	16. F	21. F
2. F	7. F	12. T	17. F	22. F
3. T	8. T	13. T	18. T	23. T
4. T	9. F	14. F	19. F	24. F
5. T	10. F	15. T	20. T	25. F

Multiple Choice

1. b	6. b	11. b	16. a	21. b	26. c
2. a	7. d	12. a	17. d	22. a	27. a
3. c	8. a	13. b	18. c	23. b	28. d
4. d	9. c	14. c	19. b	24. d	29. b
5. c	10. d	15. c	20. d	25. c	30. b

Short Answer/Problem

1. The single-step version of the income statement groups all revenues together and then deducts all expenses to arrive at a net income figure. The multiple-step income statement classifies revenues and expenses in such a way as to easily assess the profitability of a firm. Four intermediate profit measures are included on the income statement: gross profit, operating profit, earnings before income taxes and net profit. The multiple-step format is best for analysis as each of the intermediate profit measures helps explain specific items on the income statement.
Gross profit indicates how much profit the firm is generating after deducting the cost of products sold. Operating profit measures the overall performance of the company's operations apart from its financing and investing activities and separate from tax considerations. Earnings before income taxes is the profit prior to the deduction of income tax expense. Net profit is the firm's profit after consideration of all revenue and expense reported during the accounting period.

2. The analyst should determine whether the increase or decrease in sales is a result of price, volume, or a combination of both. Whether sales are growing in real, as well as nominal terms should also be assessed. The analyst should adjust the sales figure for inflation to compare the real or inflation-adjusted amount, to the nominal, reported amount. Higher quality earnings are a result of volume increases combined with price increases for inflation.

3. Gross profit margin will increase or decrease due to the following:

- Sales prices increase or decrease;
- Cost of goods sold decreases or increases; and/or
- Volume increases or decreases and cost of goods sold includes fixed costs.

4. Management exercises discretion over these operating expenses. Spending too little or too much in these areas can impact the firm negatively. In capital intensive industries it is important for management to properly maintain plant and equipment. Expenditures in this area should correspond to the level of investment in capital equipment and to the age and condition of the assets. Poorly maintained equipment will result in waste and lost time. Advertising is critical for certain types of industries. For example, firms operating in the beverage industry generally gain market share through extensive advertising. High-technology and pharmaceutical firms would cease to exist if they did not spend a certain amount on research and development. These industries depend on developing new products each year.

5. Interest and income tax expenses could be higher. Interest income could be lower. The firm may have experienced losses from the sale of assets, discontinued operations, or extraordinary losses.

6. a. A one percent investment would be accounted for under short-term marketable securities using the cost method and recognizing investment income only to the extent of any cash dividends received.

b. A 35 percent investment would most likely be accounted for by using the equity method of accounting and recognizing a proportionate share of the investee's net income.

c. A 60 percent investment would be accounted for by preparing consolidated financial statements with related disclosures in the notes to the financial statements.

7. Basic earnings per common share will increase (decrease) if net earnings increases (decreases) or if the number of common shares outstanding decreases (increases). Changes in the number of common shares outstanding result from such transactions as treasury stock purchases, the purchase and retirement of a firm's own common stock, stock splits, and reverse stock splits.

8. Comprehensive income includes all revenues, expenses, gains, and losses recognized during an accounting period, regardless of whether they are the results of operations. Comprehensive income is comprised of four items not included directlyon the income statement: foreign currency translation effects, unrealized gains and losses, additional pension liabilities, and cash flow hedges.

9.

ABC Company
Income Statement

Net sales	$990
Cost of goods sold	450
Gross profit	$540
Depreciation expense	120
Advertising expense	100
General and administrative expenses	150
Operating profit	$170
Interest income	80
Interest expense	(30)
Earnings before taxes	$220
Income tax expense	70
Net profit	$150

10.

Net sales	$10,000
Cost of goods sold	5,800
Gross profit	4,200
Operating expenses	3,600
Operating profit	600
Income tax expense	180
Net profit	$420

11.

Net sales	100%
Cost of goods sold	60
Gross profit	40%
General and administrative expenses	25
Selling expenses	12
Operating profit	3%
Income tax expense	1
Net profit	2%

12.

	2012	2011	2010
Overall gross profit margin	36.2%	33.3%	28.3%
Gross profit margin of:			
Movie tickets	4.0%	11.1%	9.5%
Concessions	56.2%	50.0%	44.0%

The gross profit margin of Brown Theater Company has been increasing significantly. This is a result of mainly concession sales rather than movie ticket sales. In 2012 movie ticket gross profit fell significantly while concession gross profit increased. Movie ticket prices have decreased (an unlikely scenario) or the cost of movies has increased without a corresponding increase to the ticket price. Either prices have been increased on concession products or the costs of purchasing concessions have declined without a corresponding decrease in price.

13. Gross profit margin is declining significantly. This could be a result of a decrease in prices caused by competition, deflation, or slow-moving goods that have been discounted. Another possibility is that the prices have remained the same, but the cost of goods has increased and the firm has been unable to pass along the increases to customers.

Operating profit margin has increased each year despite the decreasing gross profit margin. The firm has been able to cut operating costs. Hopefully this has been achieved by cutting waste and not by cutting discretionary expenses such as advertising, repairs and maintenance and research and development. Cutting necessary discretionary expenses may negatively impact the firm's sales in future years.

Net profit margin has been volatile. The large increase in Year 2 appears to be the result of a one-time, nonrecurring item. Excluding this item, net profits have increased more than operating profits. This could be a result of decreasing interest expense, decreasing taxes, an increase in interest income or other miscellaneous revenue, or a decrease in miscellaneous expenses.

14.

	2012	2011
Cost of goods sold percentage	65.5%	68.9%
Gross profit margin	34.5%	31.1%
G&A/Net sales	31.0%	27.5%
Operating profit margin	3.4%	3.6%

Effective tax rate	40.0%	40.0%
Net profit margin	1.7%	1.8%

Management has improved control of COGS. Either prices of the products have been increased or the management has been able to reduce cost of goods sold. This has resulted in a more favorable gross profit. Unfortunately general and administrative expenses have not been controlled well. While gross profit improved by 3.4%, the increases in other operating expenses totaled 3.5%, resulting in a drop in operating profit margin. Taxes and interest remained unchanged. Management should focus on reducing the other operating expenses in the future.

15.

	Investment Income	Investment Account
(a) Cost method	$4,000*	$400,000
(b) Equity method	$60,000**	$456,000***

* $20,000 cash dividends x 20%
** $300,000 earnings x 20%
*** $400,000 + $60,000 - $4,000

16. Gross profit margin has declined five percent from 2011 to 2012. Either selling prices have declined and/or cost of goods sold have increased. If there are fixed costs within the cost of goods sold category then a decline in volume of sales may be responsible for the large drop in gross profit margin.

Operating profit margin has increased, despite the decrease in gross profit margin. It appears Key Company has compensated for the drop in gross profit by cutting costs in research and development and selling, general and administrative expenses. Reducing waste in these areas would constitute a beneficial cut; however, if these areas have been cut only for the purpose of increasing earnings, this could be highly detrimental to the long-term success of the firm. Investment in research and development is critical to creating innovative products in order to remain competitive and increase sales. Cuts in advertising may result in lower sales. If layoffs have been used to reduce operating expenses, lower morale in the work force may result in lower quality of products and lower sales.

Net profit has increased as a result of the increased operating profit. Interest expense has risen slightly which implies higher debt or higher interest rates. Income tax expense is lower and has offset the increase in interest expense.
17. From 2012 to 2011 sales growth increased significantly while operating costs increased at less than half the sales growth rate for Toby Company. The increase in gross profit margin could be a result of higher selling prices, lower cost of goods sold, or economies of scale as a result of large fixed costs such as equipment and buildings used to make the products.

Operating profit follows the same pattern as gross profit, increasing significantly in 2012. The percentage figures are skewed in 2012 due to the large increases in the sales numbers. In raw dollars, research and development, selling, general and administrative costs have probably not decreased or have not decreased as much as the common size percentages indicate. In 2011, it appears Toby Company undertook a major restructuring, causing operating profit to be zero, but improving the profitability of the company immensely in 2012. These charges should be a one-time, nonrecurring event.

Net profit margin has followed the same trend as operating profit margin for the same reasons. The loss in 2011 was a result of interest expense which declined in 2012 probably as a result of the firm being able to reduce debt levels.

Chapter 4

True-False

1. It is possible for a company to post a healthy net income but still not have the cash needed to pay its employees, suppliers, and creditors.

2. The statement of cash flows shows the changes in the income statement accounts between periods.

3. The four parts of a cash flow statement are cash, operating activities, profit activities, and financing activities.

4. Payments for purchases of inventory, operating expenses, and interest are all classified as operating activities on the statement of cash flows.

5. Proceeds from borrowing and issuing the firm's own equity securities are examples of financing cash inflows.

6. Cash from sales of property, plant and equipment and cash collections from loans to others are examples of investing cash flows.

7. A decrease in an asset account constitutes a cash outflow on the cash flow statement.

8. The change in retained earnings is often the product of both an operating and a financing activity.

9. Cash flows from operating activities represent cash generated internally, while Cash flows from investing and financing activities provide cash from external sources.

10. Using the indirect method to prepare a statement of cash flows requires converting net income to cash flow from operating activities.

11. An increase in an asset account or decrease in a liability or equity account is a cash outflow.

12. Gains and losses from asset sales are considered an operating activity.

13. Depreciation and amortization expense are added back to net income because they represent the recognition of a cash expense.

14. An increase in cash is equal to net cash provided by operating activities plus net cash provided by financing activities minus net cash provided by investing activities.

15. An increase in accounts receivable means the firm has collected cash from customers.

16. An increase in accounts payable means the firm has not yet paid their suppliers.

17. The statement of cash flows is helpful in determining the capacity of a firm to meet obligations for cash.

18. While creditors rely heavily on cash flow information, investors do not need to be concerned with cash flows and can rely exclusively on earnings.

19. Temporary shortfalls of cash can be satisfied by borrowing or other means, such as selling long-lived assets, but ultimately a company must generate cash from operations.

20. Cash flow from operations is especially important for those firms that are heavily invested in inventories and use accounts receivables and accounts payables as a major part of business operations.

21. Generating cash from investing activities is the preferred method for obtaining excess cash.

22. The summary analysis of the statement of cash flows categorizes yearly cash flows as inflows or outflows.

23. The preferred method to support expansion is to use external sources of cash.

24. It is best to use long-term debt to support increases in inventories and accounts receivable.

25. In theory, firms should only pay dividends if the company has excess cash not needed for expansion, capital expenditures, or repayment of debt.

Multiple Choice

1. Why is the statement of cash flows useful to the analyst?
   a. It is the only source in financial statements for learning about cash generation.
   b. Focusing on net income can be misleading if a company has a healthy profit, but cannot translate the profit into cash.
   c. The statement of cash flows reveals why a company was able to generate a profit.
   d. Both (a) and (b).

2. Which of the following is not true with regard to the preparation of a cash flow statement?
   a. Cash flows are categorized by operating, investing, and financing activities.
   b. The changes in all income statement accounts are calculated and then listed as cash inflows or outflows.
   c. The direct method or the indirect method may be used to prepare the statement of cash flows.
   d. The changes in all of the balance sheet accounts are calculated and then listed as inflows or outflows, except for cash.

3. The following items would be classified as operating activities on the statement of cash flows:
   a. Payments for inventory, payments for salaries, cash received from sale of goods.
   b. Acquisitions of equipment, payment of dividends, revenue.
   c. Proceeds from borrowing, payments of dividends, purchases of supplies.
   d. Payments on loans, payments for taxes, payments for rent.

4. The following items would be classified as investing activities on the statement of cash flows:
   a. Proceeds from borrowing, payment of dividends, receipt of dividends.
   b. Sale of goods, receipt of dividends, repurchase of firm's own stock.
   c. Sale of property, purchase of equity securities, loans to others.
   d. Payment to lenders, proceeds from issuing common stock, revenue.

5. The following items would be classified as financing activities on the statement of cash flows:
   a. Payments for inventory, payments to lenders, payments for taxes.
   b. Proceeds from borrowing, payment of dividends, repayment of debt.
   c. Loans to others, returns from loans to others, acquisition of land.
   d. Sales of goods, repayment of debt, loans to others.

For questions 6-12 identify how the item would be classified on the statement of cash flows:
   a. Cash accounts.
   b. Operating accounts.
   c. Financing accounts.
   d. Investing accounts.

6. Accounts receivable.

7. Long-term debt.

8. Property, plant and equipment.

9. Cash equivalents.

10. Accounts payable.

11. Certificates of deposit.

12. Inventory.

Questions 13-21 are based on the indirect method of presenting cash flow from operating activities. Indicate whether the following items will be added (A) or subtracted (S) from net income to obtain cash flow from operating activities.

13. An increase in accounts payable.

14. A decrease in inventory.

15. A gain from an asset sale.

16. A decrease in an accrued liability.

17. An increase in accounts receivable.

18. Depreciation.

19. A decrease in interest receivable.

20. A decrease in deferred revenue.

21. An increase in deferred tax liabilities.

Use the indirect method to answer questions 22-25. The following information is available for Casey Company:

Net income	$200	Increase in plant and equip.	$ 90
Depreciation expense	50	Payment of dividends	25
Increase in accts. receiv.	30	Increase in long-term debt	100
Decrease in inventories	10	Decrease in accounts payable	20

22. What is cash flow from operating activities for Casey Company?
    a. $195
    b. $310
    c. $210
    d. $290

23. What is cash from investing activities for Casey Company?
    a. ($215)
    b. $215
    c. ($90)
    d. $90

24. What is cash from financing activities for Casey Company?
    a. $75
    b. $125
    c. ($125)
    d. $55

25. What is the change in cash for Casey Company?
    a. $85
    b. $375
    c. $125
    d. $195

26. What is implied if the accounts payable account has decreased?
    a. Cash flow from financing activities has decreased relative to net income.
    b. Cash flow from operating activities has increased relative to net income.
    c. Cash flow from operating activities has decreased relative to net income.
    d. Cash flow from financing activities has increased relative to net income.

27. What impact does depreciation have on the cash account?
    a. Depreciation has no impact on the cash account.
    b. Depreciation results in a decrease to cash.
    c. Depreciation results in an increase to cash.
    d. Depreciation only impacts the cash account if inflation has occurred.

28. Which of the following items are included in the adjustments to net income to obtain cash flow from operating activities?
    a. Payment of dividends and depreciation expense.
    b. The change in accounts receivable and the acquisition of land.
    c. The gain from an asset sale and the payment of dividends.
    d. The change in inventory and depreciation expense.

29. Which item may be of concern when analyzing cash flow from operating activities?
    a. Increasing inventories.
    b. Decreasing accounts receivable.
    c. Repayment of debt.
    d. Payments of dividends.

30. Which of the following could be indicative of cash flow problems or a result of an expansion?
    a. Increasing accounts receivable and decreasing inventories.
    b. Increasing accounts receivable and increasing inventories.
    c. Decreasing accounts receivable and increasing inventories.
    d. Decreasing accounts receivable and decreasing inventories.

Short Answer/Problem

1. Discuss the importance of the statement of cash flows as an analytical tool for users of financial statements.

2. Explain the meaning of the three categories of a statement of cash flows: operating, investing and financing activities. Give an example of an inflow and an outflow for each category.

3. a. What are the two methods prescribed by the FASB for calculating and presenting cash flow from operating activities?
b. Describe each of the two methods.

4. Identify the following items as operating (O), investing (I), or financing (F) activities:
______a. Property, plant and equipment
______b. Current maturities of long-term debt
______c. Inventories
______d. Accounts receivable
______e. Common stock
______f. Short-term debt
______g. Accounts payable
______h. Net income
______i. Accumulated depreciation
______j. Dividends

5. Using the following list of items, classify each item in the table given below:

a. Proceeds from borrowing
b. Payments for purchase of inventory
c. Revenues from sales of long-lived assets
d. Payment of dividends
e. Revenue from sales of goods
f. Repayments of debt principal
g. Returns of equity securities (dividends)
h. Loans (principal) to others
i. Acquisitions of long-lived assets
j. Payments to lenders (interest)

k. Proceeds from issuing the firm's own equity securities
l. Revenue from services
m. Payments for operating expenses
n. Repurchase of firms own shares
o. Payments for taxes
p. Revenue from sales of debt and equity securities of other entities

Operating Activities	
Inflows	Outflows
Investing Activities	
Inflows	Outflows
Financing Activities	
Inflows	Outflows

6. Indicate whether the following items would be added (+) or deducted (-) from net income to determine cash flow from operating activities.
______a. Increase in accounts receivable
______b. Decrease in accrued liabilities
______c. Loss on sale of assets
______d. Decrease in inventory
______e. Amortization expense
______f. Increase in deferred revenue
______g. Decrease in prepaid expenses
______h. Increase in deferred tax liabilities
______i. Increase in accounts payable

_____j. Increase in investment accounts from equity income

7. Explain how it is possible for a firm with a positive net profit to generate negative cash flow from operating activities.

8. AJAR Corporation reported the following information for the current year:

(1) Net income is $102 million.
(2) Purchases of equipment were $47 million.
(3) Customer accounts receivable decreased by $18 million.
(4) Dividends paid to common shareholders were $10 million.
(5) Depreciation expense was $39 million.
(6) Income tax payable increased by $5 million.
(7) Long-term debt decreased by $40 million.
(8) Accounts payable increased by $16 million.
(9) Inventories increased by $28 million.

Required: Based on the above information, calculate the following items:

a. Cash flow from operating activities.
b. Cash flow from investing activities.
c. Cash flow from financing activities.
d. The increase or decrease in the cash balance.

9. Prepare the statement of cash flows for Brindley Company using the indirect method.

Brindley Company
Income Statement
For the Year Ended December 31, 2012

Revenues		$8,500
Depreciation expense	$ 800	
Other operating expenses	6,100	6,900
Income before income taxes		$1,600
Interest expense		850
Income tax expense		300
Net income		$ 450

Brindley Company
Balance Sheet
December 31, 2012 and 2011

	2012	2011		2012	2011
Assets:			Liab. & SE:		
Cash	$ 650	$ 130	A/P	$ 520	$ 500
A/R	770	610	Inc.Taxes/Pay.	270	280
Inventories	835	870	LT debt	415	250
Plant & Equip.	3,450	2,870	Common Stock	1,260	1,260
Less: Acc. Depr.	(1,690)	(890)	Retained Earnings	1,550	1,300
Total Assets	$4,015	$3,590	Total Liab. & SE	$4,015	$3,590

Use the following information for Cantor Co. to answer questions 10 and 11.

Cantor Co.
Balance Sheet
December 31, 2011 and 2010

	2011	2010
Cash	$220	$110
A/R	45	60
Inventory	110	90
Total current assets	$375	$260
Property, plant & equipment	140	140
Less: Accumulated depreciation	40	25
Property, plant & equipment, net	$100	$115
Total assets	$475	$375
A/P	$ 40	$ 30
Accrued expenses	10	15
Total current liabilities	$ 50	$ 45
Stockholders' equity:		
Common stock	200	200
Retained earnings	225	130
Total liabilities and stockholders' equity	$475	$375

Cantor Co.
Income Statement
For the Year Ended December 31, 2011

Sales	$600
COGS	240
Gross profit	$360
Operating and other expenses	265
Net income	$ 95

10. Compute cash flow from operating activities using the indirect method.

11. Compute cash flow from operating activities using the direct method.

12. Using the excerpt from the XYZ Company statement of cash flows analyze thoroughly the cash flow from operating activities. Be sure to offer possible reasons for the changes identified.

Operating Activities	**2012**	**2011**
Net income	200,870	108,500
Depreciation	156,428	141,762
Restructuring, and impairment charges	269,543	24,000
Equity in losses of investees	15,140	20,731
Deferred income tax benefit	(9,645)	(33,421)
Increase (decrease) in cash resulting from changes in:		
Accounts receivable	(579,436)	(399,781)
Inventories	40,801	(165,782)
Accounts payable and accrued expenses	173,400	275,609
Net cash provided (used) by operating activities	267,101	(28,382)

13. Using the following statement of cash flows and summary analysis of the statement of cash flows for Kat Kompany, analyze cash flow from operating activities, cash inflows and cash outflows.

Kat Kompany
Statement of Cash Flows
For the Years Ended December 31, 2012, 2011, and 2010

	2012	2011	2010
Net income (loss)	($145)	$190	$206
Adjustments to reconcile net income to net cash provided by (used for) operating activities:			
Depreciation	265	275	171
Deferred income taxes	(70)	(40)	20
Loss on sale of business assets	45	0	0
Changes in assets and liabilities:			
Accounts receivable	395	(10)	(125)
Inventory	70	(45)	(145)
Other current assets	(85)	(25)	(15)
Accounts payable	(230)	75	31
Net cash provided by operating activities	$245	$420	$143
Cash flows from investing activities:			
Capital expenditures	(125)	(110)	(142)
Acquisitions	(140)	(350)	(668)
Net cash used by investing activities	($265)	($460)	($810)
Cash flows from financing activities:			
Net proceeds (payments) of short-term borrowings	(340)	225	272
Proceeds from long-term debt	915	460	405
Repayments of long-term debt	(292)	(308)	(25)
Purchase of common stock	(368)	(237)	(179)
Stock options transactions	2	50	60
Payment of cash dividends	(50)	(50)	(50)
Net cash (used) provided by financing activities	($133)	$140	$483
Net increase (decrease) in cash	($153)	$100	($184)

Cash at beginning of period	280	180	364
Cash at end of period	$127	$280	$180

Kat Kompany
Summary Analysis of Statement of Cash Flows

	2012	%	**2011**	%	**2010**	%
Inflows:						
CFO	245	21	420	36	143	16
ST borrowings	0	0	225	20	272	31
LT debt	915	79	460	40	405	46
Stock Options	2	0	50	4	60	7
Total Inflows	1162	100	1155	100	880	100
Outflows:						
Capital Expend.	125	9	110	10	142	13
Acquisitions	140	11	350	33	668	63
ST debt payments	340	26	0	0	0	0
LT debt payments	292	22	308	29	25	2
Purchase of stock	368	28	237	23	179	17
Dividends	50	4	50	5	50	5
Total Outflows	1315	100	1055	100	1064	100
Change in Cash	(153)		100		(184)	

14. Using the statements of cash flows for BK Enterprises:

a. Prepare a summary analysis of the statements of cash flows for BK Enterprises for all three years.
b. Write an analysis of the statements of cash flows for BK Enterprises for all three years.

BK Enterprises
Statement of Cash Flows
For the Years Ended December 31, 2012, 2011, and 2010

	2012	2011	2010
Net income	$5,800	$3,300	$800
Adjustments to reconcile net income to net cash provided by (used for) operating activities:			
Depreciation	1,200	520	380
Loss on sale of business assets	10	0	305
Changes in assets and liabilities:			
Accounts receivable	(490)	(375)	(135)
Inventory	(6,900)	(2,600)	(1,700)
Other current assets	410	(495)	(160)
Accounts payable and accrued exp.	1,300	570	1,100
Net cash provided by operating activities	$1,330	$920	$590
Cash flows from investing activities:			
Capital expenditures	(740)	(1,100)	(550)
Proceeds from sales of equipment	0	10	2,020
Net cash used by investing activities	($740)	($1,090)	$1,470
Cash flows from financing activities:			
Exercise of stock options	2,000	380	0
Capital lease obligations	0	0	(250)
Payments on mortgage	0	0	(1,800)
Net cash (used) provided by financing activities	$2,000	$380	($2,050)
Net increase (decrease) in cash	$2,590	$210	$10

Cash at beginning of period	900	730	400
Cash at end of period	$3,490	$940	$410

15. Using the summary analysis for ToyWorks, Inc. analyze the cash inflows and cash outflows for the three years from 2010 to 2012.

ToyWorks, Inc.
Statement of Cash Flows
Summary Analysis

	2012	**%**	**2011**	**%**	**2010**	**%**
Inflows:						
CFO	162,556	14.0	391,512	33.8	126,587	14.4
Other investing activities	82,863	7.1	30,793	2.7	16,986	1.9
Borrowings > 3 months	912,979	78.7	460,333	39.7	407,377	46.2
Short-term borrowings	0	0.0	226,103	19.5	271,895	30.9
Stock option/warrant transactions	2,523	0.2	50,358	4.3	58,493	6.6
Total Inflows	1,160,921	100.0	1,159,099	100.0	881,338	100.0
Outflows:						
Additions to PPE	125,055	9.5	107,468	10.2	141,950	13.3
Investments/acquisitions	138,518	10.6	352,417	33.3	667,736	62.7
Repayments of borrowings > 3 months	291,779	22.2	308,128	29.2	24,925	2.3
Repayments of short-term borrowings	341,522	26.0	0	0.0	0	0.0
Purchase of common stock	367,548	28.0	237,532	22.5	178,917	16.8
Dividends	42,494	3.2	45,526	4.3	42,277	4.0
Exchange rate changes	7,049	0.5	5,617	.5	9,570	0.9
Total Outflows	1,313,965	100.0	1,056,688	100.0	1,065,375	100.0
Change in cash	(153,044)		102,411		(184,037)	

Solutions - Chapter 4

True-False

1. T	6. T	11. T	16. T	21. F
2. F	7. F	12. F	17. T	22. T
3. F	8. T	13. F	18. F	23. F
4. T	9. T	14. F	19. T	24. F
5. T	10. T	15. F	20. T	25. T

Multiple Choice

1. d.	6. b	11. a	16. S	21. A	26. c
2. b	7. c	12. b	17. S	22. c	27. a
3. a	8. d	13. A	18. A	23. c	28. d
4. c	9. a	14. A	19. A	24. a	29. a
5. b	10. b	15. S	20. S	25. d	30. b

Short Answer

1. The statement of cash flows is the only financial statement where information on cash inflows and cash outflows can be found. Cash is important to any business since it is the means by which companies pay their bills and service their debt. While companies may post healthy net income numbers, this is not a guarantee that those profits can be translated into cash. The statement of cash flows helps users of financial statements determine the ability of the firm to generate future cash flows, the firm's capacity to meet obligations, the firm's potential external financing needs, and the firm's success in managing investing activities.

2. Operating activities include delivering and producing goods for sale and providing services and the cash effects of transactions and other events that enter into the determination of income. Examples of cash inflows from operating activities would include: sales of goods, revenue from services, returns on interest earning assets and returns on equity securities. Examples of cash outflows from

operating activities would include payments for purchases of inventories, supplies, operating expenses, interest and taxes.

Investing activities include acquiring and selling, or otherwise disposing of (a) securities that are not cash equivalents and (b) productive assets that are expected to benefit the firm for long periods of time; and lending money and collecting loans. Examples of cash inflows from investing activities would include sales of long-lived assets, sales of securities and returns from loans to others. Examples of cash outflows from investing activities would include acquisitions of long-lived assets, purchases of securities and loans to others.

Financing activities include borrowing from creditors and repaying principal as well as obtaining resources from owners and providing them with a return on the investment. Examples of cash flows from financing activities would include proceeds from borrowing or issuing the firm's own equity securities. Examples of cash outflows from financing activities would include repayment of debt principal, repurchase of a firm's own stock and payment of dividends.

3. a. Firms may use one of two methods prescribed by the Financial Accounting Standards Board (FASB) for calculating and presenting cash flow from operating activities: the direct method and the indirect method.

b. The *direct method* shows cash collections from customers, interest and dividends collected, other operating cash receipts, cash paid to suppliers and employees, interest paid, taxes paid, and other operating cash payments. The *indirect method* starts with net income and adjusts for deferrals; accruals; noncash items, such as depreciation and amortization; and nonoperating items, such as gains and losses on asset sales. The direct and indirect methods yield identical figures for net cash flow from operating activities because the underlying accounting concepts are the same.

4.
a. I
b. F
c. O
d. O
e. F
f. F
g. O
h. O
i. O
j. F

5.

Operating Activities

Inflows	Outflows
e. Revenue from sales of goods	b. Payments for purchase of inventory
g. Returns of equity securities (dividends)	j. Payments to lenders (interest)
l. Revenue from services	m. Payments for operating expenses
	o. Payments for taxes
Investing Activities	
Inflows	Outflows
c. Revenues from sales of long-lived assets	h. Loans (principal) to others
p. Revenue from sales of debt and equity securities of other entities	i. Acquisitions of long-lived assets
Financing Activities	
Inflows	Outflows
a. Proceeds from borrowing	d. Payment of dividends
k. Proceeds from issuing the firm's own equity securities	f. Repayments of debt principal
	n. Repurchase of firms own shares

6.
a. - f. +
b. - g. +
c. + h. +
d. + i. +
e. + j. -

7. Net profit is a number derived from accrual-based accounting, therefore, it is possible for the firm to record revenues not yet received in cash and pay for expenses recorded in a prior period or that will be recorded as an expense in a later period. Increases in current asset accounts and decreases in current liability accounts are deducted from net profit when calculating cash flow from operating activities.

8. a. Net income $102 million

Decreased A/R	18
Depreciation	39
Increased tax payable	5
Increased A/P	16
Increased inventories	(28)
	$152 million

b. Purchases of equipment ($47) million

c. Dividends paid	($10) million
Increase of long-term debt	($40)
	($50) million

d. $152 – 47 - 50 = $55 million

9.

Brindley Company
Statement of Cash Flows
For the Year Ended December 31, 2012

Net income	$450
Adjustments to reconcile net income to net cash provided by (used for) operating activities:	
Depreciation	800
Changes in assets and liabilities:	
Accounts receivable	(160)
Inventory	35
Accounts payable	20
Income taxes payable	(10)
Net cash provided by operating activities	$1,135
Cash flows from investing activities:	
Capital expenditures	(580)
Net cash used by investing activities	($580)
Cash flows from financing activities:	
Proceeds from long-term debt	165
Payment of cash dividends	(200)
Net cash (used) provided by financing activities	($35)
Net increase (decrease) in cash	$520

Cash at beginning of period	130
Cash at end of period	$650

10.

Net income	$ 95
Adjustments:	
Depreciation	15
Changes in assets/liabilities:	
A/R	15
Inventory	(20)
A/P	10
Accrued expenses	(5)
Cash flow from operating activities	$ 110

11.

Cash received from customers (600 + 15)	$615
Cash paid to suppliers for inventory (240 + 20 - 10)	(250)
Cash paid for operating expenses (265 - 15 + 5)	(255)
Cash flow from operating activities	$110

12. XYZ Company generated negative cash flows from operations despite a positive net income in 2011. In 2012 the firm was able to double its net income from 2011 and cash from operations increased to an amount even greater than net income for the year. Accounts receivable increased significantly both years which is consistent with the large increase in net income if the firm is expanding and increasing sales. Inventories increased significantly in 2011, but declined in 2012, also supporting the theory that the firm is expanding. Accounts payable and accrued expenses increase both years by large amounts which has caused cash from operations to be higher than it otherwise would be. In 2012 the firm had large charges for restructuring and impairments which is why cash from operations was positive, rather than negative in 2012. Assuming these charges do not occur again in 2013 and the firm collects on its accounts receivable, XYZ should generate enough cash to begin paying accounts payable and also generating a positive cash flow from operations.

13. Kat Kompany's (Kat's) earnings have declined over the past three years and the company is now operating at a loss. Despite this downward trend the company has been able to generate cash from operations (CFO). Increases in accounts receivables, inventories and other current assets in 2010 caused CFO to be far less than net earnings. Substantially more CFO than earnings was generated in 2011 due to the large increase in amortization caused by acquisitions and the large increase in accounts payable. CFO was impressive in 2012 despite the net loss. This was due to the significant decreases in accounts receivables and inventories. In addition, Kat was able to pay down a large amount of accounts payable.

Of concern is the large amount of cash inflows derived from borrowing each year. Short and long-term borrowings have contributed 77%, 60% and 79% of cash inflows in 2010, 2011, and 2012 respectively, while CFO contributed most of the balance.

CFO has been large enough over the three year period to cover capital expenditures and dividends, but not enough to cover acquisition activity, debt repayments and the purchase of common stock. It is possible that the acquisitions have not worked out well for Kat and may be the cause of the decline in earnings.

Of greater concern is the use of scarce cash for repurchase of common stock with borrowed funds. Further investigation is warranted to determine if the firm is purchasing common stock in hopes that this will boost the stock price, despite the challenges the firm may face.

14. a.

BK Enterprises
Summary Analysis of the Statements of Cash Flows

	2012	%	2011	%	2010	%
Inflows:						
Cash from operations	1,330	40	920	70	590	23
Proceeds from sales of equipment	0	0	10	1	2,020	77
Exercise of stock options	2,000	60	380	29	0	0
Total Inflows	3,330	100.0	1,310	100.0	2,610	100.0
Outflows:						
Capital expenditures	740	100	1,100	100	550	21
Capital lease obligations	0	0	0	0	250	10
Payments on mortgage	0	0	0	0	1,800	69

Total Outflows	740	100.0	1,100	100.0	2,600	100.0
Change in cash	2,590		210		10	

b. BK Enterprises (BK) has generated an increasing dollar amount of cash from operations (CFO) from 2010 to 2012, but CFO has been significantly smaller than the net income the firm has produced each year. Two noteworthy reasons for this are the constantly increasing accounts receivables and inventory accounts. BK has used large amounts of accounts payable to support the increase in accounts receivable and inventory. This pattern is generally seen in companies unable to manage their working capital well, or in firms that are new or expanding. Most likely BK falls into the latter category based on the large increases in net income.

BK has generated other cash inflows from sales of property and equipment and proceeds from the exercise of stock options in 2011 and 2012. The amount of cash generated from the sale of property and equipment in 2010 is surprising for a new or expanding company, however, it is possible the firm chose to sell their fixed assets in order to pay off their mortgage (see cash outflows) and is now using operating leases instead. This could also explain why the firm no longer has capital lease obligations after 2010.

The firm has spent most of their excess cash on purchasing property and equipment. It appears that BK has paid off their mortgage and all capital lease obligations in 2010.

The trend is upward for both net income and CFO. Once BK is able to decrease, rather than increase accounts receivables and inventories, CFO should grow to a larger amount than the net income of the firm. BK appears to be doing well.

15. Of concern is the large amount of cash inflows derived from borrowing each year. Short and long-term borrowings have contributed 77.1% , 59.2% and 78.7% of cash inflows in 2010, 2011 and 2012 respectively, while CFO contributed most of the balance.

CFO has been large enough over the three year period to cover capital expenditures and dividends, but not enough to cover investment and acquisition activity, debt repayments and the purchase of common stock. It appears that ToyWorks has been making significant acquisitions over the three year period and borrowing

heavily to finance the purchases of companies. The other financial statements should be analyzed to see if these acquisitions are delivering the return expected.

Of greater concern is the use of scarce cash for repurchase of common stock with borrowed funds. It would be helpful to additional information to determine why the firm is repurchasing common stock when funds are needed for their acquisition activities.

Chapter 5

True-False

1. The first step in a financial statement analysis is to calculate ratios.

2. Before beginning the analysis of a firm's financial statements, it is necessary to specify the objectives of the analysis.

3. A creditor is ultimately concerned with the ability of the borrower to make interest and principal payments on borrowed funds.

4. The investor attempts to arrive at an estimation of a company's future earnings stream in order to attach a value to the securities being considered for purchase or liquidation.

5. Financial statement analysis from the standpoint of management does not relate to the same questions raised by investors and creditors.

6. Sources of information outside the company's annual report should not be relied upon in a financial statement analysis.

7. Sources of information for analysts include the Form 10-K, proxy statement, auditor's report, and management discussion and analysis.

8. Using comparative statistical ratios to help determine a company's relative position within its industry is misleading due to the many accounting choices and techniques firms choose to report information.

9. Tools and techniques used to evaluate a firm's financial condition should include common size financial statements, financial ratios, trend and structural analysis and industry comparisons.

10. Financial ratios do not provide answers in and of themselves, and they are not predictive.

11. Liquidity ratios measure the extent of a firm's financing with debt relative to equity.

12. The current and quick ratios measure the short-run solvency of a firm.
13. The current and quick ratio may contradict the cash flow liquidity ratio, requiring the analyst to explore the underlying components of each ratio.

14. An increasing average collection period implies the firm has tightened its credit policies.

15. A low number of days inventory held is usually a sign of efficient management; however, too low a number could indicate understocking and lost orders.

16. To improve the cash conversion cycle a firm would want to decrease the average collection period, decrease days inventory held and increase days payable outstanding.

17. The smaller the fixed asset turnover ratio is the lower the investment in property, plant and equipment.

18. In order for a firm to benefit from debt financing, the fixed interest payments must be greater than the operating earnings.

19. The cash interest coverage ratio can be misleading if a company generates high profits, but no cash flow from operations.

20. Cash flow ratios add to a financial statement analysis by ensuring that profits are being translated into cash flows.

21. The accounting and finance scandals, including Lehman Brothers, Enron, and WorldCom, illustrated the importance to investors of earnings numbers and market ratios based on those earnings numbers.

22. Short-term liquidity focuses on assessment of the key components of the income statement.

23. An upward trend in asset turnover ratios indicates improved operating efficiency.

24. When the financial leverage index is less than one, this indicates the firm is employing debt beneficially.

25. The Du Pont System helps the analyst see how a firm's decisions and activities over an accounting period interact to produce an overall return to the firm's shareholders, the return on equity.

Multiple Choice

1. Which of the following items is an outside source of information from the corporate annual report?
    a. Auditor's report.
    b. Supplementary schedule of segment information.
    c. Comparative statistical ratios from Annual Statement Studies.
    d. Management's discussion and analysis.

2. Which of the following tools and techniques are the least useful to the financial statement analyst?
    a. Financial ratios.
    b. Public relations material and pro forma statements prepared by the firm.
    c. Trend and structural analysis.
    d. Common size financial statements.

3. What type of ratios measure the firm’s ability to meet cash needs as they arise?
    a. Activity ratios.
    b. Liquidity ratios.
    c. Leverage ratios.
    d. Profitability ratios.

4. What type of ratios measure the liquidity of specific assets and the efficiency of managing those assets?
    a. Activity ratios.
    b. Liquidity ratios.
    c. Leverage ratios.
    d. Profitability ratios.

5. What type of ratios measure the extent of a firm’s financing with debt relative to equity and its ability to cover interest and fixed charges?
    a. Activity ratios.
    b. Liquidity ratios.
    c. Market ratios.
    d. Leverage ratios.

6. Which of the following statements is false?
    a. Financial ratios can indicate areas of potential strength and weakness.
    b. Financial ratios can serve as screening devices.
    c. Financial ratios are predictive.
    d. No rules of thumb apply to the interpretation of financial ratios.

7. Which of the following ratios would be useful in assessing short-term liquidity?
    a. Current ratio, inventory turnover, fixed asset turnover.
    b. Quick ratio, average collection period, cash conversion cycle.
    c. Average collection period, debt ratio, return on assets.
    d. Current ratio, cash interest coverage, cash-flow liquidity ratio.

8. What relationship exists between the average collection period and accounts receivable turnover?
    a. There is a direct and proportional relationship.
    b. Both ratios are expressed in number of times receivables are collected per year.
    c. Both ratios are expressed in number of days.
    d. As average collection period increases (decreases) the accounts receivable turnover decreases (increases).

9. What is the cash conversion or net trade cycle?
    a. The amount of time needed to complete the normal operating cycle of a firm.
    b. The amount of time it takes to manufacture or buy inventory.
    c. The amount of time it takes to sell inventory.
    d. The amount of time it takes to be profitable.

10. If a firm is using financial leverage successfully what would be the impact of doubling operating earnings?
    a. The return on equity will double.
    b. The return on equity will increase, but not double.
    c. The return on equity will more than double.
    d. The return on equity will decline by half.

Use the following data to answer questions 11-15.

Lazy O Corporation
Selected Financial Data

Current assets	$85,000
Current liabilities	70,000
Accounts receivable	35,000
Inventories	40,000
Accounts payable	25,000
Net sales	425,000
Cost of goods sold	258,000

11. Lazy O's current ratio is:
    a. 2.1 to 1
    b. 0.1 to 1
    c. 0.8 to 1
    d. 1.2 to 1

12. Lazy O's quick ratio is:
    a. 0.88 to 1
    b. 0.64 to 1
    c. 1.2 to 1
    d. 0.71 to 1

13. Lazy O's average collection period is:
    a. 30 days
    b. 24 days
    c. 12 days
    d. 4 days

14. Lazy O's days inventory held is:
    a. 34 times
    b. 9 times
    c. 57 times
    d. 18 times

15. Lazy O's net trade cycle is:
a. 122 days
b. 52 days
c. 35 days
d. 72 days

Use the following selected financial data for Crazy A Corporation to answer questions 16-20.

Net sales	$500,000
Cost of goods sold	300,000
Operating expenses	100,000
Net income	30,000
Total assets	180,000
Total liabilities	120,000
Cash flow from operating activities	10,000

16. Crazy A's debt ratio is:
a. 8%
b. 60%
c. 67%
d. 150%

17. Crazy A's cash flow margin is:
a. 2.0%
b. 16.7%
c, 5.5%
d. 33.0%

18. Crazy A's operating profit margin is:
a. 33%
b. 20%
c. 40%
d. 55%

19. Crazy A's return on equity is:
a. 25%
b. 40%

c. 50%
d. 33%

20. Crazy A's net profit margin is:
    a. 2.5%
    b. 5.5%
    c. 2.0%
    d. 6.0%

Use the following selected financial information for Cascabel Corporation to answer questions 21-30.

Cascabel Corporation
Balance Sheet
December 31, 2012

Assets		Liabilities and stockholders' equity	
Current assets		Current liabilities	
Cash	2	Accounts payable	36
Short-term investments	10	Accrued liabilities	25
Accounts receivable	52	Total current liabilities	61
Inventory	57	Deferred income taxes	20
Other current assets	8	Long-term debt	82
Total current assets	129	Total liabilities	163
Long-term assets		Stockholders' equity	
Net PPE	65	Common stock and PIC	110
Goodwill	130	Retained earnings	51
		Total stockholders' equity	161
Total assets	324	Total liabilities and equity	324

Cascabel Corporation
Income Statement
For the Year Ended December 31, 2012

Net sales	$345
Cost of goods sold	248
Gross profit	$ 97
Operating expenses	74
Operating profit	$ 23
Interest expense	8

Earnings before taxes	$ 15
Income tax expense	4
Net profit	$ 11

Cascabel Corporation
Statement of Cash Flow Information
For the Year Ended December 31, 2012

Cash from operating activities	$20
Investing activities:	
Capital expenditures	$25
Acquisitions	$ 9
Financing activities:	
Proceeds from long-term borrowing	$12
Payments on long-term borrowing	$31
Payments of cash dividends	$ 6
Cash paid for interest	$ 9
Cash paid for income taxes	$ 5

21. Cascabel’s current ratio is:
    a. .47
    b. 2.11
    c. 1.18
    d. 1.79

22. Cascabel's cash flow liquidity ratio is:
    a. .52
    b. .36
    c. 1.91
    d. .33

23. Cascabel's cash conversion cycle is:
    a. 82 days
    b. 24 days
    c. 192 days
    d. 86 days

24. Cascabel's fixed asset turnover ratio is:
    a. 5.31
    b. .19
    c. 5.91
    d. .17

25. Cascabel's cash interest coverage ratio is:
    a. 2.50
    b. 3.50
    c. 3.78
    d. 4.50

26. Cascabel's cash flow adequacy ratio is:
    a. 3.10
    b. .32
    c. .28
    d. .21

27. Cascabel's operating profit margin is:
    a. 5.80%
    b. 4.35%
    c. 3.19%
    d. 6.67%

28. Cascabel's effective tax rate is:
    a. 26.67%
    b. 36.36%
    c. 35.00%
    d. 33.33%

29. Cascabel's cash flow margin is:
    a. 1.81%
    b. .58%
    c. 5.80%
    d. 3.48%

30. Cascabel's cash return on assets is:
    a. 0.62%
    b. 15.5%
    c. 6.17%
    d. 10.49%

Short Answer/Problem

1. a. What is the objective of financial statement analysis from the standpoint of a creditor?

b. What sources of information are available to creditors when analyzing a firm?

2. a. What is the objective of financial statement analysis from the standpoint of an investor?

b. What sources of information are available to investors when analyzing a firm?

3. How does the objective of a financial statement analysis for management differ from an analysis done by creditors and investors?

4. Describe the steps of conducting a financial statement analysis.

5. List and describe the ratios which should be assessed when looking at the short-term liquidity of a firm.

6. Explain the importance of analyzing the activity ratios.

7. What should the analyst assess when analyzing capital structure and long-term solvency?

8. Explain why shareholder returns are magnified when financial leverage is used and operating earnings rise or fall.

9. Explain how the Du Pont System can help the analyst.

10. Using the ratios and information given below for LDC Company, analyze the short-term liquidity and operating efficiency of the firm.

	2012	2011
Current ratio	.70	.80
Quick ratio	.62	.71
Cash flow liquidity ratio	.55	1.02
Average collection period	30 days	30 days
Days inventory held	10 days	12 days
Days payable outstanding	91days	98 days
Cash conversion cycle	(51 days)	(56 days)
Fixed asset turnover	.29 times	.27 times
Total asset turnover	.20 times	.21 times
Cash flow from operations (in millions)	$613	$1,254
Net sales (in millions)	$9,144	$8,611

11. Using the ratios and information given for FABulous Things.com, an Internet retailer, analyze the short-term liquidity and operating efficiency of the firm as of 2012.

Financial ratios	2012	2011
Liquidity		
Current (times)	1.48	1.35
Quick (times)	1.07	1.02
Cash flow liquidity (times)	1.32	1.23
Average collection period	9 days	9 days
Days inventory held	35 days	27 days
Days payable outstanding	85 days	75 days
Cash conversion cycle	(41 days)	(39 days)
Activity		
Fixed asset turnover (times)	30.45	28.25
Total asset turnover (times)	2.42	2.63
Other information		
Cash flow from operations (millions of $)	602	412
Revenues (millions of $)	7,158	5,369

12. The following ratios have been calculated for Western Airlines. Analyze the capital structure, long-term solvency, and profitability of Western Airlines.

Financial ratios	2012	2011
Leverage		
Debt ratio (%)	80.3	79.2
Long-term debt to total capital (%)	70.1	69.8
Debt to equity (times)	4.2	4.1
Times interest earned (times)	1.6	0.8
Cash interest coverage (times)	3.9	2.7
Fixed charge coverage (times)	1.0	0.7
Cash flow adequacy (times)	0.4	1.1
Profitability		
Gross profit margin (%)	13.5	12.3
Operating profit margin (%)	1.4	0.9
Net profit margin (%)	(1.3)	(2.8)
Cash flow margin (%)	8.4	5.2
Return on assets (%)	(0.6)	(1.9)
Return on equity (%)	(4.1)	(9.9)
Cash return on assets (%)	9.8	7.6

13. Sally Gordon, owner of dance studios, is wondering why her bookkeeper keeps complaining that it is difficult to pay the bills on time. Sally has looked at her income statement and can't figure out what the problem is. Looking at the following ratios for the company, write an explanation that will help Sally understand the challenges her firm is facing.

	2012	2011
Debt ratio	72%	58%
Long-term debt to total capitalization	49%	24%
Times interest earned	6.9 times	3.4 times
Cash interest coverage	(2.6 times)	1.5 times
Fixed charge coverage	6.0 times	3.2 times
Cash flow adequacy	(5.1 times)	.4 times

14. Using the following information for Cedric Inc. calculate earnings per share, the price-to earnings ratio, dividend payout and dividend yield for the firm. Analyze these market ratios.

	2012	2011
Net income	$31 million	$30 million
Shares of common stock outstanding	24 million	22 million
Dividends per share	$ 0.55	$ 0.50
Market price per share	$12	$16

15. L.A. Gear, a designer and marketer of athletic and casual footwear, filed for bankruptcy in 1998; however red flags existed long before the firm went bankrupt. Using the information from the common size financial statements and growth rates given, discuss the red flags that existed as early as 1990.

Balance Sheet

	1990	1989
	%	%
Cash	.9	.1
A/R	43.0	37.6
Inventory	44.1	52.3
Ppd. exp., def. taxes, other	4.9	6.5
Total current assets	92.9	96.5
Net property and equipment	6.5	3.0
Other assets	.6	.5
Total assets	100.0	100.0
Line of credit	25.8	14.0
A/P	6.1	9.6
Accrued expenses	11.5	13.0
Taxes payable	--	.3
Total current liabilities	43.4	36.9
Common stock	25.1	31.8
Retained earnings	31.5	31.3

Total liabilities and shareholders' equity		100.0	100.0

Income Statement

	1990	1989	1988
	%	%	%
Net sales	100.0	100.0	100.0
Cost of sales	65.6	58.1	57.7
Gross profit	34.4	41.9	42.3
Selling, general and admin. exp.	26.7	25.0	23.8
Interest expense	2.0	2.0	1.8
Earnings before income taxes	5.7	14.9	16.7
Income taxes	2.2	6.0	6.9
Net earnings	3.5	8.9	9.8

Statement of Cash Flows

	1990	1989	1988
Inflows:	$	$	$
Exercise of stock options and related tax benefits	6,316	2,681	495
Issuance of common stock	---	68,616	---
Borrowings	56,600	---	50,104
Total	62,916	71,297	50,599
Outflows:			
Operations	40,332	48,905	46,687
Capital expenditures	18,939	6,168	2,546
Other assets	707	246	406
Repayments of debt	---	19,830	---
Total	59,978	75,149	49,639
Net cash flow	2,938	(3,852)	960

Statement of Cash Flows

	1990	1989	1988
	%	%	%
Inflows:			
Exercise of stock options and related tax benefits	10.0	3.8	1.0
Issuance of common stock	---	96.2	---
Borrowings	90.0	---	99.0
Total	100.0	100.0	100.0
Outflows:			
Operations	67.2	65.1	94.1
Capital expenditures	31.6	8.2	5.1
Other assets	1.2	.3	.8
Repayments of debt	---	26.4	---
Total	100.0	100.0	100.0

	89-90	88-89
Sales growth	46%	176%
Operating expense growth	56%	190%

16. Financial ratio data is listed below for Crazy A's Horse Trailers. Construct a list of strengths and weaknesses for the firm after analyzing the ratios.

Crazy A's Horse Trailers
Ratios

Ratio	Industry	2012	2011	2010
Current	1.20x	1.18x	1.20x	1.35x
Quick	0.20x	0.18x	0.21x	0.26x
Cash Flow Liquidity	0.50x	(0.11x)	(0.09x)	(0.05x)
Average Collection Period	4 days	9 days	8 days	6 days
Days Inventory Held	75 days	106 days	99 days	90 days
Days payable outstanding	10 days	11 days	12 days	8 days
Fixed Asset Turnover	11.30x	8.84x	8.89x	8.95x
Total Asset Turnover	2.50x	2.20x	2.27x	2.42x
Debt Ratio	75.10%	78.47%	76.04%	70.17%
Long Term Debt to Total Capitalization	29.30%	41.09%	36.91%	35.33%
Debt to Equity	3.50x	3.65x	3.17x	2.35x
Times Interest Earned	2.40x	1.72x	2.00x	2.23x
Fixed Charge Coverage	1.50x	1.59x	1.77x	1.85x
Gross Profit Margin	23.10%	21.21%	22.39%	23.52%
Operating Profit Margin	2.00%	3.05%	2.86%	2.52%
Net Profit Margin	1.10%	0.89%	1.00%	0.97%
Cash Flow Margin	4.30%	(5.31%)	(5.15%)	(4.48%)
Return on Investment	2.75%	1.97%	2.28%	2.35%
Return on Equity	11.04%	9.14%	9.51%	7.88%

17. Using the financial ratios calculated from the 2012 annual report of Maggie's Crafts, assess the short-term liquidity, operating efficiency, capital structure and long-term solvency and profitability of the firm.

Maggie's Crafts (TLF / AMEX)

Summary of Financial Statement Ratios

	Results for the Years Ending December 31		
	2012	2011	2010
Liquidity Ratios:			
Current ratio	7.47 times	5.19 times	
Quick ratio	2.84 times	1.99 times	
Cash flow liquidity	2.48 times	1.98 times	
Average collection period	17 days	18 days	
Days inventory held	270 days	266 days	
Days payable outstanding	24 days	28 days	
Cash conversion cycle	263 days	256 days	
Activity Ratios:			
Accounts receivable turnover	21.79 times	21.24 times	
Inventory turnover	1.35 times	1.37 times	
Payables turnover	15.79 times	13.26 times	
Fixed asset turnover	7.90 times	29.41 times	
Total asset turnover	1.47 times	1.73 times	
Leverage Ratios:			
Debt ratio	20.81 %	17.53 %	
Long-term debt to total capitalization	11.61 %		
Debt to equity	0.26 times	0.21 times	
Financial leverage (FL)	1.26 times	1.21 times	
Times interest earned	36.91 times		1748.25 times
Cash interest coverage	36.81 times		1095.70 times
Fixed charge coverage	2.56 times	3.83 times	3.50 times
Cash flow adequacy	1.49 times	8.29 times	5.63 times
Profitability Ratios:			
Gross profit margin	57.26 %	57.31 %	56.69 %
Operating profit margin	8.15 %	12.80 %	10.99 %
Net profit margin	5.58 %	8.65 %	7.32 %
Cash flow margin	4.60 %	7.09 %	3.03 %
Return on assets (ROA) or Return on investment (ROI)	8.20 %	14.97 %	
Return on equity (ROE)	10.36 %	18.15 %	
Cash return on assets	6.76 %	12.26 %	
Market Ratios:			
Earnings per share	$ 0.28	$ 0.44	$ 0.35
Price-to-earnings	11.68	18.34	19.57
Dividend payout			
Dividend yield			

NOTES: If a ratio's numerator and/or denominator equals zero, no ratio is displayed.
"N/M" indicates a calculated ratio is not meaningful for analysis

Solutions - Chapter 5

True-False

1. F	6. F	11. F	16. T	21. F
2. T	7. T	12. T	17. F	22. F
3. T	8. F	13. T	18. F	23. T
4. T	9. T	14. F	19. F	24. F
5. F	10. T	15. T	20. T	25. T

Multiple Choice

1. c	6. c	11. d	16. c	21. b	26. b
2. b	7. b	12. b	17. a	22. a	27. d
3. b	8. d	13. a	18. b	23. d	28. a
4. a	9. a	14. c	19. c	24. a	29. c
5. d	10. c	15. b	20. d	25. c	30. c

Short Answer/Problem

1. a. The creditor is ultimately concerned with the ability of an existing or prospective borrower to make interest and principal payments on borrowed funds. Information the creditor would like to know is:

- What is the borrowing cause?
- What is the firm's capital structure?
- What will be the source of debt repayment?

b. Sources of information for the creditor include information in the corporate annual report: the auditor's report, management's discussion and analysis, and supplementary schedules. Other sources would include references revealing comparative statistical ratios, and credit ratings from sources such as Moody's. In addition the creditor could learn more about the company by reading about the firm in business periodicals.

2. a. The investor attempts to arrive at an estimation of a company's future earnings stream in order to attach a value to the securities being considered for purchase or liquidation. The investment analyst poses such questions as:

- What is the company's performance record, and what are the future expectations? What is its record with regard to growth and stability of earnings? Of cash flow from operations?
- How much risk is inherent in the firm's existing capital structure? What are the expected returns, given the firm's current condition and future outlook?
- How successfully does the firm compete in its industry, and how well positioned is the company to hold or improve its competitive position?

The investment analyst also uses historical financial statement data to forecast the future. In the case of the investor, the ultimate objective is to determine whether the investment is sound.

b. Sources of information for the investor include information in the corporate annual report: the auditor's report, management's discussion and analysis, and supplementary schedules. Other sources would include references revealing comparative statistical ratios and investment and financial information including company profile and stock prices from sources such as Hoover's, Dun & Bradstreet and Standard & Poor's as well as the many websites available that contain information for financial analysts. In addition the investor could learn more about the company by reading about the firm in business periodicals.

3. Financial statement analysis from the standpoint of management relates to all of the questions raised by creditors and investors because these user groups must be satisfied in order for the firm to obtain capital as needed. Management must also consider its employees, the general public, regulators, and the financial press. Management looks to financial statement data to determine:

- How well has the firm performed and why? What operating areas have contributed to success and which have not?
- What are the strengths and weakness*es* of the company's financial position?
- What changes should be implemented in order to improve future performance?

4 Steps of a financial statement analysis should include:

a. Establish the objectives of the analysis.
b. Study the industry in which the firm operates and relate industry climate to current and projected economic developments.
c. Develop knowledge of the firm and quality of management.
d. Evaluate the financial statements by preparing common size financial statements, calculating key financial ratios and comparing to industry competitors. Major areas to consider are short-term liquidity, operating efficiency, capital structure and long-term solvency, profitability, segmental analysis, quality of financial reporting, and market measures.
e. Summarize the findings based on the analysis and reach conclusions relevant to the established objectives.

5. The following ratios are useful in assessing the short-term liquidity of the firm:

a. Current ratio – measures the ability of the firm to meet needs for cash as they arise.
b. Quick ratio – measures short-term liquidity more rigorously than the current ratio by eliminating inventory, usually the least liquid current asset.
c. Cash flow liquidity ratio – measures short-term liquidity by considering cash resources of cash and cash equivalents (marketable securities) plus cash from operations.
d. Average collection period – indicates the days required to convert receivables to cash.
e. Days inventory held – indicates days required to sell inventory.
f. Days payable outstanding - indicates days required to pay suppliers.
g. Cash conversion cycle – measures the number of days it takes to buy or manufacture inventory, sell inventory, and collect the cash from the sale.

6. The activity ratios measure the operating efficiency of the firm. The accounts receivable, inventory and payables turnover ratios measure how many times, on average, accounts receivable are collected in cash, inventory is sold, and accounts payables are paid during the year. The three measures together make up the cash conversion cycle. By looking at these measures the analyst can assess why cash flow generation has improved or deteriorated since changes in receivables, inventory and payables directly affect cash flow from operations. The fixed and total asset turnover ratios are used to assess management's effectiveness in generating sales from investments in assets.

7. The analyst should evaluate the amount and proportion of debt in a firm's capital structure as well as the ability to service debt. The debt ratio, long-term debt to total capitalization and debt to equity ratios measure the extent of the firm's financing with debt. The analyst needs to consider the risk of too much debt relative to the return from using debt. Coverage ratios such as times interest earned, cash interest coverage, fixed charge coverage and cash flow adequacy measure how well the firm can cover fixed payments of interest, lease payments, debt repayments, capital expenditures, and dividends. Failure to satisfy interest and lease payments could result in bankruptcy for the firm. Off-balance sheet-financing arrangements should be considered as well and this information can be found in the notes to the financial statements.

8. Financial leverage refers to the use of debt in a company's capital structure. Shareholder returns are magnified, positively or negatively, when operating earnings rise or fall. This is caused by the fact that interest expense is fixed regardless of operating earnings. When earnings rise, interest expense does not change and the additional funds are available to the shareholder. If earnings decline, the interest expense will remain, leaving much less for the shareholders.

9. The Du Pont System allows the analyst to consider the interrelationships between ratios. The firm's decisions and activities over the course of an accounting period interact to produce an overall return to the firm's shareholders, the return on equity. The summary ratios used are the following:

(1)		(2)		(3)
Net Profit Margin	X	**Total Asset Turnover**	=	**Return on Investment**
$\frac{\text{Net income}}{\text{Net Sales}}$	X	$\frac{\text{Net Sales}}{\text{Total Assets}}$	=	$\frac{\text{Net income}}{\text{Total Assets}}$

(3)		(4)		(5)
Return on Investment	X	**Financial Leverage**	=	**Return on Equity**
$\frac{\text{Net income}}{\text{Total Assets}}$	X	$\frac{\text{Total Assets}}{\text{Stockholder' Equity}}$	=	$\frac{\text{Net income}}{\text{Stockholders' Equity}}$

By reviewing this series of relationships, the analyst can identify strengths and weaknesses as well as trace potential causes of any problems in the overall financial condition and performance of the firm.

The first three ratios reveal that the (3) return on investment (profit generated from the overall investment in assets) is a product of the (1) net profit margin (profit generated from sales) and the (2) total asset turnover (the firm's ability to produce sales from its assets). Extending the analysis, the remaining three ratios show how the (5) return on equity (overall return to shareholders, the firm's owners) is derived from the product of (3) return on investment and (4) financial leverage (proportion of debt in the capital structure). Using this system, the analyst can evaluate changes in the firm's condition and performance, whether they are indicative of improvement or deterioration or some combination. The evaluation can then focus on specific areas contributing to the changes.

10. Short-term liquidity at LDC Company is poor and has deteriorated from 2011 to 2012. The company's current assets are less than current liabilities. In 2011 the cash flow liquidity ratio was good at 1.02 but has dropped to 0.55 in 2012. This drop is most likely the result of the drop in cash flow operations from 2011 to 2012. The average collection period is stable. Days inventory held is low and improving. The firm is using accounts payable extensively to finance operations as evidenced by the length of time they take to pay bills. This should be investigated further to determine if the firm is paying its bills on time. The decline in days payable outstanding could be caused by a tightening of credit by LDC's suppliers. The cash conversion cycle is negative because of the length of time the firm is taking to pay payables. This means LDC is keeping its cash longer, which is a good strategy, unless they are not paying bills on time.

The company is capital intensive as can be seen by the low asset turnover rates. The firm is efficient with regard to accounts receivable and inventory, but total asset turnover is 0.20, slightly less than the fixed asset turnover ratio. To continue to be successful, the firm needs to generate a higher level of sales without a proportional increase in expenses and capital expenditures. This would then result in higher fixed and total asset turnover and better cash flow generation.

11. Short-term liquidity at FABulous Things.com is good and improving from 2011 to 2012. The current and quick ratios are both above one, as is the cash flow liquidity ratio. The firm's accounts receivable collection period is stable and is low at 9 days. Days inventory held has increased by eight days. Continuing increases in this ratio need to be monitored. FABulous Things.com is taking ten days longer to pay their accounts payable. As long as the firm's suppliers have given the

company such a lenient credit policy, this is good cash management and causes the negative cash conversion cycle. FABulous Things.com must be carful, however, to pay bills on time so as not to cause suppliers to refuse to conduct business with them.

Fixed asset turnover has improved which means the level of sales growth is more than any increases in fixed assets. Despite the increase in fixed asset turnover, total asset turnover has declined. If the magnitude of inventories is greater than fixed assets, the decline in total asset turnover can be explained by the decline in inventory turnover. It is also possible that FABulous Things.com has large amounts of cash, investments and goodwill which could cause the total asset turnover to be lower.

Overall FABulous Things.com has good liquidity and operating efficiency.

12. Western Airlines has a risky capital structure with 80 percent debt, most of which is long-term. The interest (accrual-based and cash-based) and fixed charge coverage ratios are low, but have improved from 2011 to 2012. This was probably a result of the increase in operating profits that may have resulted in an increase in cash flow from operations. Cash flow adequacy has declined. Since the other cash flow ratios have increased, either capital expenditures, debt repayments or dividends paid have increased.

The profitability of Western Airlines is improving but net profit margin is negative. Gross and operating profit margins have both improved due to better cost control or an increase in prices. The reason why operating profits are positive and net profits are negative is probably due to the large amount of debt, and, therefore, higher interest expense. The accrual-based return ratios are negative as a result of the net losses, but cash generated from operations must be improving based on the cash flow margin and the cash return on assets.

Western Airlines needs to work on reducing debt and interest expense in order to improve profitability. Long-term solvency at this point is not a concern, but the capital structure is risky and must be watched.

13. Sally's focus on the income statement is misleading. While the company is profitable, the profits are not being translated into cash. It appears that Sally may have been expanding or the lack of cash has caused her firm to borrow heavily. The debt ratio has increased 14 percent and long-term debt has more than doubled.

The times interest earned and fixed charge coverage ratios imply the firm is profitable, but these ratios are based on the accrual basis of accounting. The cash interest coverage and cash flow adequacy ratios confirm that the firm's cash flow from operations has become negative in 2012, hence, the problems the bookkeeper is having. While revenues may be up in the firm, Nina should investigate the accounts receivable to see if customers are paying and if so, if they pay in a timely manner.

14.	2012	2011
Earnings per share	$1.29	$1.36
PE ratio	9.3	11.8
Dividend payout	42.6%	36.8%
Dividend yield	4.6%	3.1%

The earnings per share is declining as a result of the issuance of more shares of common stock. The market is reacting negatively to the firm's stock and reasons for this should be investigated. The firm has increased dividends to its shareholders which have caused the dividend payout ratio to be higher. The cause of the increase in the dividend yield is a result of not only the increased dividends, but the drop in the stock price. Since the yield is small, investors should be more concerned with the reasons that the stock price is dropping.

15. The red flags that can be found on the common size statements and by looking at the growth rates are as follows:

1. Accounts receivable are increasing relative to other assets, indicating a possible lengthening of average collection period.
2. All debt is short-term meaning firm is mismatching short-term debt with the purchase of long-term assets.
3. Debt is increasing as the firm uses more of its line of credit, adding risk to debt structure.
4. Profit margins are deteriorating; possible causes could be price discounting in order to move inventory, increased selling costs to move inventory and higher interest expense.
5. Negative cash flows from operations all years.
6. Operating expenses are growing faster than the growth in sales.

16. The following are strengths and weaknesses for Crazy A's Horse trailers:

Strengths:

1. Good control of operating expenses; operating profit margin is increasing.
2. Return on equity has increased as a result of using debt successfully.

Weaknesses:
1. Short-term liquidity is deteriorating.
2. Current and quick ratios are declining and now below industry average.
3. Cash flows from operations are negative.
4. Average collection period is increasing and above industry average.
5. Inventory is a serious concern as the number of days held has grown to a much higher amount than the industry.
6. Number of days to pay suppliers is increasing and now above industry average.
7. Fixed and total asset turnovers are declining indicating fewer sales and/or increased capital expenditures.
8. Debt is increasing and above industry average implying more risk in firm.
9. Coverage of fixed charges is declining probably as a result of increased interest expense associated with more debt.
10. Gross profit margin is on a downward trend and below industry average; possibly a result of price discounting or increased cost of goods sold.
11. Return on investment is declining in 2012 and below industry average.

17. Short-term liquidity

Maggie's short-term liquidity appears to be improving as the current, quick and cash flow liquidity ratios are high and increasing; however, these ratios may present a better picture than reality. The company has an excellent collection period and pays its suppliers in a timely manner, but inventory is held an extremely long time and makes up a significant portion of the firm's current assets as evidenced by the difference in the current and quick ratios. It is possible that Maggie has a large amount of cash and short-term investments, but does not appear to move inventory well.

Operating efficiency

Maggie's fixed and total asset turnovers are declining which could be a result of lower sales combined with higher amounts of property, plant, and equipment . Total asset turnover has also been impacted by the slightly lower inventory turnover.

Capital structure and long-term solvency

Maggie's does not have a risky a capital structure. The leverage ratios indicate the firm finances approximately 21% of assets with debt and long-term debt to total

capitalization is 11.61% as of 2012. In 2011 the firm did not have any long-term debt, so the current amounts of long-term debt have been recently borrowed. Given the drop in the fixed asset turnover, it is likely the firm has made purchases of property, plant and equipment. The company uses financial leverage well and can cover interest and lease payments. The cash flow adequacy ratio is large, but has decreased a large amount in 2012. Since the firm does not pay dividends, this decrease is the result of increased debt repayments and capital expenditures. The firm may be expanding.

Profitability

Maggie's gross profit margin is stable and did increase over the three year period. Either the costs of products are decreasing, or the company is raising selling prices.

Operating profit margin increased in 2011, but declined in 2012. This could be a result of increased expenses due to an expansion as depreciation would increase if more plant and equipment was put into use in 2012 without a proportional increase to revenues.

Net profit margin and cash flow margin have followed the trend of operating profit margin. The return on assets, return on equity and cash return on assets reflect the decline in profitability in 2012 as well as the decrease in cash flow from operations.