

Solutions to Study Questions, Problems, and Cases

Chapter 1

1.1 The types of questions that can be answered include 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?

1.2 The annual report is published primarily for shareholders, while the 10-K report is filed with the Securities and Exchange Commission and is used by regulators, analysts, and researchers. The financial statements and much of the financial data are identical in the two documents; but the 10-K report contains more detail (such as schedules showing management remuneration and transactions, a description of material litigation and governmental actions, and elaborations of many financial statement accounts) than the annual report; and the annual report presents additional public relations type material such as colored pictures, charts, graphs, and promotional information about the company.

1.3 The analyst should use the financial statements: the balance sheet, the income statement, the statement of stockholders' equity, and the statement of cash flows; the notes to the financial statements; supplementary information such as financial reporting by segments; the auditor's report; management's discussion and analysis of operating performance and financial condition; and the five-year summary of financial data.

Use the public relations "fluff," such as colored pictures and descriptive material with caution.

1.4 The SEC has the legal authority to write accounting rules in the United States; however, they choose to delegate writing rules, for the most part, to the FASB. The SEC plays a supportive role and at times will encourage FASB to write particular rules or make changes to policies.

1.5 The annual report or Form 10-K includes the following four financial statements:

1. The *balance sheet or statement of financial position* 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.
2. The *income or earnings statement* presents the results of operations—revenues, expenses, net profit or loss, and net profit or loss per share—for the accounting period.
3. The *statement of stockholders' equity* reconciles the beginning and ending balances of all accounts that appear in the stockholders' equity section of the balance sheet. Some firms prepare a statement of retained earnings, frequently combined with the income statement, which reconciles the beginning and ending balances of the retained earnings account. Companies choosing the latter format will generally present the statement of stockholders' equity in a footnote disclosure.
4. The *statement of cash flows* provides information about the cash inflows and outflows from operating, financing, and investing activities during an accounting period.

1.6 The notes are, in fact, an integral part of the statements and must be read in order to understand the presentation on the face of each financial statement. The notes to the financial statements provide a summary of the firm's accounting policies, any changes in accounting policies during the reporting period, details about particular accounts, such as inventory, property, plant, and equipment, investments, debt and equity accounts, and information about items such as acquisitions, divestitures, pension and stock option plans, leases, legal proceedings, income taxes, contingencies, commitments, and segments,

1.7 A qualified report is issued when the overall financial statements are fairly presented "except for" items which the auditor discloses; an adverse opinion is issued when the financial statements have departures from GAAP so numerous that the statements are not presented fairly. A disclaimer of opinion is caused by a

scope limitation resulting in the auditor being unable to evaluate and express an opinion on the fairness of the statements. An unqualified opinion with explanatory language is caused by a consistency departure due to a change in accounting principle, uncertainty caused by future events such as contract disputes and lawsuits, events which the auditor believes may present business risk and going concern problems.

1.8 The Management Discussion and Analysis section is of potential interest to the analyst because it contains information that cannot be found in the financial data. The content of this section includes coverage of any favorable or unfavorable trends and significant events or uncertainties in the areas of liquidity, capital resources, and results of operations. In particular, the analyst can expect to find a discussion of the following:

1. The internal and external sources of liquidity
2. Any material deficiencies in liquidity and how they will be remedied
3. Commitments for capital expenditures, the purpose of such commitments, and expected sources of funding
4. Anticipated changes in the mix and cost of financing resources
5. Unusual or infrequent transactions that affect income from continuing operations
6. Events that cause material changes in the relationship between costs and revenues (such as future labor or materials price increases or inventory adjustments)
7. A breakdown of sales increases into price and volume components

1.9 The proxy statement is a document required by the SEC to solicit shareholder votes, since many shareholders do not attend shareholder meetings. The analyst can find important information in the proxy statement such as background information on the company's nominated directors, director and executive compensation, any proposed changes to those compensation plans and the audit and non-audit fees paid to the auditing firm.

1.10 Employee relations with management, employee morale and efficiency, the reputation of the firm with its customers and in its operating environment, the quality and effectiveness of management, provisions for management succession, potential exposure to regulatory changes, "bad publicity" in the media.

1.11

Memorandum

Date: Current Date
To: B.R. Neal, Director of Marketing
From: Student's Name
Subject: Contents of an Annual Report

The company's annual report presents financial information about the firm. This information package is published primarily for shareholders and the general public. The major components of an annual report are briefly described in this memo.

1) An annual report contains four financial statements: The **balance sheet** shows the financial condition (assets, liabilities, stockholders' equity) at end of year; the **income** or **earnings statement** presents the results of operations including revenues, expenses, net profit or loss, and net profit or loss per share for the year; the **statement of stockholders' equity** reconciles beginning and ending balances of accounts in the equity section of the balance sheet; and the **statement of cash flows** shows inflows and outflows of cash from operating, financing, and investing activities for the year.

2) Notes to the financial statements provide additional detail about particular items in the financial statements. 3) The auditor's report is prepared by an independent accounting firm and attests to the fairness of the information presented. 4) The five year summary shows key financial data including net sales, income/loss from continuing operations on a dollar and per share basis, assets, long term debt, and dividends per common share. 5) Quarterly stock prices record how the company's stock shares have performed over the past two years. 6) Management's Discussion and Analysis provides management's perspective on how the company is doing including favorable or unfavorable trends, and significant events or uncertainties.

The remaining material in the annual report is included primarily to provide background information about the company and its management, and to make the document attractive and interesting to read.

If staff members would like to learn more about any of the material in the company's annual report, the following book is highly recommended: Understanding Financial Statements by Fraser and Ormiston (Prentice Hall, 20??).

1.12 There is no solution presented as the information will be changing over time.

1.13 The SEC website contains information useful to the financial analyst including the following sections:*

"About the SEC" explains the role of the SEC, outlines the laws, regulations, and rules of practice of the SEC, includes biographies of the SEC commissioners, lists upcoming events, offers a listing of all the forms available at the SEC, and includes the strategic plan, annual reports, budgets, and directories of the SEC.

"Filings and Forms" includes the EDGAR database which allows analysts to access the SEC forms filed by publicly-held companies. A quick EDGAR tutorial is offered in this section as well as a description of SEC forms and how to request paper documents.

"Regulatory Actions" provides links to releases concerning SEC rulemaking activity.

"Staff Interpretations" provides guidance of the SEC staff members on various accounting and legal matters.

"Investor Information" allows the analyst to search for information, ask questions, file complaints, access research tools and calculators, and includes warnings and updates the SEC may desire to share with the public.

"SEC Newsroom" includes SEC press releases, speeches and testimony by senior SEC officials, special studies and reports and a daily summary of significant SEC actions.

"Litigation" provides information on SEC enforcement actions.

"Divisions & Offices" has links to each SEC division and office and includes an organization chart of the SEC. Each of the division links offers significant information related to each division's duties.

Other links provided on the SEC homepage include information for specific groups such as accountants, broker dealers, EDGAR filers and small business to name a few.

*Information was obtained in May, 2011. Changes may have been made since that date.

Case 1.1

(a) In 2010 Intel is the world's largest semiconductor chip maker based on revenue. The company also develops integrated digital technology, primarily integrated circuits, for industries such as computing and communications and hardware and software computing platforms. Other products include microprocessors, chipsets, motherboards, and wireless and wired connectivity products. (pg. 1 of Form 10-K)

(b) The analyst could learn the following by reading the letters from the CEO and the chairman:

- Intel reported the best financial results ever in 2010,
- Xeon and Itanium processors were introduced in 2010 that delivered higher performance for servers as well as better reliability and security features,
- the Intel Atom processor family of products is allowing Intel to expand into new markets of computing devices,
- new second generation “core” processors represent the largest increase in computing performance and capabilities over any previous generation,
- since 2009 Intel has been shipping 32-nanometer process technology while the competition had not shipped any,
- production of 22 nanometer process technology is scheduled to begin in 2011,
- Intel acquired Infineon’s Wireless Solutions business and Texas Instruments’ cable modem product line to take advantage of connectivity growth opportunities,
- in 2010 Intel announced plans to acquire McAfee, the world’s largest dedicated security technology company, in order to work toward better security in connected devices,
- for the third consecutive year Intel was the largest purchaser of green power and earned certification and awards for sustainable construction as well as a philanthropy award for contributions to education,
- dividends paid out continue to increase and the firm repurchases stock to increase stockholder value,
- new factories are being built in Oregon and Arizona,

- a new committee has been formed to monitor and ensure that Intel is in compliance with legal requirements globally and is operating at the highest level of integrity, and
- Intel is promoting education and access programs for women and underserved minorities, as well as increasing diversity in its own workforce.

(c) Intel received an unqualified audit opinion. The audit report states that the audit was conducted according to generally accepted auditing standards and the financial statements are in conformity with generally accepted accounting principles. Intel also received an unqualified opinion on the effectiveness of their internal controls over financial reporting. (pgs. 105-106 of Form 10-K)

(d) The Management Discussion and Analysis for Intel discusses the following items:

1. The company expects the key source of liquidity to be cash from operating activities. In 2010, Intel generated over \$16 billion of cash from operations. Cash is generated externally from the sale of stock through employee plans and the firm raised \$587 million in proceeds in 2010. The company has the potential to borrow \$3.0 billion under its commercial paper program. Intel borrowed \$150 million in 2010 but this was repaid before year-end. In addition, Intel has the ability to offer an unspecified amount of debt, equity and other securities because it has an automatic shelf registration on file with the SEC. (pgs. 40-42 of Form 10-K)
2. No material deficiencies of liquidity currently exist. (pgs. 40-42 of Form 10-K)
3. Intel plans to spend approximately \$9 billion plus or minus \$300 million in 2011 for capital expenditures. The funds will be used for investments in 22 nanometer process technology. (pg. 39 of Form 10-K) It is implied that funding will come from cash from operations. (pg. 42 of Form 10-K)
4. No anticipated changes in the mix and cost of financing resources are discussed. (pgs. 39-42 of Form 10-K)
5. No unusual or infrequent transactions were found in 2010; however the Intel paid a large fine to the European Commission and settled a lawsuit with AMD in 2009. (pg. 34 of Form 10-K)

6. Intel's restructuring program to promote efficiency and reduce costs is expected to continue to positively impact the firm in 2011. (pg. 35 of Form 10-K) Intel is projecting higher revenues in 2011, but will also experience lower gross margins and higher expenses in most categories. On a percentage basis it appears that Intel may just maintain its current net profit margin. (pg. 39 of Form 10-K)

7. Sales increased 24% overall due to higher microprocessor and chipset unit sales, as well as higher microprocessor average selling prices. The PC Client Group revenues increased 21% primarily due to higher volume of notebook unit sales and, to a lesser extent, higher average selling prices for notebooks. One area that had significantly lower sales was the wireless connectivity product lines. The Data Center Group revenues increased 35% due primarily to volume, and, to a lesser extent, higher average selling prices. Revenues increased 27% in the Other Intel Architecture segment due to volume increases. (pgs. 31-33 of Form 10-K)

(e) Intel appears to have a good strategy and is focusing on new growth opportunities. The firm has the financial resources to pursue their strategy. Some concerns may be potential competition and continued litigation.

Case 1.2

(a)

Clear

The 'Analysis ToolPak' add-in must be installed and active.

Enter data on this sheet before other financial statement information.

Company Name:	Avnet		
Stock Ticker Symbol:	AVT		
U.S. Stock Exchange:	NYSE		
Statement Year-end Dates:	7/3/2010	6/27/2009	6/28/2008
Financial Reports Rounded to :	Thousands		

Supplemental Ratio Requirements:

	2010	2009	2008
Rent expense (in thousands):	\$ 64,487	\$ 64,382	\$ 59,176
Dividends per share:			
End of year stock price (<i>adjusted for splits</i>):	\$ 23.98	\$ 21.52	\$ 29.55

Marketwatch.com URL for stock prices: <http://marketwatch.com/tools/quotes/historical.asp?date=07%2F02%2F2010&symb=AVT&siteid=mkwtw> <http://marketwatch.com/tools/quotes/historical.asp?date=06%2F26%2F2009&symb=AVT&siteid=mkwtw> <http://marketwatch.com/tools/quotes/historical.asp?date=06%2F27%2F2008&symb=AVT&siteid=mkwtw>

Check Figures:

Balance Sheet

Current Assets:	\$ 6,630,168	\$ 5,144,252
Total Assets:	\$ 7,782,382	\$ 6,273,516
Current Liabilities:	\$ 3,439,615	\$ 2,455,860
Total Stockholders' Equity:	\$ 3,009,117	\$ 2,760,857

Income Statement

Gross Profit:	\$ 2,280,217	\$ 2,022,993	\$ 2,313,716
Operating Profit:	\$ 635,600	\$ (1,018,998)	\$ 710,771
Net Profit:	\$ 410,370	\$ (1,129,712)	\$ 489,578

Cash Flow

Net Flows from Operations:	\$ (30,415)	\$ 1,118,035	\$ 453,617
Net Flows from Investing Activity:	\$ (112,421)	\$ (397,685)	\$ (378,380)
Net Flows from Financing Activity:	\$ 296,772	\$ (405,241)	\$ (33,047)

(b) Each student's response will differ depending on the news sources used and the date on which the student completes the assignment. Below is a sampling of news from articles in 2010-2011:

Source: Online Product News, August 2010
"Avnet Express Launches Asia-Wide Ecommerce Site"

Avnet is launching its first distributor website in Asia to offer a China payment capacity and rapid access to inventory held across Asia.

Source: Electronics Weekly, September 8, 2010
"Zammit: 'No Major Risks'"

Avnet's European President, Patrick Zammit, discusses the German industrial economy which is showing good growth. He predicts a 30% growth rate in 2010. Further he states that there is no inventory build-up at this time.

Source: Zacks Equity Research, May 19, 2011
"Avnet Flexes Distribution Muscle"

Avnet will acquire IT distributor, Amosdec, headquartered in Paris. Avnet's strategy has been to acquire smaller targets in markets where they want to expand their business. Avnet's recent acquisitions of Bell Micro and Tallard have firmly established Avnet as a leading distributor in Latin America.

(c) Item 1 in the Avnet Form 10-K for 2010 describes the business in which Avnet operates. The organizational structure of the firm is detailed including information about Avnet's two operating groups, the economic regions in which the firm operates, and the products and solutions that Avnet provides to their customers. The firm's strategy with regard to acquisitions is explained as well as the competition Avnet faces and the advantages they believe they have with regard to the competition.

Item 3 of the Form 10-K informs the reader of the legal proceedings in which Avnet is a party. Avnet has incurred liabilities related to environmental issues with regard to disposal of hazardous substances. The firm believes it has accrued its share of the costs for any environmental clean up in its financial statements.

The auditor's report indicates that KPMG LLP has given Avnet unqualified opinions on their financial statements as well as their effectiveness in maintaining internal controls. *

*The auditor's report is usually in Item 8; however, Avnet has moved this item to Item 15 and noted this under Item 8.

Case 1.3

1. Mattel, Inc. designs, manufactures, and markets a broad variety of toy products worldwide.
2.
 - a. Balance sheet - pg. 54
 - b. Income statement - pg. 55
 - c. Statement of cash flows - pg. 56
 - d. Statement of stockholders' equity - pg. 57
 - e. Notes to the financial statements - pgs. 58-102
 - f. Management's discussion and analysis - pgs. 25-47
 - g. Summary of selected financial data - pg.24
 - h. Auditor's report - pg. 53
3. PricewaterhouseCoopers LLP
4.
 - a. Assets - \$5,417,733
 - b. Liabilities - \$2,789,149
 - c. Stockholders' equity – \$2,628,584
 - d. Net sales - \$5,856,195
 - e. Net income - \$684,863
 - f. Cash increased \$164,126
 - g. Retained earnings - \$2,720,645

Case 1.4

1. The Management Discussion and Analysis section provides important information that cannot be found anywhere else in the annual report. The section covers trends, events, and uncertainties in the areas of liquidity, capital resources, and operations. Information should include a discussion of:
 - a. internal and external sources of liquidity;
 - b. any material deficiencies in liquidity and how they will be remedied;
 - c. commitments for capital expenditures and expected sources of funding;
 - d. anticipated changes in the mix and cost of financing resources;
 - e. unusual or infrequent transactions which affect income from continuing operations;
 - f. events which cause material changes in the relationship between costs and revenues; and
 - g. a breakdown of sales increases into price and volume components.
2. The MD&A includes the following discussion of the seven items outlined in (1) above:
 - a. The principal source of liquidity for Apple is internal, cash generated by operating activities, as well as the current balances in cash, cash equivalents, and marketable securities. There is no mention in the MD&A of external sources of liquidity in the form of equity financing and Apple currently has no debt financing.
 - b. No material deficiencies of liquidity currently exist.
 - c. Apple plans to spend approximately \$4 billion for capital expenditures, including product tooling and manufacturing process equipment, corporate facilities, and infrastructure. Apple has sufficient cash on hand (\$51 billion) to cover these expenditures and has generated between \$9 and \$18 billion of cash from operating activities in each of the past three years.
 - d. No changes to the current mix and cost of financing resources were discussed. This is not surprising given the large amounts of cash Apple generates.
 - e. No unusual or infrequent transactions were discussed in the MD&A.
 - f. If Apple continues to be successful in innovating new products that create high demand such as their iPhone and iPad products, the relationship between costs and revenues should be stable or could possibly result in higher revenues relative to costs. Competition or

saturation of markets could result in higher costs relative to revenues, but at this point seems unlikely. Apple projects lower gross margin percentages in the future, but has been able to increase revenues faster than operating expenses other than cost of goods sold, therefore, it appears that Apple should be able to maintain the current relationship between costs and revenues.

- g. Net sales increased 52% in 2010 after a 14% increase in 2009. The increase in sales was driven by an increase in the volume of sales of the iPhone and related products and services in both 2009 and 2010. In addition the iPad was released in 2010. Mac unit sales increased in 2009 and 2010, however, selling prices declined. Sales volume increased for music related products and services both years as a result of growth of the iTunes App Store. Unit sales of iPods decreased in 2010 while net sales(\$) of iPods increased due to a shift in product mix toward iPod touch. In 2009, iPod net sales and unit sales decreased due to price reductions taken with the introduction of new iPods and a stronger U.S. dollar, offset partially by a higher mix of iPod touch sales.
- 3. Apple explained changes in numbers and offered reasons for these changes. Some forward-looking information was offered in the discussion of expenses and capital expenditures, however, forward-looking information related to future revenues would be helpful. The overall quality of the MD&A is good.
- 4. Answers will vary based on individual students' reactions to the MD&A. An example of a possible response follows.

The prospects are excellent for Apple. The company focuses on innovation as evidenced by the increased spending on research and development. In addition, Apple is expanding its retail operations overseas to capture more markets. Demand for Apple products is currently high as evidenced by the large increase in sales in 2010. The firm generates significant amounts of cash and has no debt which has resulted in a solid financial structure.

Chapter 2

2.1 The balance sheet shows the financial condition or financial position of a company *on a particular date*. The statement is a summary of what the firm *owns* (assets) and what the firm *owes* to outsiders (liabilities) and to internal owners (stockholders' equity). By definition, the account balances on a balance sheet must balance; that is, the total of all assets must equal the sum of liabilities and stockholders' equity. The balancing equation is expressed as:

$$\text{Assets} = \text{Liabilities} + \text{Stockholders' equity}$$

2.2 Each item on the balance sheet is expressed as a percentage of total assets.

2.3 The valuation of marketable securities on the balance sheet as well as other investments in debt and equity securities requires the separation of investment securities into three categories depending on the intent of the investment:

1. *Held to maturity* applies to those debt securities that the firm has the positive intent and ability to hold to maturity; these securities are reported at amortized cost. Debt securities are securities representing a creditor relationship, including U.S. Treasury securities, municipal securities, corporate bonds, convertible debt and commercial paper.
2. *Trading securities* are debt and equity securities that are held for resale in the short term, as opposed to being held to realize longer-term gains from capital appreciation. Equity securities represent an ownership interest in an entity, including common and preferred stock. These securities are reported at *fair value* with unrealized gains and losses included in earnings. Fair value is the price that would be received to sell an asset or the price paid to transfer a liability in an orderly transaction between market participants at the measurement date.
3. *Securities available for sale* are debt and equity securities that are not classified as one of the other two categories, either held to maturity or trading securities. Securities available for sale are reported at fair value with unrealized gains and losses included in comprehensive income. The cumulative net unrealized gains or losses are reported in the accumulated other comprehensive income section of stockholders' equity.

2.4 The estimation of the allowance for doubtful accounts affects both the valuation of accounts receivable on the balance sheet and the amount of bad debt expense recognized on the income statement. Changes in the allowance account relative to sales level and the amount of accounts receivable outstanding may be an indication that earnings quality is or is not being improved. For example, if a company expands sales by lowering its credit standards, then the allowance account should also be expanded if a quality earnings figure is to be reflected.

2.5 Inventories are a significant proportion of the asset structure for most firms (service firms are an exception). The inventory accounting method used will impact the valuation of inventories on the balance sheet and also the cost of goods sold expense on the income statement. If the valuation method is not realistic, the ending inventory and earnings figure will be distorted.

2.6 Although LIFO generates a larger cost of goods sold expense and lower earnings in a period of inflation, the tax benefits may outweigh the costs of reporting a lower earnings figure. Use of LIFO reduces a firm's taxable income and, thus, the firm saves in terms of actual cash, not just paper figures.

2.7 The FIFO method of inventory valuation will produce an inventory valuation closest to current cost because the first goods purchased are assumed sold, therefore, the last goods are included in ending inventory and will be closest to current cost.

2.8 The straight-line method of depreciation spreads the expense evenly by periods, while the accelerated methods yield higher depreciation expense in the early years of an asset's life and lower expense in the later years. Use of an accelerated method for tax reporting tends to defer tax liabilities for firms which invest heavily in depreciable assets. For reporting purposes, straight-line depreciation will yield a higher earnings figure in the early years and will also distribute expense recognition smoothly.

2.9 Listing the account "Commitments and contingencies" on the balance sheet will draw attention to the fact that the firm has disclosures in the notes to the financial statements about contractual agreements and potential liabilities the firm has that may have a significant financial impact on the firm in the future.

2.10 The retained earnings account is the measurement of all undistributed earnings. The account does not represent cash in any way. A company can have positive retained earnings and have a zero cash balance.

2.11

	Tax Purposes	Reporting Purposes
Revenue	\$800,000	\$800,000
Expenses	<u>550,000</u>	<u>480,000</u>
Earnings before Taxes	\$250,000	\$320,000
Tax Expense (34%)	<u>85,000</u>	<u>108,800</u>
Net Income	\$165,000	\$211,200
Reported Tax Expense	\$108,800	
Actual Taxes Paid	<u>(85,000)</u>	
Deferred Tax Liability	\$23,800	

2.12 Treasury stock is shown as a reduction of shareholders' equity. (Most companies use the cost method rather than the par value method to account for treasury stock, so the cost of the treasury stock is deducted.) The number of shares acquired for treasury is deducted from the number of shares outstanding used to compute earnings per share; thus a firm can increase earnings per share by purchasing treasury stock.

2.13

	Change from 2011 to 2012
Net revenues	2.1%
Total accounts receivables	2.5%
Allowance for doubtful accounts	(59.8%)

Allowance account as a percentage of receivables:

	<u>Allowance for doubtful accounts</u> Net Receivables + Allowance	Percentage of Receivables
2012	<u>\$1,206</u> \$93,233 + \$1,206	1.28%
2011	<u>\$3,001</u> \$89,135 + \$3,001	3.26%

As revenues have increased at ABC, Inc., receivables have also increased. This is an expected pattern; however, it is unusual for the allowance account to decrease. The allowance account as a percentage of total accounts receivables indicates that the management at ABC believes that a higher percentage of receivables will be collected compared to prior years as evidenced by the drop in the allowance/accounts receivables ratio from 3.26% to 1.28%. The analyst would want to explore the reason for this change. The valuation schedule indicates that actual write-offs for the firm are increasing each year. It is noteworthy that even though the actual write-offs are increasing, the dollar amount of the write-offs is significantly less than the estimated amount the firm has recorded as potential bad debt in the allowance account. If ABC expected significant customer defaults, this information should be disclosed in the notes to the financial statements. It is possible that the management at ABC unintentionally overestimated the allowance account in 2009 and 2011; however, it is also possible the firm is using the allowance account as a way to manipulate net income. By overestimating one year, the firm can correct the error in a later year by reducing the allowance account and causing an increase to net income. The credits (negative charges) to the bad debt expense account in 2010 and 2012 would result in higher net income in those years, while the charge to the bad debt expense account in 2011 would lower net income. The volatile pattern of charges when actual write-offs are trending upward is suspicious. In addition, if actual write-offs continue to increase in 2013, the current balance of \$1,206 thousand may be inadequate.

2.14 (a) Information to be used for all methods of inventory valuation:

	<u>Units x Cost = Total</u>
Beginning inventory	600 x \$10 = \$ 6,000
Purchase	1,000 x 11 = 11,000
Purchase	900 x 12 = 10,800
Purchase	<u>700 x 14 = 9,800</u>
Total	3,200 \$37,600

Sales for the year = 1,900 units

Ending inventory = 3,200 - 1,900 = 1,300 units

Weighted average cost per unit:

$$\frac{\$37,600}{3,200} = \$11.75$$

COGS = \$11.75 x 1,900 units = \$22,325

EI = \$11.75 x 1,300 units = \$15,275

Total goods available for sale = \$37,600

FIFO

COGS:

600@\$10 = \$ 6,000
 1,000@\$11 = \$11,000
300@\$12 = \$ 3,600
1,900 units \$20,600

EI:

600@\$12 = \$ 7,200
700@\$14 = \$ 9,800
1,300 units \$17,000

Check answer: COGS \$20,600
 +EI 17,000
 Total goods available \$37,600

LIFO

COGS:

700@\$14 = \$ 9,800
 900@\$12 = \$10,800
300@\$11 = \$ 3,300
1,900 units \$23,900

EI:

600@\$10 = \$ 6,000
700@\$11 = \$ 7,700
1,300 units = \$13,700

Check answer: COGS \$23,900
 +EI \$13,700
 Total goods available \$37,600

(b) FIFO

(c) LIFO

(d) During inflationary periods, LIFO assumes the last goods purchased have been sold and the first goods purchased remain in ending inventory, therefore, LIFO produces an understated inventory valuation on the balance sheet but a currently valued cost of goods sold on the income statement, matching current

costs with current revenues; FIFO which assumes the first goods purchased have been sold and the last goods purchased remain in ending inventory results in a currently valued balance sheet inventory but an understated cost of goods sold expense and thus an overstatement of net income; average cost falls in between LIFO and FIFO.

2.15 (a) Information to be used for all methods of inventory valuation:

	<u>Units x Cost = Total</u>
Beginning inventory	10,000 x \$3.00 = \$ 30,000
January 10 purchase	4,000 x 3.50 = 14,000
April 25 purchase	10,000 x 4.00 = 40,000
July 10 purchase	6,000 x 4.50 = 27,000
October 15 purchase	<u>8,000</u> x 5.00 = <u>40,000</u>
Total	38,000 \$151,000

Sales for the year = 8,000 + 11,000 + 3,000 + 9,000 = 31,000 units

Ending inventory = 38,000 - 31,000 = 7,000 units

FIFO

COGS:

10,000@\$3.00 = \$ 30,000
 4,000@\$3.50 = \$ 14,000
 10,000@\$4.00 = \$ 40,000
 6,000@\$4.50 = \$ 27,000
1,000@\$5.00 = \$ 5,000
31,000 units \$116,000

EI:

7,000@\$5.00 = \$35,000

Check answer: COGS \$116,000
 +EI 35,000
 Total goods available \$151,000

LIFO (periodic)

COGS:

8,000@\$5.00 = \$ 40,000
 6,000@\$4.50 = \$ 27,000
 10,000@\$4.00 = \$ 40,000
 4,000@\$3.50 = \$ 14,000
3,000@\$3.00 = \$ 9,000
31,000 units \$130,000

EI:

7,000@\$3.00 = \$21,000

Check answer: COGS \$130,000
 +EI 21,000
 Total goods available \$151,000

LIFO (perpetual)

COGS:

Jan. 1 - Mar.31

$$4,000 @ \$3.50 = \$14,000$$

$$4,000 @ \$3.00 = \$12,000$$

Apr. 1 - Jun. 30

$$10,000 @ \$4.00 = \$40,000$$

$$1,000 @ \$3.00 = \$ 3,000$$

Jul. 1 - Sept. 30

$$3,000 @ \$4.50 = \$13,500$$

Oct. 1 - Dec. 31

$$8,000 @ \$5.00 = \$40,000$$

$$1,000 @ \$4.50 = \$ 4,500$$

Total COGS = \$127,000

EI:

Mar. 31

$$6,000 @ \$3.00 = \$18,000$$

Jun. 30

$$5,000 @ \$3.00 = \$15,000$$

Sept. 30

$$5,000 @ \$3.00 = \$15,000$$

$$3,000 @ \$4.50 = \$13,500$$

Dec. 31

$$5,000 @ \$3.00 = \$15,000$$

$$2,000 @ \$4.50 = \$ 9,000$$

EI = \$24,000

Check answer: COGS + EI = \$127,000 + \$24,000 = \$151,000

Average Cost per unit:

$$\frac{\$151,000}{38,000} = \$3.97$$

$$\text{COGS} = \$3.97 \times 31,000 \text{ units} = \$123,070$$

$$\text{EI} = \$151,000 - \$123,070 = \$ 27,930$$

(b) LIFO produces an understated inventory valuation on the balance sheet but a currently valued cost of goods sold on the income statement, matching current costs with current revenues; FIFO results in a currently valued balance sheet inventory but an understated cost of goods sold expense and thus an overstatement

of net income; average cost falls in between LIFO and FIFO and is a good choice for companies with volatile inventories.

2.16

(a) FIFO is probably used for the rest of Chemco's inventories. Companies using LIFO must disclose the value of those inventories as if FIFO had been used, which Chemco has done in this case.

(b) Finished goods includes inventories that are complete and ready for sale. Work in process is comprised of inventories currently in the manufacturing process, but not yet complete. Raw materials and supplies have not been put in the manufacturing process. The amount closest to current cost would be the FIFO inventory value. Under FIFO, the first goods purchased are assumed sold, so the last goods purchased would be included in the inventory valuation and would have been purchased at amounts closest to current costs. The LIFO valuation reduction is a result of the impact of inflation on inventory values. Since the first goods purchased using LIFO remain in inventory, LIFO inventories would be valued at a lower amount than FIFO inventories during an inflationary period. Chemco's inventories are lower in 2012, (\$447,866) than they would have been if reported using FIFO (\$531,695).

$$2.17 \quad (a) \quad \frac{\$60,000}{5} = \$12,000 \text{ per year}$$

$$(b) \quad \begin{array}{ll} \text{Year 1} & \$60,000 \times 2/5 = \$24,000 \\ \text{Year 2} & (\$60,000 - \$24,000) \times 2/5 = \$14,400 \end{array}$$

2.18 Using the equation from Chapter 2, the calculations to determine dividends are as follows:

$$\begin{array}{ccccccc} \text{Beginning} & & & & & & \text{Ending retained} \\ \text{retained earnings} & + & \text{net income} & - & \text{dividends} & = & \text{earnings} \end{array}$$

2008	700	+	250	-	60	=	890
2009	890	+	225	-	70	=	1,045
2010	1,045	+	40	-	75	=	1,010

2.19

Chester Co.

Balance Sheet at December 31, 20XX

Assets

Current Assets

Cash	\$1,500
Accounts receivable	6,200
Inventory	12,400
Prepaid expenses	<u>700</u>

Total Current Assets

\$20,800

Property, plant and equipment

34,000

Less accumulated depreciation

(10,500)

Property, plant and equipment, net

\$23,500

Land held for sale

9,200

Total Assets

\$53,500

Liabilities and stockholders' equity

Current liabilities

Accounts payable	\$4,300
Notes payable	8,700
Accrued interest payable	1,400
Current portion of long-term debt	<u>1,700</u>

Total current liabilities

\$16,100

Deferred taxes payable

1,600

Bonds payable

14,500

Total liabilities

\$32,200

Stockholders' equity

Common stock	2,500
Additional paid-in capital	7,000
Retained earnings	<u>11,800</u>

Total stockholders' equity	<u>21,300</u>
Total liabilities and stockholders' equity	<u>\$53,500</u>

2.20

Liz,

The reason that Tom thinks the debt structure of ShopWorld is risky and has calculated the debt ratio of the firm to be 76% has to do with the fact that ShopWorld is leasing a significant amount of fixed assets. When a firm chooses to lease property and equipment, the accounting rules require firms to record these leases as either an operating lease, a rental agreement, or a capital lease which is treated like purchasing the asset on credit. Capital leases cause the firm to record both an asset and a liability on the balance sheet, however, operating leases are merely disclosed in notes to the financial statements.

Since Tom realizes that ShopWorld is legally obligated to make payments on the operating leases for the duration of the lease, he has treated these amounts as an obligation or debt and added those amounts to the balance sheet numbers for debt. The amount that Tom added to the total liabilities on the balance sheet is the "Total future minimum lease payments" of \$4,863 for the operating leases. ShopWorld's capital lease obligations are already included in the liabilities on the balance sheet.

Companies with debt of 76% are generally considered risky since this means the firm is financed with 76% debt and 24% from equity sources such as sales of stock or retained earnings. The higher the debt, the higher the chance of bankruptcy and the less chance the firm will be able to borrow more funds if needed.

Your friend,

XXXXXX

2.21 There is no solution presented here since a variety of companies may be used for this problem. Assigning specific companies will allow instructors to review answers in the class as a whole.

2.22 There is no solution presented here since a variety of industries may be used for this problem. Assigning specific industries will allow instructors to review answers in the class as a whole.

Case 2.1

(a)

**INTEL
Common Size Balance Sheet**

	<u>2007</u>	<u>2006</u>
Assets:		
Current Assets		
Cash and equivalents	9%	8%
Short-term investments	18	10
Trading assets	8	9
A/R	5	4
Inventories	6	6
Deferred tax assets	2	2
Other current assets	<u>2</u>	<u>1</u>
Total current assets	50%	40%
Property, plant and equipment, net	28%	33%
Marketable equity securities	2	1
Other long-term investments	5	8
Goodwill	7	8
Other long-term assets	<u>8</u>	<u>10</u>
Total Assets	<u>100%</u>	<u>100%</u>

	<u>2010</u>	<u>2009</u>
Liabilities:		
Current liabilities		
Short-term debt	--%	--%
A/P	4	4
Accrued compensation and benefits	4	5
Accrued advertising	2	1
Deferred income on shipments to distributor	1	1
Other accrued liabilities	<u>4</u>	<u>3</u>
Total current liabilities	15%	14%
Long-term income tax payable	--	--
Long-term debt	3	4
Deferred tax liabilities	1	1
Other long-term liabilities	<u>2</u>	<u>2</u>
Total liabilities	21%	21%
Stockholders' equity		
Common stock	26	28
Accumulated. other comprehensive income	1	1
Retained earnings	<u>52</u>	<u>50</u>
Total stockholders' equity	<u>79%</u>	<u>79%</u>
Total liabilities & stockholders' equity	<u>100%</u>	<u>100%</u>

(b) The current assets of Intel include cash, short-term investments, trading assets, accounts receivable, inventories, deferred tax assets and other current assets. Long-term assets are composed of property, plant and equipment, marketable equity securities, long-term investments, goodwill, and an other assets account. The most significant assets to the company are cash and short-term investments, property, plant and equipment, long-term investments (including other long-term assets which include investments) and goodwill.

Trading assets and available-for-sale investments are reported at fair value. Non-marketable equity securities are accounted for at historical cost, or, if Intel has significant influence over the investee the equity method is used. Inventories are valued using current average or FIFO. Straight-line depreciation is used for depreciating property, plant and equipment for financial reporting purposes.

Other items learned from the notes about asset accounts include information about Intel's many investments, derivative financial instruments, a break-down of the inventory account into raw materials, work in process and finished goods, detail of the property, plant and equipment account, the estimated useful lives of plant and equipment, goodwill, and other intangible assets.

The asset structure has changed. Current assets have increased 10% overall, while long-term assets have decreased by that amount. In particular, short-term investments more than doubled in dollar amount and increased from 10 to 18% of total assets. The changes in long-term assets consist of a 5% decline in the net property, plant and equipment account and a 5% decline in the other long-term investments accounts. The decline in the property, plant and equipment account is a result of the large increase in dollars in the short-term investment account as property, plant and equipment has actually increased in dollars.

(c) Allowance account as a percentage of accounts receivable:

	<u>Allowance for doubtful accounts</u> Net Receivables + Allowance	Percentage of Receivables
2010	$\frac{\$28}{\$2,867 + \$28}$	0.97%
2009	$\frac{\$19}{\$2,273 + \$19}$	0.83%
	Change from 2009 to 2010	
Sales	24.2%	
Total accounts receivable	26.3%	
Allowance for doubtful accounts	47.4%	

As sales have increased both the accounts receivable and the allowance for doubtful accounts have also increased. This is a normal pattern. Looking at the valuation and qualifying accounts schedule in Intel's Form 10-K (page 111) it appears that Intel's allowance account balance was more than adequate in 2008 and 2009. In 2010, Intel did not have any write-offs of bad debt yet increased the allowance account by \$9 million. Intel may be anticipating customer defaults in 2011, but in 2008 and 2009, a recessionary period, Intel did a good job collecting on accounts receivable with minimal write-offs. It is also possible that Intel overestimated the account with the intention of later reducing it to improve the net income number.

It is noteworthy that Intel's two largest customers account for 38% of net revenues and 44% of accounts receivable in 2010. Should one of these customers default this would negatively impact Intel. In addition, if one of these customers takes their business elsewhere that would be highly detrimental to Intel's sales and ultimate

profit. Intel believes that their two largest customers are low risk with regard to collection on their accounts based on historical experience. Since Dell and Hewlett-Packard are Intel's two largest customers (page 8 of Form 10-K), this is probably a good assumption.

(d) Intel has the typical liabilities found on most companies' balance sheets: short-term debt, accounts payable, accrued liabilities, deferred income, income taxes payable, long-term debt and deferred tax liabilities. No one liability account is significant. In 2009 and 2010, 21% of the capital structure is debt, while 79% is equity. There have been no significant changes to the debt and equity structure.

(e) Intel has commitments for operating leases and is committed to pay \$327 million in the future (2011 and thereafter). The company has also committed to construct or purchase \$4.6 billion of property, plant and equipment. Other commitments of \$600 million include licenses, purchases of raw materials and non-contingent funding obligations. (Note 23 of Form 10-K)

Contingencies are comprised of legal proceedings including significant challenges filed by AMD and others to the company's competitive practices. The European Commission (EC) imposed a \$1.447 billion fine on Intel in 2009 that Intel has paid; however, Intel has appealed the EC's decision and the EC is expected to rule in 2012. Intel anticipates these challenges will continue for a number of years and may require substantial financial resources and management time to defend their position. (Note 29 of Form 10-K)

(f) Deferred taxes are included under current assets, non-current assets and non-current liabilities. Share-based compensation is the most significant component of deferred taxes.

(g) Intel has the following equity accounts: Preferred stock, Common stock, Accumulated other comprehensive income and Retained earnings.

Case 2.2

Clear

Avnet (AVT / NYSE) Annual Consolidated Balance Sheet

Amounts Rounded to : Thousands

Edit

Results as of
Jul 3, 2010 Jun 27, 2009

ASSETS

Current Assets:

Cash and cash equivalents	\$ 1,092,102	\$ 943,921
Short-term investments		
Total cash and short-term investments	1,092,102	943,921
Accounts receivable, net	3,574,541	2,618,697
Inventories, net	1,812,766	1,411,755
Current deferred taxes		
Other current assets	150,759	169,879
Total current assets	6,630,168	5,144,252
Property, plant, and equipment	844,173	876,357
Less: accumulated depreciation	541,590	570,675
Net property, plant, and equipment	302,583	305,682
Long-term investments		
Goodwill, net	566,309	550,118
Other intangibles, net		
Other deferred taxes		
Other assets	283,322	273,464
Total assets	\$ 7,782,382	\$ 6,273,516

LIABILITIES

Current Liabilities:

Accounts payable	\$ 2,862,290	\$ 1,957,993
Short-term debt	36,549	23,294
Current portion of long-term debt		
Accrued liabilities	440,354	437,312
Income taxes payable	100,422	37,261
Other current liabilities		
Total current liabilities	3,439,615	2,455,860
Long-term debt	1,243,681	946,573
Deferred income taxes payable		
Other deferred liabilities		
Other liabilities	89,969	110,226
Total liabilities	4,773,265	3,512,659

Minority interest

STOCKHOLDERS' EQUITY

Preferred stock		
Common stock, par value plus additional paid-in capital	1,358,006	1,329,623
Retained earnings (accumulated deficit)	1,624,441	1,214,071
Treasury stock	(692)	(931)
Accumulated other comprehensive income (loss)	27,362	218,094
Other stockholders' equity		
Total stockholders' equity	3,009,117	2,760,857
Total liabilities and stockholders' equity	\$ 7,782,382	\$ 6,273,516

Avnet (AVT / NYSE)

Annual Common Size Balance Sheet

Summary percentages in *italics* will not foot due to rounding

	Results as of	
	Jul 3, 2010	Jun 27, 2009
ASSETS		
Current Assets:		
Cash and cash equivalents	14.0%	15.0%
Short-term investments	0.0%	0.0%
Total cash and short-term investments	14.0%	15.0%
Accounts receivable, net	45.9%	41.7%
Inventories, net	23.3%	22.5%
Current deferred taxes	0.0%	0.0%
Other current assets	1.9%	2.7%
Total current assets	85.2%	82.0%
Property, plant, and equipment	10.8%	14.0%
Less: accumulated depreciation	7.0%	9.1%
Net property, plant, and equipment	3.9%	4.9%
Long-term investments	0.0%	0.0%
Goodwill, net	7.3%	8.8%
Other intangibles, net	0.0%	0.0%
Other deferred taxes	0.0%	0.0%
Other assets	3.6%	4.4%
Total assets	100.0%	100.0%
LIABILITIES		
Current Liabilities:		
Accounts payable	36.8%	31.2%
Short-term debt	0.5%	0.4%
Current portion of long-term debt	0.0%	0.0%
Accrued liabilities	5.7%	7.0%
Income taxes payable	1.3%	0.6%
Other current liabilities	0.0%	0.0%
Total current liabilities	44.2%	39.1%
Long-term debt	16.0%	15.1%
Deferred income taxes payable	0.0%	0.0%
Other deferred liabilities	0.0%	0.0%
Other liabilities	1.2%	1.8%
Total liabilities	61.3%	56.0%
Minority interest	0.0%	0.0%
STOCKHOLDERS' EQUITY		
Preferred stock	0.0%	0.0%
Common stock, par value plus additional paid-in capital	17.4%	21.2%
Retained earnings (accumulated deficit)	20.9%	19.4%
Treasury stock	0.0%	0.0%
Accumulated other comprehensive income (loss)	0.4%	3.5%
Other stockholders' equity	0.0%	0.0%
Total stockholders' equity	38.7%	44.0%
Total liabilities and stockholders' equity	100.0%	100.0%

(b) The overall structure of Avnet's balance sheet is relatively stable from 2009 to 2010. All asset and liability accounts have increased in dollars with the exception of property, plant and equipment, prepaid and other current assets and other long-term liabilities. Due to the 24% growth in total assets some accounts have decreased as a percentage of total assets even though the account may have increased in dollars.

Current assets make up over 85% of total assets with accounts receivable and inventories being the most significant assets. Both of these accounts increased from 2009 to 2010 causing a 3.2% increase in current assets. This increase was offset by a decline in property, plant and equipment as well as a percentage decline in goodwill and other assets. Based on information in Note 5 of the Form 10-K, Avnet has disposed of buildings and equipment.

Current liabilities, in particular, accounts payable, are more significant than long-term liabilities. This is to be expected as Avnet should finance its current assets, including accounts receivable and inventories, with accounts payable. Long-term debt is the most significant noncurrent liability. Both accounts payable and long-term debt have increased. Long-term debt should be used to finance long-term assets and it appears that Avnet has borrowed \$300 million (see Note 7) in order to finance the acquisition of Bell Microproducts subsequent to the 2010 fiscal year (See Acquisitions under Item 1 of the Avnet Form 10-K).

Stockholders' equity has increased in dollars due to increases in retained earnings and paid-in capital accounts. The percentage decline of total stockholders' equity is a result of the liabilities increasing at a faster rate than equity as well as the actual decline in accumulated other comprehensive income which has dropped by 3.1%. The increase in retained earnings is most likely the result of increased net income which is a positive sign.

Avnet's balance sheet structure is appropriate for a distributor and no red flags are apparent from analyzing the balance sheet.

Case 2.3

1.

Logitech International S.A. Common Size Balance Sheet March 31, 2010 and 2009

ASSETS	<u>2010</u>	<u>2009</u>
Current assets:		
Cash and cash equivalents	20%	35%
Short-term investments	--	--
Accounts receivable	12	15
Inventories	14	16
Other current assets	<u>4</u>	<u>4</u>
Total current assets	50%	70%
Property, plant and equipment	6	8
Goodwill	34	17
Other intangible assets	6	2
Other assets	<u>4</u>	<u>3</u>
Total assets	<u>100%</u>	<u>100%</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable	16%	11%
Accrued liabilities	<u>11</u>	<u>9</u>
Total current liabilities	27%	20%
Other liabilities	<u>10</u>	<u>10</u>
Total liabilities	<u>37%</u>	<u>30%</u>
Shareholders' Equity		
Shares, par value	2%	2%
Additional paid-in capital	1	3
Shares in treasury, at cost	(24)	(24)
Retained earnings	88	94
Accumulated other comprehensive loss	<u>(4)</u>	<u>(5)</u>
Total shareholders' equity	<u>63%</u>	<u>70%</u>
Total liabilities and shareholders' equity	<u>100%</u>	<u>100%</u>

2. The asset structure of Logitech has changed significantly from 2009 to 2010. Current assets have decreased from 70% to 50% of total assets with corresponding increases in long-term assets. The most significant current assets of the company are cash and cash equivalents, accounts receivable and inventories. Goodwill is the most significant long-term asset. Most of the decline is a result of the cash account decreasing, although accounts receivable and inventories have declined by 3% and 2%, respectively. It is probable that cash was used to acquire LifeSize and TV Compass. A significant amount of goodwill and intangible assets was recorded in 2010 as a result of the acquisitions explaining the shift in asset structure from short-term to long-term assets.

The debt structure changed, although less significantly than the asset structure. Current liabilities are 7% higher in 2010 relative to total assets compared to 2009. The increase in the accounts payable and accrued liabilities could be a result of having acquired two companies; however, this is inconsistent with the fact that accounts receivable and inventories decreased.

The equity structure has only changed because of the changes in the debt structure. The retained earnings account is significant at 88% of total assets in 2010. Even though the percentage of retained earnings relative to total assets decreased from 94% in 2009 to 88% in 2010 retained earnings increased in dollar amount.

3. Allowance account as a percentage of accounts receivable:

	<u>Allowance for doubtful accounts</u> Net Receivables + Allowance	Percentage of Receivables
2010	$\frac{\$5,870}{\$195,247 + \$5,870}$	2.9%
2009	$\frac{\$6,705}{\$213,929 + \$6,705}$	3.0%
	Change from 2009 to 2010	
Sales	(11.0%)	
Total accounts receivable	(8.8%)	

Allowance for doubtful accounts (12.5%)

Sales, accounts receivable and the allowance for doubtful accounts have all decreased in 2010, a normal pattern. The valuation schedule shows a completely different picture when looking at actual write-offs and charges to bad debt expense over the three year period from 2008 to 2010. Actual write-offs have decreased each year. In 2009 Logitech increased the allowance account by \$5,102 thousand even though write-offs in 2009 were only \$894 thousand. A slight reduction of the allowance account occurred in 2010. There are no disclosures in the excerpts that discuss why the firm believes there should have been such a large increase to the account. Possible explanations are that the firm may have unintentionally overestimated the allowance account based on projected customer defaults from the acquisitions in 2009 or could be intentionally manipulating the account. If Logitech credits the allowance account in the future to reduce the balance, this will result in higher net income in the year of the reduction.

4. The FIFO method is used to value inventory. Since the last goods purchased would still be in inventory, this method does reflect current cost of inventory on the balance sheet.

5. Logitech operates in the high-tech industry which is generally a deflationary industry; therefore, the firm should realize tax savings as the first goods sold under FIFO would be the oldest and higher priced products resulting in lower net income.

6. Logitech discusses the following commitments and contingencies in the notes to the financial statements (all amounts in millions):

• Future minimum operating lease payments	\$ 46.7
• Purchase commitments	12.9
• Inventory purchase commitments	183.6
• Consulting, marketing and advertising commitments	33.3

Logitech also has lawsuits, guarantees, indemnifications, letters of credit and potential performance-based payments as a result of an acquisition which may require payments in the future. The maximum possible payments for all these items are \$106.4 million of which \$7.9 million is currently outstanding.

The operating lease payments and commitments total \$276.5 amounts to another 17% of obligations relative to total assets. This makes Logitech riskier than the balance sheet indicates.

7. The change in retained earnings from 2009 to 2010 is \$64,957 thousand which is the amount of net earnings for the year. This means that Logitech has not paid any dividends.

8. Logitech has a large balance in their cash and cash equivalents account. It appears the firm is expanding through acquisitions. Currently the firm has no long-term debt and the retained earnings of the firm is significant and increasing.

9. Investors and creditors would be concerned about the large amounts paid for goodwill related to acquisitions. Goodwill now makes up 34% of total assets, a significant, amount for an item that may be written off as impaired in the future if the acquisitions do not deliver above average earnings. The firm has acquired several firms in 2009 and 2010 which would imply that sales and earnings should rise; however, sales and earnings have declined 17% and 72%, respectively, from 2008 to 2010.

10. Investors and creditors would want to look at all other financial statements, the notes to the financial statements, the management discussion and analysis, the auditor's report and stock price information. SEC documents, Form 10-K, Form 10-Q and Form 8-K reports, would be a good source of both financial and nonfinancial information. Financial information of competitors would be useful for comparison purposes. Nonfinancial information from newspapers and periodicals would also be useful. In particular, investors and creditors would want to further investigate the details of the acquisitions made by Logitech.

Case 2.4 1. Walgreen Co. and Subsidiaries
Common Size Balance Sheet

	August 31,	
	<u>2010</u>	<u>2009</u>
Assets		
Current Assets:		
Cash and cash equivalents	7%	8%
Short-term investments	--	2
Accounts receivable, net	9	10
Inventories	28	27
Other current assets	<u>1</u>	<u>1</u>
Total Current Assets	<u>45%</u>	<u>48%</u>
Non-Current Assets		
Property and equipment, at cost less accumulated depreciation and amortization	43	43
Goodwill	7	6
Other non-current assets	<u>5</u>	<u>3</u>
Total Non-Current Assets	<u>55%</u>	<u>52%</u>
Total Assets	<u>100%</u>	<u>100%</u>
Liabilities and Shareholders' Equity		
Current Liabilities		
Short-term borrowings	--%	--%
Trade accounts payable	17	17
Accrued expenses and other liabilities	11	10
Income taxes	--	--
Total Current Liabilities	<u>28%</u>	<u>27%</u>
Non-Current Liabilities		
Long-term debt	9%	9%
Deferred income taxes	1	1%
Other non-current liabilities	<u>7</u>	<u>6</u>
Total Non-Current Liabilities	<u>17%</u>	<u>16%</u>
Total Liabilities	<u>45%</u>	<u>43%</u>
Shareholders' Equity		
Common stock	--%	--%
Paid-in capital	3	3
Employee stock loan receivable	--	(1)
Retained earnings	64	61
Accumulated other comprehensive (loss) income	--	--
Treasury stock, at cost	<u>(12)</u>	<u>(6)</u>
Total Shareholders' Equity	<u>55%</u>	<u>57%</u>

Total Liabilities and Shareholders' Equity	<u>100%</u>	<u>100%</u>
--	-------------	-------------

2. Inventories are the most significant current asset and property and equipment is the most significant noncurrent asset. The proportion of inventories seems appropriate since the industry average relative to total assets, according to Exhibit 2.4 in the textbook, is 32.6% and Walgreen's inventories are 28% of total assets. Walgreen's property and equipment make up 43% of total assets while the industry average, according to Exhibit 2.5 in the textbook, is 12.4%.

3. Walgreen uses the LIFO method of inventory valuation. The notes to the financial statements explain that inventories would have been recorded at a higher amount if the FIFO method of inventory had been used. This implies that inflation has occurred since under FIFO, the most recent purchases would be recorded on the balance sheet, and under LIFO, the first purchases would be recorded on the balance sheet.

4. The majority of Walgreen's liabilities is current and includes accounts payable and accrued expenses. Long-term debt is 9% of total assets. The dollar amount of total liabilities is \$11,875 million, just under the amount of current assets. The level of risk appears to be low.

5. Walgreen most likely paid dividends in the amount of \$570 million calculated as follows:

Beginning retained earnings + net income – dividends = Ending retained earnings

$$\$15,327 + \$2,091 - \text{dividends} = \$16,848$$

6. Yes, Walgreen uses off-balance sheet financing in the form of operating leases. As of August 31, 2010, total minimum lease payments totaled \$36,790 million. This amount is larger than the total of Walgreen's assets.

7. Even though it appears from the balance sheet of Walgreen that the company may be creditworthy, reading the notes paints a much different picture. Off-balance sheet financing puts Walgreen at high risk. Operating leases are contractual obligations and, like debt, the firm must be able to make the lease payments or could be forced into bankruptcy. Without more information about the profitability of the firm and an assessment of how much cash they generate each year, the balance sheet and notes available suggest that Walgreen is a poor credit risk.