PART 3

Assets: A Closer Look

In a conference call with analysts, executives of Xerox Corporation discussed fourth quarter 2009 results, noting that earnings beat earlier estimates despite concerns about revenue levels. The company's CFO proudly reported, "Given the 2009 environment, we challenged our management teams around the world to manage cash as the number one priority. They did, and delivered cash from operations of almost $1 billion in the fourth quarter and $2.2 billion for the year versus a forecast of $1.7 billion. Achievements were where we wanted them to be, profit and working capital. Fourth quarter working capital improvements were $489 million and $758 million for the year. In addition, we managed CapEx [capital expenditures] to only $193 million for the year."

The key to success for Xerox and many other companies is their ability to efficiently manage assets—that is, have relatively low investments in receivables, inventories, and long-lived assets that produce large returns for the shareholders. Well-run companies get a lot of "bang for their buck." Part 3 of this textbook is devoted to managing and accounting for these assets.

CHAPTER 6
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CHAPTER 6

The Current Asset Classification, Cash, and Accounts Receivable

KEY POINTS

The following key points are emphasized in this chapter:

- Current assets, working capital, current ratio, and quick ratio, and how these measures are used to assess the solvency position of a company.

- "Window dressing" and the reporting of current assets, working capital, and the current ratio.

- Techniques used to account for and control cash.

- Accounts receivable and how they are valued on the balance sheet.

- The allowance method for uncollectible receivables.

- Major concerns of financial statement users in the area of receivables reporting.

The world revolves around credit. Companies sell goods and services on account, while banks allow homeowners to borrow a substantial portion of the purchase price of a house. These loans, or "receivables," appear on the balance sheet as assets, but nobody knows for sure when or if they will become cash. In 2008 and 2009, the excesses of home loans extended to "subprime" borrowers caused the downfall of many household names in the world of finance. Merrill Lynch and Countrywide Mortgage were purchased at distressed prices by Bank of America with the help of the U.S. government. Investment bank Bear Sterns was purchased "on the cheap" (according to *Business-Week*) by JPMorgan Chase; and the 158-year-old investment bank Lehman Brothers went out of business. These well-known and previously dominant firms all invested in securities backed by mortgage loan receivables from borrowers with poor credit histories. When housing prices dropped and economic forces pushed borrowers beyond their ability to make their monthly payments, the mortgage receivables became worthless, causing massive losses for investors. Investment firms that were not able to cover their dwindling assets ceased to exist and, for a time, threatened the viability of the financial markets and those who depend on available credit to run their businesses. Deciding when and to whom to extend credit, and then managing those receivables, are indeed important considerations for managers in today's business world.

This chapter is divided into four sections. Section 1 covers the current asset classification and the measures of solvency and liquidity that use current assets. The dollar amounts in the cash and accounts receivable accounts make up an important part of current assets and are therefore important components of these measures. Sections 2 and 3 consider the definitions, disclosure rules, and methods of accounting for cash and accounts receivable. The chapter concludes with managing receivables expressed in foreign currencies, and a discussion of the link between receivables management and return on equity.

THE CURRENT ASSET CLASSIFICATION

Current assets are so named because they are intended to be converted to cash (or consumed) in the near future. The exact definition of the near future is subjective, so the accounting profession has provided guidelines. According to professional standards, a **current asset** is defined as any asset that is intended to be converted into cash within one year or the company's **operating cycle,** whichever is longer.[1] As illustrated in Figure 6–1, a company's operating cycle is the time it takes the company to convert its cash to inventory (to purchase or manufacture inventory), sell the inventory, and collect cash from the sale. In other words, the operating cycle is the time required for a company to go through all the required phases of the production and sales process.

FIGURE 6–1
The operating cycle
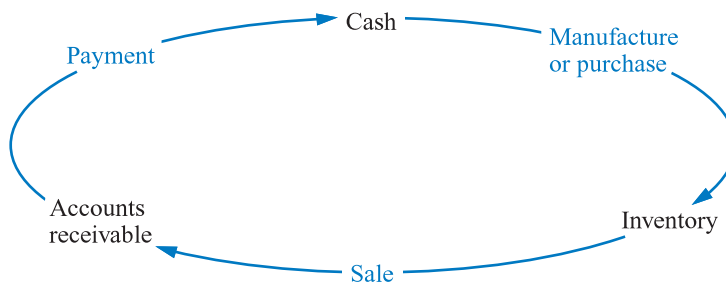
1. "Current Assets and Current Liabilities," *Accounting Research Bulletin No. 43, Restatement and Revision of Accounting Research Bulletin* (New York: American Institute of Accountants, 1953), Chapter 3A.

As the definition of current assets states, if the operating cycle is longer than one year, it serves as the time period for current assets. Companies with different operating cycles therefore use different time periods to define current assets. Compare, for example, the relatively short operating cycles of grocery chains like Safeway, Kroger, and Lucky Stores to the operating cycles of companies in the aerospace industry like The Boeing Company and Airbus, which require several years to manufacture aircraft. Indeed, the time periods for the current asset classification differ widely from company to company. However, the accounts included in the current asset section on the balance sheets of all companies are virtually the same. They are *cash, short-term investments, short-term accounts and notes receivable, inventories,* and *prepaid expenses.* The individual accounts that comprise the current asset classification were briefly discussed and illustrated in Chapter 2.

> **?** Discuss the differences in the operations and the operating cycles of Tommy Hilfiger, a clothing manufacturer; Toyota, an automobile manufacturer; Young & Rubicam, an advertising agency; and Yahoo!, an Internet portal.

The Relative Size of Current Assets across Industries

The relative size of current assets differs significantly across companies in different industries. Figure 6–2, which includes current assets as a percentage of total assets for selected well-known companies from various industries, shows that investment bank Goldman Sachs has a ratio of over 90 percent. In contrast, general services (AT&T and Wendy's) and manufacturing (GE and Chevron) are in the 10–30 percent range. The primary assets of financial services are short-term notes receivable and investments; the primary assets in the manufacturing and general services sectors tend to be property, plant, and equipment. Retailers, such as Kroger and Lowe's, carry relatively large

FIGURE 6–2

Current assets as a percentage of total assets

	Current Assets/Total Assets
MANUFACTURING:	
General Electric (Manufacturer)	0.16
Chevron Texaco (Oil drilling and refining)	0.23
RETAIL:	
Kroger (Grocery retail)	0.31
Lowe's (Hardware retail)	0.28
INTERNET:	
Yahoo! (Internet search engine)	0.26
Cisco (Internet systems)	0.65
GENERAL SERVICES:	
AT&T (Telecommunications services)	0.09
Wendy's/Arby's (Restaurant services)	0.08
FINANCIAL SERVICES:	
Bank of America (Banking services)	0.31
Goldman Sachs (Investment services)	0.97

amounts of inventory, and many of the Internet firms (Yahoo! and Cisco) have large cash and short-term investment balances.

Measures Using Current Assets: Working Capital, Current Ratio, and Quick Ratio

The distinction between current and noncurrent assets is useful because it provides an easy-to-determine, low-cost measure of a company's ability to produce cash in the short run. Current assets are often compared to current liabilities (the liabilities expected to require cash payments within the same time period as current assets) as an indicator of a company's solvency position.[2] Reasoning that current liabilities are a measure of short-run cash outflows, we find that these comparisons appear to be logical. Three such comparisons, which were discussed in Chapter 5, are working capital and two solvency ratios, the current ratio and the quick ratio. **Working capital** is defined as current assets less current liabilities; the **current ratio** is equal to current assets divided by current liabilities; and the **quick ratio** divides the sum of cash plus short-term investments plus short-term receivables by current liabilities.

Under IFRS the definition of current and the definition and use of working capital is the same as under U.S. GAAP. Many non-U.S. firms, however, include current assets at the bottom of assets on the balance sheet, and match them there against current liabilities.

Selected current ratio balances are presented in Figure 6–3. The variances are quite large—some well above 1.0 and others below 1.0. Internet companies, like Yahoo! and

FIGURE 6–3 Current assets as a percentage of current liabilities	Current Assets/Current Liabilities
MANUFACTURING:	
General Electric (Manufacturer)	0.50
Chevron (Oil drilling and refining)	1.14
RETAIL:	
Kroger (Grocery retail)	0.94
Lowe's (Hardware retail)	1.15
INTERNET:	
Yahoo! (Internet search engine)	1.41
Cisco (Internet systems)	3.24
GENERAL SERVICES:	
AT&T (Telecommunications services)	0.53
Wendy's/Arby's (Restaurant services)	0.76
FINANCIAL SERVICES:	
Bank of America (Banking services)	0.42
Goldman Sachs (Investment services)	1.31

2. Current liabilities were introduced and listed in Chapter 2 and are discussed extensively in Chapter 10.

Cisco, tend to carry large amounts of cash and short-term investments and rely very little on short-term debt financing. Lowe's current ratio is driven by hefty cash and short-term investment balances, a large inventory of hardware goods, and a low level of accounts payable. Large companies in the high-tech telecommunications industry (AT&T) invest heavily in property, plant, and equipment, financing these investments with both short- and long-term debt. Such companies can afford to carry low current ratios because their operations can generate cash flows sufficient to meet their short-term debt payments. Also, they carry little in the way of inventories or receivables.

> **?** Approximately three-quarters of RadioShack's total assets are considered current, while the same ratio for shopping mall owner Simon Property Group is only about 5 percent. Why?

The Economic Consequences of Working Capital, the Current Ratio, and the Quick Ratio

Managers must understand how transactions affect working capital, the current ratio, and the quick ratio because investors, bankers, and other lenders (e.g., bondholders) often use these measures to help assess a company's ability to meet current obligations as they come due. For example, Dun & Bradstreet, a widely used service that rates the creditworthiness of a large number of U.S. businesses, includes both the current ratio and the quick ratio as solvency measures in its list of fourteen key business ratios. Another of these key ratios, sales/working capital, is described as indicating whether a company has enough (or too many) current assets to support its sales volume. The formula used by Dun & Bradstreet to determine a company's credit rating, which in turn relates to the company's ability to borrow funds and the terms of its outstanding loans, includes these fourteen ratios.[3]

The measures of working capital and the current ratio also appear in loan contracts and debt covenants, where they specify certain minimum dollar amounts or ratios that a debtor company must maintain. For example, a recent financial report of Cummins Engine Company, a manufacturer of heavy-duty truck engines, indicated that loan agreements entered into by the company require maintenance of a 1.25 current ratio. This means that Cummins must maintain a current ratio of 1.25, or the creditor has the right to call for the immediate payment of the entire loan principal. Similarly, The Limited, which specializes in high-end clothing, has revolving credit agreements with a number of banks specifying that the company must maintain a certain level of working capital.

Working capital, the current ratio, and the quick ratio are also used by auditors. For example, an AICPA list of "red flags" alerting auditors to possible management fraud includes "inadequate working capital." The AICPA reasons that low amounts of working capital may put pressure on management to fraudulently manipulate the financial records in an effort to deceive shareholders, creditors, investors, and others. In addition, examining a company's working capital and current ratio can help an auditor assess whether there is substantial doubt about a company's ability to continue operations in the future. Information that helps to predict business failures is valuable to auditors because such failures lead to investor and creditor losses, which in turn can lead to costly lawsuits against auditors.

3. Many of the fourteen ratios were discussed in Chapter 5, but Dun & Bradstreet uses others as well.

Limitations of the Current Asset Classification

While working capital, the current ratio, and the quick ratio are used extensively in business to assess solvency, they have a number of inherent and significant weaknesses. These limitations are related to the fundamental fact that current assets and current liabilities fail to accurately reflect future cash inflows and outflows, the essence of a company's ability to meet its debts as they come due. As noted by Leopold A. Bernstein,

The current ratio is not fully up to the task [of assessing short-term liquidity] because it is a static or "stock" concept of what resources are available at a given moment to meet the obligations at that moment. Moreover, working capital . . . does not have a logical or causative relationship to the future funds which flow through it. The future flows are, of course, the focus of our greatest interest in the assessment of short-term liquidity. And yet, these flows depend importantly on elements not included in the current ratio, such as sales, profits, and changes in business conditions.[4]

In addition, management has incentives to choose accounting methods and make operating decisions for no reason other than to "cosmetically" inflate the balances in the current asset accounts. For example, Datapoint, a computer manufacturer, once was charged by the SEC with materially overstating its receivables and revenues. The company was apparently shipping computers without customer authorization and thereby recording sales and receivables prematurely. In three successive years General Electric made accounting changes, all of which affected working capital and reduced earnings in total by approximately $2 billion. Such actions can have a significant impact on solvency ratios, which in turn may affect the company's credit rating as well as determine whether a company is in violation of a loan contract or debt covenant.

From these examples, it is clear that managers have discretion over the accounts in the current asset section of the balance sheet and thus have some control over measures like working capital, the current ratio, and the quick ratio. Exercising such discretion to inflate these measures is often called **window dressing** and includes choosing accounting methods or making operating decisions designed solely to make the financial statements appear more attractive. Keep in mind, however, that while the practice of window dressing is widespread, it may not serve management's long-term interest. Managers who attempt to deceive by manipulating the dollar amounts on the financial statements risk reducing the credibility of the statements, which may actually hinder their ability to raise debt and equity capital.

? In a speech to the New York Center for Law and Business, Arthur Levitt, past chair of the SEC, commented that "earnings were like a bottle of fine wine; you wouldn't pop the cork before it was ready . . . but some companies are doing this with their revenue . . . recognizing it before a sale is complete." Explain how recognizing revenue before a sale is complete could be considered window dressing working capital.

A MOVEMENT TOWARD CASH FLOW ACCOUNTING

In view of these limitations, measures like working capital, the current ratio, and the quick ratio are rarely viewed as the only ways to assess solvency. Cash flow numbers have gained popularity as indicators of a company's ability to meet its debts as they come

4. Leopold A. Bernstein, "Working Capital as a Tool," *Journal of Accountancy* (December 1981), pp. 82, 84, 86.

due. The statement of cash flows, for example, which discloses the net cash flows from operating, investing, and financing activities, is also being used by investors and creditors to assess solvency. For example, Loyd C. Heath, an emeritus accounting professor at the University of Washington, states that "the emphasis in credit analysis has shifted from analysis of working capital position to dynamic analysis of future cash receipts and payments." A survey of investors published in *Management Accounting* notes that "investors use the statement of cash flows more, and the income statement less, than previously."

Nonetheless, solvency and liquidity measures based on the current asset classification are still important and widely used. Working capital, the current ratio, and the quick ratio are low-cost surrogates for cash flow measures and are still used extensively by investors and creditors and in loan contracts and debt covenants. It is important, therefore, that you as a manager understand how transactions affect these measures and how these measures can be used to assess solvency and earning power. As we move now into discussions of each individual current asset, keep in mind that the accounting methods and operating decisions that affect these assets also affect working capital, the current ratio, and the quick ratio.

? The Wendy's/Arby's Group carries a current ratio that is approximately 75 percent, with relatively little investments in cash, receivables, inventories, and prepaid expenses. Explain why Wendy's/Arby's is not in danger of going bankrupt even though its current liabilities far exceed its current assets.

CASH

The cash account is the first asset listed in the current asset section of the balance sheet. It consists of coin, currency, and checking accounts, as well as money orders, certified checks, cashier's checks, personal checks, and bank drafts received by a company. Remember also that cash is the standard medium of exchange and thus provides the basis for measuring all financial statement accounts.

Companies use a number of different titles to describe the cash account on their balance sheets. *Accounting Trends and Techniques* (2009) provided the summary contained in Figure 6–4 of the balance sheet captions of 600 of the largest companies in the United States. Note that the title *Cash* is decreasing in popularity, while *Cash and Equivalents* is becoming much more common.

FIGURE 6–4

Cash: Balance sheet captions

	2009	2008	2007	2006
Cash	22	29	36	35
Cash and cash equivalents	528	515	505	501
Cash and equivalents	34	37	34	32
Cash, including certificates of deposit or time deposits	2	2	1	2
Cash and marketable securities	13	14	21	25
No amount for cash	1	3	3	5
Total companies	600	600	600	600

Source: *Accounting Trends and Techniques* (2009).

The relative size of the cash account on the balance sheet varies across companies in different industries. Figure 6–5 reports that Yahoo!, Wendy's/Arby's, and Cisco carry relatively large amounts of cash. Yahoo! may be holding cash intended for acquisitions, while Cisco built up a cash reserve as protection during the recession Wendy's/Arby's has to keep its cash registers full.

FIGURE 6–5

Cash as a percentage of total assets and current assets

	Cash/Total Assets	Cash/Current Assets
MANUFACTURING:		
General Electric (Manufacturer)	0.06	0.39
Chevron (Oil drilling and refining)	0.06	0.26
RETAIL:		
Kroger (Grocery retail)	0.04	0.12
Lowe's (Hardware retail)	0.01	0.03
INTERNET:		
Yahoo! (Internet search engine)	0.12	0.47
Cisco (Internet systems)	0.08	0.13
GENERAL SERVICES:		
AT&T (Telecommunications services)	0.01	0.08
Wendy's/Arby's (Restaurant services)	0.02	0.24
FINANCIAL SERVICES:		
Bank of America (Banking services)	0.02	0.06
Goldman Sachs (Investment services)	0.02	0.02

Three issues concerning cash are particularly important to managers: (1) restrictions on the use of cash, (2) proper management of cash, and (3) control of cash.

Restrictions on the Use of Cash

In general, cash presents few problems from a reporting standpoint. There are no valuation problems because cash always appears on the balance sheet at face value. The only reporting issue is whether there are restrictions on its use.

Restrictions placed on a company's access to its cash are typically imposed by creditors to help ensure future interest and principal payments. As part of a loan agreement, for example, a creditor may require that a certain amount of cash be held in **escrow,** that is, controlled by a trustee until the debtor's existing liability is discharged. In addition, banks sometimes require that minimum cash balances be maintained on deposit in the accounts of customers to whom they lend money or extend credit. These amounts are called **compensating balances.**

Cash held in escrow and compensating balances are examples of cash amounts that a company may own but cannot immediately use. Such restricted cash should be separated from the general cash account on the balance sheet, and the restrictions should be clearly described either on the balance sheet itself or in the footnotes to the financial statements. If the restricted cash is to be used for payment of obligations maturing within the time period of current assets, the separate "restricted cash" account is appropriately classified as a current asset. If it is to be held for a longer period of time, it should be classified as noncurrent.

Owens Corning, for example, once noted in its financial report that $85 million, almost 96 percent of its $89 million cash balance, was restricted. Approximately $70 million was held in escrow, to be used in the following year for the payment of a long-term debt, and $15 million was temporarily "locked" in a Brazilian bank. That same year, Atlantic Richfield Company's financial report noted that "the company maintains compensating balances for some of its various banking services and products." Both Owens Corning and Atlantic Richfield included the restricted funds among their current assets. Manville Corporation, in its financial report, indicated that $278 million was placed in escrow in connection with bankruptcy proceedings. These funds were not included as current assets.

?   On its 2009 balance sheet, La-Z-Boy reported $17.3 million in "cash and equivalents" and $18.7 million in "restricted cash." Would you include both amounts in the calculation of working capital? Why or why not?

Proper Management of Cash

Proper cash management requires that enough cash be available to meet the needs of a company's operations, yet too much is undesirable because idle cash provides no return and loses purchasing power during periods of inflation. Maintaining a proper balance is one of management's greatest challenges. Enough cash must be available so that a company can meet its cash obligations as they come due. Purchases are often made in cash, and payments on accounts payable require cash. Wages, salaries, and currently maturing long-term debts must be honored in cash. Normally the cash needed for such operating activities is kept on the premises in the form of **petty cash** (small amounts of cash to cover day-to-day needs) or deposited in an interest-bearing checking account, where it earns a moderate rate of interest and can be withdrawn immediately as cash needs arise.

Cash in and of itself, however, is not a productive asset. Consider, for example, a popular TV game show that left $1 million under a plastic dome sitting out on the stage. The amount of annual interest income that was forgone by leaving that amount of cash idle, assuming a 10 percent interest rate, was $100,000 ($1,000,000 × 10%). Furthermore, during inflationary times, cash continually loses purchasing power. Assuming a 5 percent annual rate of inflation, it would require $1.05 million at the end of a year to buy the same goods and services that could have been purchased with $1 million at the beginning of the year. Consequently, cash over and above the amount needed for operations should be returned to shareholders as dividends or invested in income-producing assets such as short-term investments, inventories, long-term investments, property, plant, and equipment, and intangible assets.

A company that maintains a cash balance of more than is necessary for its day-to-day needs is not operating at its full potential. It is, of course, a desirable practice to keep a little extra in the checking account to meet unforeseen cash requirements, but in general, cash in excess of the amount necessary to cover day-to-day cash obligations should be invested in assets that produce a higher return. Determining this amount and where to invest the excess is a very important concern of a company's managers. Andrew Long, head of global payments and cash management for Asia Pacific, once noted, "If you are a treasurer of a company, one of the key concerns is managing cash."

? In the same article in *Business Times*, Andrew Long notes that "cash management can cover a whole range of things." What does he mean?

Control of Cash

The control of cash is an important responsibility of a company's accounting system. It is a special concern for businesses such as grocery stores, movie theaters, restaurants, financial institutions, retail stores, department stores, and bars, which process frequent cash transactions. Two aspects of the control of cash are record control and physical control.

RECORD CONTROL OF CASH

Record control refers to the procedures designed to ensure that the cash account on the balance sheet reflects the actual amount of cash in the company's possession. Problems of record control arise when many different kinds of transactions involve cash, and it is difficult to record them all accurately. Proper control of cash records requires that all cash receipts and disbursements be faithfully recorded and posted. Periodically, the dollar amount of cash indicated in the cash account in the ledger should be checked against and reconciled with the cash balance indicated on the statement provided by a company's bank.

PHYSICAL CONTROL OF CASH

Physical control of cash refers to the procedures designed to safeguard cash from loss or theft. Problems of physical control arise because cash is the standard medium of exchange; it is universally desired and easily concealed and transported. Cash embezzlement by a company's employees is always a threat. Separation of duties is an important part of a well-controlled system. It requires that employees responsible for recording cash transactions should not also be responsible for the physical control of the cash.

Proper physical control of cash may require that a minimum amount of cash be kept on a company's premises at any one time. Petty cash amounts used to cover day-to-day office expenses and cash receipts from sales or receivable payments should be handled by as few employees as possible and stored in a safe or locked cash drawer. Cash amounts in excess of petty cash requirements should be taken to the bank at frequent intervals.

? Sarah Hogg, chairperson of Frontier Economics, a leading European consulting firm, commented that "ignoring cash control is accountants' Achilles' heel." Explain what she means.

ACCOUNTS RECEIVABLE

Accounts receivable arise from selling goods or services to customers who do not immediately pay cash. Often backed by oral rather than written commitments, accounts receivable represent short-term extensions of credit that are normally collectible within thirty to sixty days. These credit trade agreements are often referred to as **open accounts.** Often many such transactions are enacted between a company and its

customers, and it is impractical to create a formal contract for each one. Open accounts typically reflect running balances, because at the same time customers are paying off previous purchases, new purchases are being made. If an account receivable is paid in full within the specified thirty- or sixty-day period, no interest is charged. Payment after this period, however, is usually subject to a significant financial charge. Credit card arrangements with department stores, like Macy's and JCPenney, and oil companies, like Exxon Mobil and Chevron, are common examples of open accounts.

The following journal entries illustrate the recognition of accounts receivable from (1) the sale of merchandise[5] and (2) the sale of a service.

Accounts Receivable (+A)   500
   Sales (R, +RE)   500
Sold two items of inventory for $250 each on account

Accounts Receivable (+A)   150
   Fees Earned (or Service Revenue) (R, +RE)   150
Provided consulting services for $150 on account

Note that the recognition of the account receivable in each case is accompanied by the recognition of a revenue: sales or fees earned (service revenue). Both the balance sheet and the income statement are therefore affected when accounts receivable are established. Note also that the recognition of an account receivable is an application of the accrual system of accounting. Recall from Chapter 3 that revenues are recognized when the four criteria of revenue recognition are met.[6] Accounts receivable, therefore, are established in those cases where these four criteria are met prior to cash collection.

Under IFRS, revenue recognition is based mainly on a single standard that contains general principles applied to different types of transactions. Under U.S. GAAP, the general principles are similar, but there is also extensive guidance for individual industries and different types of contracts.

As the following journal entry illustrates, when cash is ultimately received, the accounts receivable balance is removed from the balance sheet and no revenue is recognized.

Cash (+A)   500
   Accounts Receivable (−A)   500
Collected cash on account

The accounts receivable account therefore appears on the balance sheet during the time period between the recognition of a revenue and the receipt of the related cash payment.

In a well-known financial fraud, Cendant Corp. was found to have booked fictitious revenues. The fraud was discovered when an analyst noted that the accounts receivable balance was growing much faster than sales from one year to the next. Explain how one could be alerted to a possible fraud by comparing the growth of accounts receivable to the growth of sales.

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5. The sale of merchandise also involves the outflow of inventory which must be recognized before financial statements are prepared.
6. The four criteria of revenue recognition are: (1) The earning process is substantially complete, (2) revenue is objectively measurable, (3) post-sale costs can be estimated, and (4) cash collection is reasonably assured.

Importance of Accounts Receivable

In our heavily credit-oriented economy, transactions that give rise to accounts receivable make up a significant portion of total business transactions. Figure 6–6 discloses the importance of accounts receivable to our selected group of well-known companies. Note first the sizable investment in receivables made by the financial institutions. Most of these receivables are loans made to customers and clients. Similarly, General Electric owns a financial subsidiary that is used to provide financing to customers who purchase big-ticket items, such as home appliances. The subsidiary also extends loans to large borrowers, much the same as Bank of America. These receivables make up half of the company's total assets. Many companies are moving away from extending credit to their customers. Lowe's, for example, does not issue its own credit cards, relying instead on cash sales, personal checks, and major credit cards such as VISA and MasterCard.[7] Some major retailers, like Nordstrom, issue their own credit cards and consequently carry large balances of accounts receivable.

In August 2009 the *Wall Street Journal* reported the results of a survey that considered the cash flow timing of large and small companies. The report found that, as the 2008–2009 recession wreaked its havoc, large companies with revenues of $5 billion or more sped up the collection of accounts receivable and slowed payment of accounts payable. On the other hand, smaller companies, with revenues of less than $500 million, took an extra 4.5 days to collect receivables and actually paid trade obligations two days faster during the recession. Discuss the advantages to companies of accelerating collections from customers and delaying payments to suppliers, and explain why larger companies may have an upper hand in this form of working capital management.

FIGURE 6–6

Receivables as a percentage of total assets and current assets

	Receivables/ Total Assets	Receivables/ Current Assets
MANUFACTURING:		
General Electric (Manufacturer)	0.50*	3.21*
Chevron (Oil drilling and refining)	0.10	0.43
RETAIL:		
Kroger (Grocery retail)	0.04	0.13
Lowe's (Hardware retail)	NA	NA
INTERNET:		
Yahoo! (Internet search engine)	0.09	0.33
Cisco (Internet systems)	0.05	0.07
GENERAL SERVICES:		
AT&T (Telecommunications services)	0.06	0.71
Wendy's/Arby's (Restaurant services)	0.02	0.24
FINANCIAL SERVICES:		
Bank of America (Banking services)	0.50*	0.61*
Goldman Sachs (Investment services)	0.10	0.11*

Includes notes receivable.

7. When a customer uses a bank card to pay for an item or service (e.g., VISA or MasterCard), the selling company does not carry the receivable on its balance sheet. The receivable is "sold" to the finance company that issued the card. Such an arrangement is called *factoring*.

> **?** In which of these three companies do you think accounts receivable management and control are most important and why—General Electric (major manufacturing), Wal-Mart (discount retail), or Walgreens (pharmacies)?

Net Realizable Value: The Valuation Base for Accounts Receivable

The key factor in valuing accounts receivable on the financial statements is the amount of cash that the receivables are expected to generate. The cash is expected to be received in the future; in theory, therefore, present value should be used as the valuation base. The expected future cash receipt should theoretically be discounted. However, as indicated earlier, the period of time from the initial recognition of an account receivable to cash collection is normally quite short (thirty to sixty days). Consequently, the difference between the amount of cash to be received and the present value of the expected cash flows from the receivable is considered immaterial. For example, the difference between $100 and the present value of $100 to be received in one month, given a 10 percent annual interest rate, is approximately $0.76. Therefore, the face value of the receivable, the amount of cash to be collected, is judged to be a reasonable approximation of present value and, accordingly, provides the starting point for balance sheet valuation.

While the face value of the receivable represents a starting point, there are a number of reasons why it may not represent the actual amount of cash ultimately collected. Many companies, for example, offer cash discounts, allowing customers to pay lesser amounts if they pay within specified time periods. Other accounts receivable may produce no cash at all because customers simply refuse to, or cannot, pay (bad debts) or choose to return previously sold merchandise (sales returns). Each of these issues must be considered when placing a value on the accounts receivable account on the balance sheet.

Accordingly, the valuation base for the accounts receivable account is not the face amount of the receivables but rather the **net realizable value,** an estimate of the cash that is expected to be produced by the receivables.

Net Realizable Value of Accounts Receivable = Face Value − Adjustments for (1) Cash Discounts, (2) Bad Debts, and (3) Sales Returns

> **?** As of the end of fiscal 2009, Apple, Inc. had outstanding accounts receivables in the amount of $3.41 billion but only reported $3.36 billion on its balance sheet. Why?

Cash Discounts

When a good or service is sold on credit, creating a receivable, the company making the sale naturally wants to collect the cash as soon as possible. To encourage prompt payment, many companies offer discounts (called **cash [sales] discounts**) on the gross sales price. There are benefits associated with offering these discounts because collected cash can be used to earn a return, and eliminating receivables quickly reduces the costs of maintaining records for and collecting outstanding receivables. Presumably,

companies that offer cash discounts believe that these benefits exceed the reduction in future cash proceeds that results from the discount.

Cash discounts simply specify that an amount of cash less than the gross sales price is sufficient to satisfy an outstanding receivable if the cash is received within a certain time period. Certain sales on account, for example, may be subject to a 2 percent (of the gross sales price) cash discount if paid within ten days. Such terms are expressed in the following way: 2/10, *n*/30, which reads "two-ten, net thirty." This expression means "a discount in the amount of 2 percent of the gross sales price is available if payment is received within ten days. To avoid finance charges over and above the gross price, payment must be received within thirty days." Other terms on cash discounts are also common: 3/20, *n*/30, for example, means that a discount in the amount of 3 percent of the gross sales price is available if payment is received within twenty days, and finance charges over and above the gross price can be avoided if payment is received within thirty days; *n*/10, EOM means that the net amount of the sale (gross price less cash discount) is due no later than ten days after the end of the month.

CASH (SALES) DISCOUNTS VS. QUANTITY AND TRADE DISCOUNTS

Cash (sales) discounts, which can be viewed as incentives for prompt payment of open accounts, should be distinguished from quantity and trade discounts, which are simply reductions in sales prices. A **quantity discount** is a reduction in the per-unit price of an item if a certain quantity is purchased. "Cheaper by the dozen" is an example. Trade discounts are simply reductions in the sales price. A common form of trade discount, called a **markdown,** is quite common in retailing and normally is a sales price reduction due to decreased demand.

This distinction is important because cash (sales) discounts are reflected in the financial statements but quantity and trade discounts are not. To illustrate, in conjunction with an end-of-season sale, suppose that The Gap reduces the price of a certain line of shirts from $40 to $25. This $15 markdown is simply a reduction in the sales price of the shirts and would not be reflected in The Gap's books when the shirts are sold. The journal entry to record the sale would simply be:

Cash (or Accounts Receivable) (+A)   25
   Sales (R, +RE)   25
Sold merchandise for cash (or on account).

Note that the books give no recognition to the fact that the original sales price was $40. The asset (cash or accounts receivable) and the revenue (sales) are valued at the exchange price at the time of the transaction. The fact that the shirts were originally priced at $40 is ignored.

ACCOUNTING FOR CASH (SALES) DISCOUNTS

There are two ways to account for cash discounts: the **gross method** and the net method. We cover just the gross method because it is more straightforward and much more common in practice than the net method. Figure 6–7 illustrates the entries involved in the gross method.

The gross method initially recognizes the transaction at $1,000, the gross sales price, and thereby is based on the assumption that Buyer Company, the customer, will not receive the cash discount. If Buyer Company pays within the ten-day discount period (Case 1), a cash discount account is used to balance the difference between the gross receivable ($1,000) and the cash proceeds ($980). Cash discount is a temporary account that appears on the income statement of Seller Company. Its debit balance serves as a contra account to the credit balance in the sales account, giving rise to an

FIGURE 6–7   Accounting for cash discounts

GIVEN INFORMATION:
Assume that Seller Company sells goods on account with a gross sales price of $1,000 to Buyer Company
on December 15, 2011 (terms 2/10, *n*/30). The following journal entries would be recorded on the books
of Seller Company using the gross method for two different cases.

Initial sale on December 15.	Accounts Receivable (+A)	1,000	
	Sales (R, +RE)		1,000
	Sold goods on account.		
CASE 1:			
Assume that Seller Company receives full payment on	Cash (+A)	980	
December 20 (within the ten-day discount period).	Cash Discount (−R, −RE)	20	
	Accounts Receivable (−A)		1,000
	Paid on account.		
CASE 2:			
Assume full payment is received by Seller Company on	Cash (+A)	1,000	
January 3 (beyond the ten-day discount period).	Accounts Receivable (−A)		1,000
	Paid on account.		

income statement number called *net sales.* An example of the form of this disclosure
follows.

Sales	**$1,000**
Less: Cash discounts	**20**
Net sales	**$ 980**

If Buyer Company misses the ten-day discount (Case 2), the $1,000 cash receipt
after the expiration of the discount period exactly matches the gross amount in Seller
Company's accounts receivable account.

An important caveat about cash discounts: In reality, many companies pay little
attention to their terms. Consider, for example, a major retailer like Wal-Mart which is
an extremely important customer to a large number of its suppliers. While the suppli-
ers may offer cash discounts, encouraging Wal-Mart to pay its bills quickly, there is
little they can do if Wal-Mart chooses to pay the discounted amount after the expira-
tion of the discount period. The suppliers are very dependent on Wal-Mart's business,
and that dependence gives Wal-Mart an advantage that many businesses in similar
situations tend to exploit.

The Allowance Method of Accounting for Bad Debts (Uncollectibles)

In an ideal world, all receivables would be satisfied, and there would be no need to con-
sider bad debts. However, accounts that are ultimately uncollectible are an unfortunate
fact of life, and companies must act both to control them and to estimate their effects
on the financial statements. To give you some idea of the magnitude of bad debts,
Figure 6–8 shows 2008 uncollectibles as a percentage of outstanding receivables for
several major U.S. corporations.

FIGURE 6–8 Bad debts as a percentage of outstanding receivables	Company	Bad Debts/ Outstanding Receivables
	Verizon	7.4%
	SUPERVALU	1.5%
	General Electric	1.4%
	Pier 1 Imports	8.3%
	Source: *2008 annual reports*.	

Controlling bad debts is a costly undertaking for many companies. The creditworthiness of potential customers can be checked by subscribing to credit-rating services such as Dun & Bradstreet, Moody's, or Standard & Poor's. Companies can create and maintain collection departments, hire collection agencies, and pursue legal proceedings. Certainly, each of these alternatives can improve cash collections, but each does so at a significant cost. In the extreme, management can institute a policy requiring that all sales be paid in cash. Such a policy would eliminate collection costs and drive bad debts to zero, but it could also be extremely costly because it could dramatically reduce sales revenue. Many companies sell their receivables to financial institutions by accepting credit cards, like VISA and MasterCard, but they are charged substantial fees for this service. Thus, a number of companies choose to extend credit to their customers, and for those companies bad debts are an inevitable cost of everyday operations that must be considered in the management of accounts receivable.

From an accounting standpoint, the inevitability of bad debts reduces the cash expected to be collected from accounts receivable. It thereby reduces the value of accounts receivable on the balance sheet. Bad debt losses also represent after-the-fact evidence that certain sales should not have been recorded, since the fourth criterion of revenue recognition (i.e., cash collection is assured) was not met for those sales. As a result, both accounts receivable and net income are overstated if bad debts are ignored. Proper accounting for bad debts, therefore, involves two basic adjustments: (1) an adjustment to reduce the value of accounts receivable on the balance sheet and (2) an adjustment to reduce net income.

? "With China poised to enter the World Trade Organization, a fresh wave of foreign investors is preparing to take the plunge into its huge market. But as they do, these newcomers should learn a hard truth from their more seasoned, battle-worn predecessors: just because you make a sale doesn't mean you will get paid for it." Explain the meaning of this quote and how it might affect how U.S. companies do business in China.

The **allowance method** is used to account for bad debts. This method involves three basic steps: (1) the dollar amount of bad debts is estimated at the end of the accounting period; (2) an adjusting journal entry, which recognizes a bad debt expense on the income statement and reduces the net balance in accounts receivable, is recorded in the books; and (3) a write-off journal entry is recorded when a bad debt actually occurs. The following example illustrates the basic steps of the allowance method.

Suppose that during 2011, its first year of operations, Q-Mart had credit sales of $20,000 and a balance in accounts receivable of $6,000 as of December 31.

1. *Estimating bad debts*. After reviewing the relevant information, Q-Mart's account-ants estimate that 2.5 percent ($500) of its credit sales will not be collected.
2. *Adjusting journal entry*. The following journal entry would be recorded on December 31.

Bad Debt Expense (E or, −RE)	500	
Allowance for Doubtful Accounts (−A)		500

Recognized provision for doubtful accounts.

> On its 2006, 2007, and 2008 statement of cash flows in the operating section, Target adds back bad debt provisions of $380 million, $481 million, and $1,251 million, respectively, in the calculation of cash flow provided by operations. Why?

3. *Write-off journal entry*. On January 18, 2012, Q-Mart is notified that ABM Enterprises has declared bankruptcy and will not be able to pay the $200 it owes to Q-Mart. The following journal entry would then be recorded in the books of Q-Mart.

Allowance for Doubtful Accounts (+A)	200	
Accounts Receivable/ABM (−A)		200

Wrote off uncollectible account/ABM.

STEP 1: ESTIMATING BAD DEBTS

The allowance method requires that the dollar value of bad debts be estimated at the end of each accounting period. The most common method of estimating bad debts for financial reporting purposes is the **percentage-of-credit-sales approach.**[8] This approach simply multiplies a percentage by the credit sales of the period. In the example given, $500 (2.5% × $20,000) of the credit sales during 2011 was estimated to be uncollectible.

The percentage of credit sales used in the calculation of bad debt expense is based primarily on a company's past experience. For a company such as Q-Mart, which is in its first year of operations, the typical bad debt rate of the other companies in its industry may provide a useful benchmark. Nonetheless, the percentage is an estimate, which by definition is inexact and uncertain. These estimates represent an area of potential disagreement between managers, who often want the financial statements to be as attractive as possible, and auditors, whose professional ethics and exposure to legal liability encourage them to prefer conservative reporting.

The problem of estimating bad debts is significant for financial institutions, which have a large portion of their assets in outstanding loans. However, most service, retail, and manufacturing companies, especially those that have been in business for many years, can estimate bad debts with reasonable accuracy. The major retail companies, in particular, experience bad debts at a fairly constant percentage of credit sales across time. Bad debt expenses for JCPenney, for example, have been less than 1 percent of sales for a number of consecutive years. Thus, while it may be difficult to predict whether an individual account will be uncollectible, many companies find it relatively easy to predict the percentage of bad debt losses from a large group of credit sales.

8. Later in the chapter we discuss another method of estimating bad debts, called the *aging method*.

STEP 2: ADJUSTING JOURNAL ENTRY

The proper method of accounting for bad debts requires an end-of-period adjusting journal entry that reduces both net income and the balance sheet carrying value of accounts receivable.

The credit side of the adjusting journal entry recorded by Q-Mart in the previous example, *allowance for doubtful accounts,* reduces the balance sheet value of accounts receivable by $500, the expected dollar amount of bad debts.[9] Allowance for doubtful accounts is a permanent contra asset account with a credit balance. It immediately follows and is subtracted from accounts receivable on the balance sheet. The form of this disclosure in the current asset section of the balance sheet follows:

Accounts receivable	**$6,000**
Less: Allowance for doubtful accounts	**500**
	$5,500

Disclosing the allowance for doubtful accounts account in this way reflects the fact that less cash than is indicated by the face value of the receivables is expected to be collected. In the case above, $5,500 of the outstanding receivables is expected to be received. Such disclosure helps to report accounts receivable at net realizable value.[10]

The debit side of the adjusting journal entry records a contra revenue on the income statement (bad debt expense). Recognizing the $500 contra revenue in 2011 indicates that certain (unidentifiable as of December 31) credit sales should not have been recorded in 2011. It thereby serves to reduce revenues for sales that actually were never made.[11]

> **?**
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> For many years Sears offered financing to its customers through a separate credit card business. The company suffered from management problems in that business, recording increasingly large reserves (allowances) to cover growing bad debts. Several years ago Sears sold its credit card business to Citigroup, a large financial institution. What does it mean that Sears recorded "increasingly large reserves (allowances) to cover growing bad debts"? Why might Citigroup be better suited to manage receivables?

STEP 3: THE WRITE-OFF JOURNAL ENTRY

The write-off journal entry recorded by Q-Mart reduces both the allowance account and the accounts receivable balance. It is particularly important to note that this entry has no effect on the income statement and only serves to remove from the books the specific account receivable of ABM.

The write-off entry has virtually no effect on the financial statements because it simply identifies a specific bad debt that (on average) was known to be uncollectible and was recognized as such at the end of the previous accounting period. Indeed, the

9. The account title "Allowance for Doubtful Accounts" is used in this text. However, in a survey of 600 major U.S. companies, *Accounting Trends and Techniques* (2009) reports that slightly less than half of these companies use this title. The remaining companies use any of eight different descriptions, including Allowance, Allowance for Losses, and Reserve for Doubtful Accounts.

10. Many major U.S. companies do not disclose the dollar amount in the allowance account explicitly on the balance sheet. Instead, they simply report the net amount of receivables, after the dollar amount in the allowance account has been subtracted.

11. The bad debt estimate represents revenues that should never have been recorded because the fourth criterion of revenue recognition (cash collection is reasonably assured) was not met, giving rise to a contra revenue account, which is subtracted from sales on the income statement. However, generally accepted accounting principles do not specifically address how this charge should be disclosed, and some companies record the adjustment as an expense.

entry does not affect the net accounts receivable balance, current assets, working capital, the current ratio, quick assets, or net income.

To illustrate, the February 28, 2009, net accounts receivable of SUPERVALU, one of the nation's largest grocery retailers, appeared as follows (dollars in millions):

Accounts receivable	**$887**
Less: Allowance for doubtful accounts	**13**
	$874

The following year, assume that SUPERVALU receives notice that Catering Corporation will not be able to pay the $5 million it owes to SUPERVALU, and the following journal entry is recorded in SUPERVALU's books:

Allowance for Doubtful Accounts (+A)	**5**	
Accounts Receivable/Catering (−A)		**5**

Wrote off uncollectible account/catering.

This write-off entry reduces the balance of both accounts receivable and allowance for doubtful accounts by $5 million. Consequently, after the write-off entry, the net accounts receivable balance appears as follows:

Accounts receivable	**$882**
Less: Allowance for doubtful accounts	**8**
	$874

Note that the write-off entry had no effect on the net realizable value of accounts receivable. The net balance of $874 is unchanged because both accounts receivable and allowance for doubtful accounts were reduced by the same dollar amount. As a result, current assets, the current ratio, working capital, the quick ratio, and net income are all unaffected. The financial statement effect occurred at the end of the previous period (Step 2) when the adjusting journal entry was recorded.

So far we have implied that bad debts are discovered when a specific event occurs. For example, in the preceding illustrations the bad debt write-offs were recorded when a company received notice that a given customer was bankrupt or could not pay for some other reason. While bad debt write-offs can be recorded in this manner, it is probably more common for companies to write off bad debts when they decide that given receivables have been outstanding too long and are too costly to pursue. The following excerpt, which summarizes a typical write-off policy, was taken from a financial report of JCPenney Company, Inc.:

The Company's policy is to write off accounts when the scheduled minimum payment has not been received for six consecutive months, or if any portion of the balance is more than twelve months past due, or if it is otherwise determined that the customer is unable to pay.

The accounts receivable footnote in RadioShock's 2008 annual report provided the following information (dollars in millions).

The change in the allowance for doubtful accounts is as follows:

Balance at the beginning of the year	$2.5
Provision for bad debts	0.6
Uncollected receivables written off	(1.6)
Balance at the end of the year	$1.5

Explain the meaning of this information in terms of the three steps described above.

BAD DEBT RECOVERIES

Specific accounts that have been written off the books are occasionally recovered later. When such a receivable is reinstated, the write-off entry is simply reversed. This procedure corrects what was (in retrospect) recorded in error at a previous time. For example, the recovery of a previously written-off $5 million account receivable would be recorded as follows:

Accounts Receivable/Catering (+A)	5	
Allowance for Doubtful Accounts (−A)		5

Recovered $5 accounts receivable/catering.

Cash (+A)	5	
Accounts Receivable/Catering (−A)		5

Received $5 cash on account.

Inaccurate Bad Debt Estimates

Inaccurate bad debt estimates give rise to preadjustment balances in allowance for doubtful accounts. For example, if a company estimates $4,000 of bad debts on December 31, 2011, and actually incurs only $3,400 during 2012, as shown in Figure 6–9, allowance for doubtful accounts contains a $600 credit balance *before adjusting entries are recorded* at the end of 2012. If, instead of $3,400, bad debts of $4,400 actually occur during 2012, as shown in Figure 6–10, the *preadjustment December 31, 2012, balance* in allowance for doubtful accounts is a $400 debit.

FIGURE 6–9   Overestimated bad debts

			Allowance for Doubtful Accounts			
Allow. for Dbt. Accts. (+A) 3,400					**Bad Debt Exp. (−R, −RE)** 4,000	
Accts. Rec. (−A)	3,400			4,000	**Allow. for Dbt. Accts. (−A)**	4,000
Wrote off accts. rec.—2012.			3,400		*2011 adjusting entry.*	
				Preadj. bal. 600		

FIGURE 6–10   Underestimated bad debts

			Allowance for Doubtful Accounts			
Allow. for Dbt. Accts. (+A) 4,400					**Bad Debt Exp. (−R, −RE)** 4,000	
Accts. Rec. (−A)	4,400			4,000	**Allow. for Dbt. Accts. (−A)**	4,000
Wrote off accts. rec.—2012.			4,400		*2011 adjusting entry.*	
		Preadj. bal. 400				

Because estimates are rarely correct, preadjustment balances in allowance for doubtful accounts are common. They are usually ignored because across time under- and overestimates in individual years tend to neutralize each other. However, a significant

debit or credit accumulation in the preadjustment balance over several periods may indicate that the estimates are not only inaccurate but also biased. Consistent overestimates give rise to preadjustment credit accumulations (Figure 6–9), while consistent underestimates create preadjustment accumulations on the debit side of allowance for doubtful accounts (Figure 6–10). Such accumulations, which often indicate that a company's estimating formula should be revised, can lead to balance sheet misstatements in the allowance account because they are reflected in the year-end, post-adjustment balance. Users can detect these misstatements by comparing the amount in the allowance account to such numbers as sales and accounts receivable across time. Unusual deviations or well-defined trends may reveal a problem in estimating bad debts, which may raise questions about management's competence and/or incentives.

> **?**
>
> In early 2004 Quovadx Inc., a business software company, was being investigated by the SEC. Apparently, in 2002 the company booked millions of dollars in revenue on sales made to a group of Indian information-technology companies, and as of early 2004 had not received any payments from them. How do you think Quovadx should account for these facts? Explain how a reader of the financial statements might have been able to detect such a problem.

AN AGING SCHEDULE: ANOTHER METHOD OF ESTIMATING BAD DEBTS

Another common method of estimating bad debt losses is to establish an **aging schedule** of outstanding accounts receivable. This method categorizes individual accounts in terms of the length of time each has been outstanding and applies a different bad debt rate to each category. The bad debt rate applied to categories comprising older accounts is greater than that applied to categories comprising younger accounts, on the assumption that the longer an account has been outstanding, the more likely it is to be uncollectible.

To illustrate how an aging schedule can be used to estimate bad debts, assume that each of the accounts that make up a $4,000 end-of-year balance in accounts receivable is placed into one of three categories that represent the lengths of time the accounts have been outstanding: (1) six to twelve months, (2) three to six months, and (3) less than three months. It is the company's policy to write off accounts when they become one year old. Assume also that the percentage of uncollectibles expected for each of the three categories is 30 percent for Category 1, 10 percent for Category 2, and 2 percent for Category 3. The bad debt estimate for the entire accounts receivable balance is computed in Figure 6–11. The $324 estimate is computed by totaling the dollar amount of the bad debts expected from each of the three categories.

FIGURE 6–11
An aging schedule

Age of Accounts	Amount	Percent Uncollectible	Estimate	
6–12 months	$ 500	30%	$150	(500 × 30%)
3–6 months	1,300	10%	130	(1,300 × 10%)
Less than 3 months	2,200	2%	44	(2,200 × 2%)
Total	$4,000		$324	

AGING AS A MANAGEMENT TOOL

Maintaining control over outstanding accounts receivable is an important part of effective management for many companies. Because of the time value of money, receivables should be collected as quickly as possible. Bad debts should also be held to a minimum. Aging schedules help companies control bad debts in a number of significant ways.

An aging schedule, for example, can identify slow-moving accounts, thus directing collection efforts and defining the maximum costs that should be incurred by those efforts. Collection efforts should be directed toward the accounts in the older categories, but the costs associated with these efforts should not exceed the expected loss from the accounts. For example, a company may have $10,000 of accounts receivable that have been outstanding for over six months. Past experience indicates that 20 percent of such accounts are uncollectible. The $2,000 ($10,000 $\times$ 20%) expected loss from these accounts determines a maximum dollar amount for the costs incurred to collect them.

An aging schedule can also be helpful in estimating how much money a company is losing in potential interest charges. Such information can be useful in deciding whether to offer cash discounts and in determining the appropriate terms for such discounts.

Although aging schedules can provide useful information, keep in mind that they can be costly to establish and maintain. For companies that rely on credit sales to a wide variety of customers, maintaining the age and balance of each account can be quite time-consuming. Computerized accounting systems are almost a necessity for efficient aging analyses and receivables control. Most large companies, of course, have computerized their receivables accounting, and when small companies change from manual to computerized accounting systems, receivables applications are often used first to improve control over accounts receivable.

There is a growing trend among companies seeking greater efficiencies to sell their outstanding receivables to financial institutions, which are well equipped to deal with potential bad debts. As reported in *Crain's Chicago Business Journal,* "The trend has been fueled by downsizing companies that no longer want to employ mid-level managers to oversee collection efforts, and the spread of sophisticated financial management techniques is leading more firms to conclude that a smaller amount of money now is worth more than the possibility of a larger amount later." These developments underscore the significant costs associated with managing your own receivables.

? As president and CEO of newly formed Hilco Receivables LLC, Bruce Passen plans to tap into a growing trend among businesses to sell delinquent accounts receivable rather than hire collection agencies to try to recover the money owed. Collection firms with a stomach for a little risk now have an opportunity for higher returns. What does Mr. Passen plan to do?

Accounting for Sales Returns

For many companies, it is common that merchandise sold on account is returned by customers at a later date. These returns are important in the retail industry, and textbook publishers are especially affected because customers can often return large amounts of product sixty days or more after the initial sale. When returned items were initially sold, the sale and the associated account receivable were recognized on

the books. Because sales returns are usually accompanied by either the removal of the receivable or the granting of future credit, companies with significant returns must adjust both the income statement and accounts receivable on the balance sheet. The methods used to account for sales returns are similar to those used to account for bad debts; that is, at the end of each period an estimate of expected sales returns is made which, in turn, determines the dollar value of an adjusting journal entry that reduces income and establishes an allowance account. This account is disclosed on the balance sheet as a contra to accounts receivable. Actual returns are then debited against the allowance and credited against accounts receivable.

> Under IFRS, the methods used to estimate and account for uncollectibles are very similiar to those under U.S. GAAP.

ACCOUNTS RECEIVABLE FROM A USER'S PERSPECTIVE

When accounting for short-term receivables, two general questions are of significant economic importance: (1) When should a receivable be recorded in the books? (2) At what dollar amount should a receivable be valued on the balance sheet?

When Should a Receivable Be Recorded?

Revenues and related receivables are recognized when the four criteria of revenue recognition have been met. Establishing exactly when this occurs, however, is difficult and subjective because managers have freedom to determine when and how a sale and the associated receivable are recorded. This freedom gives rise to widely different practices. For example, General Electric recognizes revenues when goods are shipped, while HarperCollins, a large book publisher, recognizes revenues when it invoices customers, sometimes a month before orders are shipped. Revenue recognition practices even differ among companies in the same industry. A survey of 200 software companies, for example, revealed that twenty-six (13 percent) companies waited until cash was received before recognizing a sale, while thirty (15 percent) companies recognized a sale as soon as an order was received.

Users of financial statements must realize that, even within the guidelines of generally accepted accounting principles, managers can use discretion to speed up or slow down the recognition of revenue. This concern is particularly important for transactions that occur near the end of an accounting period. Recognizing a receivable and a revenue on December 30 instead of January 2, for example, can significantly affect current assets, working capital, and net income on the December 31 financial statements.

> **?**
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> A former executive of Computer Associates International pleaded guilty in U.S. District Court, noting that the company "kept quarters open," a practice of not closing the books until several days after the end of an accounting period. He noted that this practice allowed Computer Associates International to prematurely record more than $1 billion of revenue from 95 contracts. Explain what "keeping quarters open" means, and how it affects the financial statements.

To illustrate, suppose that current assets, current liabilities, and net income for Johnson and Sons as of December 29 are $45,000, $34,000, and $14,000, respectively. Johnson and Sons provides a service to Ace Manufacturing that is billed at $20,000. The service is ordered by Ace on December 30 and completed by Johnson and Sons on January 5. Payment is made by Ace after January 5. The current ratio, working capital position, and net income as of December 31 for Johnson and Sons are computed in Figure 6–12, assuming that (1) the revenue is recognized when the service is completed on January 5 and (2) the revenue is recognized when the service is ordered on December 30.

FIGURE 6–12		(1) Revenue Is Recognized on January 5.	(2) Revenue Is Recognized on December 30.
The timing of revenue and receivable recognition			
	December 31 current ratio (current assets ÷ current liabilities)	1.32	1.91
	December 31 working capital (current assets − current liabilities)	$11,000	$31,000
	Net income, year ended December 31	$14,000	$34,000

Note that the timing of revenue recognition can have a significant effect on important financial statement numbers. Recognizing the sale in the earlier period increased the current ratio by 45 percent and working capital and net income each by $20,000. Such effects have economic significance because they may influence a company's credit rating or determine whether it violates the terms of debt agreements. Since the timing of revenue and receivable recognition has a direct effect on net income and current assets, financial statement users should pay special attention to it.

Extreme cases of premature revenue and receivable recognition, or the complete fabrication of sales, is often interpreted as management fraud. Bear Stearns cited a 1999 study of over 200 corporate accounting fraud cases that occurred between 1987 and 1997, and concluded that the majority of these cases involved premature recognition of revenues (and receivables). In September of 2000 the SEC reported that it filed 30 enforcement actions for accounting abuses at a number of public companies, and many of these cases involved revenue recognition problems, such as booking revenue on shipments that never occurred. Two companies cited by the SEC were Raytheon, a defense contractor, and The Limited, a well-known clothing retailer, both of which have changed their revenue recognition practices. In each case the change led to the recognition of a major income write-down.

Other famous cases of inappropriate revenue recognition have involved such companies as MiniScribe, a software manufacturer, Regina Corporation, a well-known home appliance maker, and Orion Pictures, a motion picture studio that produced a number of box office hits. In all three cases, aggressive management, under intense pressure to perform, either fabricated sales or used questionable accounting practices to accelerate the recognition of revenues in an effort to increase reported profits and improve solvency measures. While these unethical behaviors may have delayed and obscured the companies' financial problems, they did little to solve them and in most cases made matters much worse.

A special problem has arisen in the world of the Internet. Given that Internet startup companies are now routinely valued on their revenues—since most generate

losses—the SEC has grown worried that some companies are overstating their revenues. When dot-com companies, for example, swap advertising with other Web sites, the swapping companies often book offsetting revenue and expense amounts. While the practice does not affect earnings, it does tend to overstate revenues.

? When California Micro Devices Corp. wrote off over half of its accounts receivable, its stock price dropped by 40 percent. A court hearing later revealed that in the face of aggressive revenue goals, the company booked revenues on products that had been sold but were not shipped until after the end of the year. In terms of the principles of revenue recognition, explain why this practice is inappropriate. How could it lead to a receivables write-off?

Balance Sheet Valuation of Receivables

The appropriate dollar amount at which to value receivables on the balance sheet is primarily a question of whether the outstanding receivables will, in fact, be paid. Companies like Bank of America and General Electric have billions of dollars in outstanding receivables, many of which may never produce any cash. Estimating such uncollectibles, which can significantly affect both the income statement and the balance sheet, can be very subjective and can lead to substantial disagreements between management and its auditors. Several years ago, for example, a major auditing firm postponed rendering an opinion on Federal Home Loan Bank of Dallas because the bank carried $500 million of questionable receivables on its balance sheet. Bad debt write-offs can also be enormous. In 2008 alone, Bank of America wrote off $13 billion in bad debts. In addition, estimating bad debts involves judgment, and there is a real temptation for managers to use the estimate to report favorable earnings.
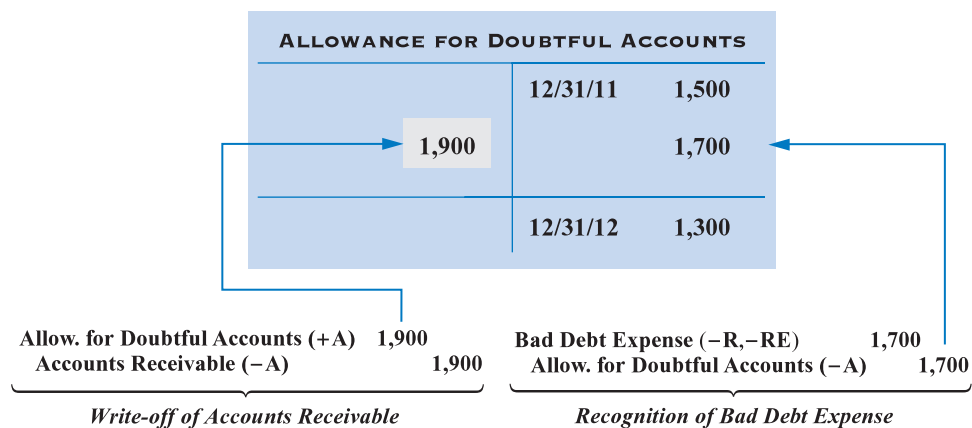
? In 2008 Federated Department Stores was purchased by Macy's, Inc. Federated carried customer credit, but Macy's did not, selling Federated receivables to a financial institution. Explain Macy's decision.

These examples suggest that (1) bad debts can be significant, (2) estimating bad debts is subjective, and (3) management is often unwilling to establish large bad debt provisions. Users must be aware of these concerns and pay close attention to the size and activity in the allowance account as well as the annual bad debt expense. For example, consider a case where the following information is taken from the financial statements of a company you are currently reviewing as a possible investment:

	2012	2011
Balance Sheet		
Accounts Receivable	$12,500	$13,200
Allowance for Doubtful Accounts	(1,300)	(1,500)
Income Statement		
Sales	$99,000	$82,500
Bad Debt Expense	(1,700)	(1,650)
Net Income	5,000	4,200

At first glance, the company's financial performance appears to be strong and improving. Both sales and net income increased by 20 percent during 2012, and accounts receivable decreased, which suggests that receivables collections may have improved. However, a closer look at the activity in the allowance account and bad debt expense raises a concern. Using T-account analysis, as illustrated in Figure 6–13, you can see that the bad debt expense was insufficient, $200 less than the write-offs during 2012. Further review shows that the expense, as a percent of sales, decreased from 2 percent in 2011 to 1.7 percent in 2012. Had 2 percent been used in 2012, the expense would have been $1,980, and net income would have been lower by $280. Also, the allowance amount, as a percent of accounts receivable, decreased from 11.4 to 10.4 percent. It seems that management reduced the bad debt expense, which increased reported net income, even though bad debt write-offs did not decrease during 2012. Users must be cautious in these situations because bad debt estimates are based on information about the creditworthiness of their customers, which is available only to management. It is virtually impossible for outsiders to assess these estimates.

FIGURE 6–13

Analyzing the allowance for doubtful accounts T-account

Allow. for Doubtful Accounts (+A) 1,900
Accounts Receivable (−A) 1,900
Write-off of Accounts Receivable

Bad Debt Expense (−R,−RE) 1,700
Allow. for Doubtful Accounts (−A) 1,700
Recognition of Bad Debt Expense

In one of its annual reports Sears, the well-known retailer, reported a profit of $1.4 billion, while reporting net cash from operations of negative $500 millions. One of the main reasons for the difference was a $4.86 billion increase in accounts receivable during the year. Sears subsequently sold off its credit-card receivables portfolio to concentrate its efforts on retail sales. What events may have accounted for the huge increase, and how might they influence an investor's interpretation of the company's current ratio and cash flow statement?

In summary, the methods used to account for accounts receivable can lead to significant economic consequences, affecting a company's credit rating, determining whether debt covenants are violated, accelerating bankruptcy proceedings, and introducing the potential for sizable lawsuits against managers and auditors. Recall from Chapter 5 that the combination of such economic effects and reporting subjectivity can encourage managers to use reporting strategies. Examples are overstating income and financial condition, "taking a bath," and building "hidden reserves," which can serve managers' interests at the expense of the shareholders. Recall also that practicing such strategies need not be fraudulent, because generally accepted accounting principles are sufficiently flexible to allow a large amount of management discretion.

FINANCIAL INSTITUTIONS AND UNCOLLECTIBLE LOANS

The collectibility of outstanding loans is a key concern for bank management and is at the heart of successful banking. In its 2008 financial statement, for example, JPMorgan Chase reported approximately $745 billion in outstanding loans, which was about 34 percent of total assets. The company estimated that $23.2 billion of these loans would be written off, and in 2008 the company recognized bad debt expense of $21 billion. Other financial institutions, such as savings and loans, insurance companies, and manufacturers that offer financing to their customers (Big 3 automakers, General Electric, Deere & Company), also carry significant receivables and face special collectibility problems. Such problems can involve much more than simply assessing the creditworthiness of customers. Major swings in the overall U.S. economy, certain sectors within the economy, or even entire countries and continents can have huge impacts on the financial health of these kinds of companies. Several years ago, for example, Westinghouse sold off its financial subsidiary due to nonperforming loans caused by a drop-off in the U.S. economy; banks with outstanding loans to companies in the southwest United States experienced severe financial hardship when oil prices slumped in the 1980s; and Citibank and other major U.S. banks recently booked huge losses due to the financial crisis in Asia.

? On its 2006, 2007, and 2008 statement of cash flows in the operating section, General Electric subtracts increases in current receivables of $2,194 million, $868 million, and $24 million, respectively, in the calculation of cash from operating activities. Why?

The difficulties in America's financial institutions have brought about several significant changes relevant to accountants. First, the FASB has ruled that banks both disclose the market values of their outstanding loans and create larger reserves for bad debts. This rule, which generated much opposition from the banking industry, has reduced the balance sheet value of most U.S. banks. Difficulties in the financial institutions have also imposed additional legal liability on the audit profession. Leading accounting firms have been sued for billions of dollars for their alleged roles in the failures of hundreds of savings and loan companies. Such suits were initiated by both savings and loan shareholders and government regulators. Indeed, the accounting issues surrounding receivables can lead to significant economic consequences.

? We mentioned in the introduction to this chapter that many financial institutions suffered large losses on investments composed primarily of mortgage receivables during the 2008–2009 recession. The losses were so large and so prevalent throughout the financial services industry that the U.S. government stepped in with an unprecedented infusion of capital into the banking system. Banks large and small, from Goldman Sachs in New York to Old National Bank in Evansville, Indiana, received capital infusions from the government's Troubled Asset Relief Program (TARP). How do losses on receivables affect a bank's capital position? Why was the government so concerned about losses on the banks' balance sheets?

INTERNATIONAL PERSPECTIVE: RECEIVABLES, FOREIGN CURRENCIES, AND HEDGING

As companies expand, they often search for new markets in other countries. Most major U.S. companies operate in more than one country, and many have operations in countries throughout the world. Of the $64 billion in worldwide revenues generated by Johnson & Johnson in 2008, for example, $31 billion (48 percent) came from outside U.S. borders. The internationalization of business introduces an issue of major concern to accountants—that is, many transactions with foreign entities involve currencies other than the U.S. dollar. When General Electric, a **multinational corporation,** sells products on account to Japanese customers, the contract often requires payment to be made in Japanese yen. An accounting problem arises because the accounts receivable must be expressed on GE's balance sheet in U.S. dollars, and the **exchange rate** between the U.S. dollar and the Japanese yen is constantly fluctuating.

Suppose, for example, that on December 1, 2010, Motorola delivered a shipment of wireless communicators to a German customer for a price of 1.5 million euros. Assume that on that date 1.4 U.S. dollar could be exchanged for 1 euro. Because Motorola prepares financial statements expressed in U.S. dollars, it would convert the receivable to an equivalent U.S. dollar amount and record the following entry:

Accounts receivable (+A)   2.10*
    Sales (R, +RE)   2.10

*(1.4 U.S. dollar/1 euro) × 1.5 million euros

Assume further that the U.S. dollar advances against the euro and that by December 31 the two currencies are trading 1:1—that is, 1 U.S. dollar can be exchanged for 1 euro. Consequently, as of December 31, the 1.5 million euros receivable is worth only $1.5 million dollars, and Motorola has experienced an **exchange rate loss** of $0.60 million. Accordingly, Motorola would record the following year-end adjusting entry:

Exchange rate loss (E, −RE)   0.60*
    Accounts receivable (−A)   0.60

*$2.10 million − $1.50 million

The loss occurred because Motorola held a contract promising the receipt of 1.5 million euros over a time period when the euro dropped in value relative to the U.S. dollar; simply, the value of the receivable went down. Of course, had the value of the euro advanced instead of declined against the U.S. dollar, Motorola would have recorded a gain, reflecting an increase in the value of the receivable.

Exchange rates among currencies can vary significantly across time, and these gains and losses can cause reported earnings to jump up and down erratically from one period to the next. U.S. firms with outstanding receivables expressed in non-U.S. currencies normally attempt to avoid bearing the risks associated with these kinds of gains and losses because they can lead to negative effects on stock prices, credit ratings, management compensation, and debt covenants.

Management has very little control over exchange rates, but it can reduce some of the risks associated with holding receivables denominated in foreign currencies through a strategy called **hedging.** There are many ways to practice hedging, some of which are discussed in Appendix 11B, but a simple way involves holding payables

expressed in foreign currencies that exactly counteract the effects of exchange rate fluctuations on outstanding receivables held in those same currencies.

Suppose in the preceding illustration that at the same time Motorola made the sale to the German customer, it simultaneously borrowed 1.5 million euros from a German bank. As of December 1, that payable would be expressed on Motorola's balance sheet at $2.10 million [(2.10 U.S. dollars/1 euro) × 1.5 million euros]. As of December 31, after the U.S. dollar advanced against the euro, the payable would decrease in value and Motorola would recognize an exchange rate gain of $0.60 million, which would exactly counteract the effect on reported net income of the exchange rate loss associated with the outstanding receivable.

Effective hedges can significantly reduce the variation in earnings across time associated with holding receivables denominated in foreign currencies. The following excerpt from the 2008 annual report of 3M, a multinational manufacturer, describes how the company deals with fluctuating exchange rates:

The company enters into foreign exchange forward contracts, options, and swaps to hedge against the effect of exchange rate fluctuations on cash flows denominated in foreign currencies and certain intercompany financing transactions.

ROE EXERCISE: MANAGEMENT OF WORKING CAPITAL AND RECEIVABLES AND RETURN ON EQUITY

Management's goal is to maximize shareholder wealth by choosing investments (e.g., people, inventories, plant and equipment, other companies) that generate an overall return exceeding the cost of the debt and equity capital used to finance the investments. Stated another way, management must manage its operating, investing, and financing decisions in a manner that maximizes the return on the shareholders' investment in the company. The ROE model, introduced and illustrated in Appendix 5A, provides a framework linking the management of a company's operating, investing, and financing activities to its return on the shareholders' investment (return on equity). The management of a company's working capital and receivables plays an important role in the ROE model via three financial statement ratios: current ratio (current assets/current liabilities), quick ratio ([cash + short-term investments + accounts receivable]/current liabilities), and receivables turnover (sales/average accounts receivable).

Current and Quick Ratios

The current and quick ratios provide measures of solvency—the ability to meet debt obligations as they come due. Companies that finance their operating and investing activities through borrowing (leverage) often maintain liquid-asset (e.g., cash, marketable securities, accounts receivable, inventories) balances because it lowers the risk borne by the lender by helping to ensure that the company will be able to meet the debt payments. The lower risk reduces the costs of borrowing (e.g., lower interest cost), and in some cases the debt contract requires liquid-asset balances. At the same time, liquid assets tend to provide minimal returns, indicating that holding overly large balances may not be in the shareholders' best interest. In terms of the ROE

model, the current and quick ratios indicate the extent to which the company is maintaining liquid assets that can be used to meet short-term obligations. It is important that adequate liquid assets be maintained, but the requirement to hold liquid assets imposes a cost on companies that practice leverage.

Accounts Receivable Turnover

Accounts receivable turnover provides a measure of a company's investment in its receivables. As indicated earlier, offering customer credit can increase sales, but outstanding receivable balances need to be financed at a cost, and managing receivables can be costly and risky. In terms of the ROE model, receivables turnover is a component of total asset turnover, meaning that changes in receivables turnover are reflected in changes in asset turnover, which in turn are reflected in return on assets (ROA), which in turn are reflected in return on equity (ROE). Thus, increasing the speed of receivables turnover (increasing sales relative to the investment in accounts receivable) puts upward pressure on both ROA and ROE.

ROE Analysis

Access the Web site http://wiley.com/college/pratt, and conduct ROE analyses on Caterpillar versus Deere & Company and/or IBM versus Hewlett-Packard, paying special attention to how the companies' solvency positions and receivables turnover impact ROE.

REVIEW PROBLEM

This section provides a review problem that covers the methods used to account for bad debts. The facts given are accounted for using the allowance method with a percentage-of-credit-sales estimate.

Assume that Credit Inc. began operations on January 1, 2011. The relevant transactions for 2011 and 2012 are summarized in the accounts receivable T-account provided in Figure 6–14. Sales on account during 2011 totaled $10,000, and cash receipts for those sales equaled $6,000. The accounts receivable balance at the end of 2011 was $4,000 ($10,000 − $6,000). Sales on account during 2012 totaled $12,000, and cash receipts during the same period, from sales made in both 2011 and 2012, were $11,000. On June 5, 2012, Credit Inc. received notice that a $500 account established in 2011 would not be collectible. This account was written off, and the December 31, 2012 balance in accounts receivable is $4,500 ($4,000 + $12,000 − $11,000 − $500). Assume that companies in Credit's industry typically experience bad debt losses of approximately 7 percent of credit sales.

The allowance method gives rise to end-of-period adjusting journal entries that decrease revenues in the appropriate period and reduce the value of accounts receivable on the balance sheet to net realizable value, the amount of cash expected to be collected from the receivables. The write-off entry on June 5, 2012, has virtually no effect on the financial statements of Credit Inc.

Note that the preadjustment balance in allowance for doubtful accounts as of December 31, 2011, is a $200 credit ($700 estimate − $500 write-off). Either Credit overestimated its bad debt losses for 2011 or certain outstanding accounts created from 2011's credit sales may still be written off. If this preadjustment balance accumulates over a period of several years, Credit should review and possibly revise its estimating formula. Otherwise, it is ignored.

FIGURE 6–14

Bad debt
review problem

General Ledger

Accounts Receivable

Beginning balance	0		
2011 credit sales	10,000		
		2011 cash receipts	6,000
12/31/11 balance	4,000		
2012 credit sales	12,000		
		2012 cash receipts	11,000
		2012 bad debt	500
12/31/12 balance	4,500		

Allowance Method
(percentage-of-credit-sales estimate)

December 31, 2011

$700 (7% × $10,000)

Estimate entry	Bad Debt Expense (E or −R, −RE)	700	
	Allow. for Doubt. Accts. (−A)		700

June 5, 2012

Write-off entry	Allow. for Doubt. Accts. (+A)	500	
	Accts. Rec. (−A)		500

December 31, 2012

$840 (7% × $12,000)

Estimate entry	Bad Debt Expense (E or −R, −RE)	840	
	Allow. for Doubt. Accts. (−A)		840

Allowance for Doubtful Accounts

		Beginning balance	0
		12/31/11	700
		12/31/11 balance	700
6/5/12	500		
		Preadj. balance	200
		12/31/12	840
		12/31/12 balance	1,040

SUMMARY OF KEY POINTS

● *Current assets, working capital, current ratio, and quick ratio, and how these measures are used to assess the solvency position of a company.*

Current assets are assets that can be converted into cash within one year or the company's operating cycle, whichever is longer. Working capital is equal to current assets less current liabilities, which are the liabilities expected to be required for payment with the assets listed as current. The current ratio is equal to current assets divided by current liabilities. The quick ratio is equal to cash plus marketable securities plus accounts receivable, divided by current liabilities.

These low-cost measures are useful in assessing a company's solvency position because they compare a measure of short-term cash inflows to a measure of short-term cash outflows. They are often used by banks and other lenders, and they appear in many loan agreements and debt covenants, enabling lenders to protect their investments by requiring that management maintain certain levels of liquidity.

● *"Window dressing" and the reporting of current assets, working capital, and the current ratio.*

Window dressing refers to management's use of discretion in reporting accounting numbers to make the financial statements appear more attractive. Such discretion is used, for example, to make it easier to attract capital, to increase bonus compensation, or to avoid violating the terms of debt contracts. Management can window dress in three basic ways: (1) management can choose to use accounting methods that improve the reported numbers, (2) it can bias the estimates required to apply a given accounting method, and (3) it can make operating, investing, and financing decisions that directly affect the reported numbers.

● *Techniques used to account for and control cash.*

Cash held in escrow or compensating balances are examples of restrictions on a company's use of its cash. Such restrictions should be clearly disclosed on the balance sheet or in the footnotes, and restricted cash should be included in separate accounts.

Two aspects to the control of cash that are largely the responsibility of the company's accountants are record control and physical control. Problems of record control arise because many transactions involve the cash account, and it is often difficult to ensure that the cash account on the balance sheet reflects the actual amount of cash in a company's possession. Problems of physical control arise because cash is universally desired and easily concealed and transported.

● *Accounts receivable and how they are valued on the balance sheet.*

Accounts receivable arise from transactions with customers who have purchased goods or services but have not yet paid for them. They are amounts owed by customers for goods and services sold as part of the normal operations of the business. Often backed up by oral rather than written commitments, accounts receivable represent short-term extensions of credit that are normally collectible within 30 to 60 days. Accounts receivable are valued at net realizable value, the gross amount of the receivables less adjustments for cash discounts, uncollectibles, and sales returns.

● *The allowance method for uncollectible receivables.*

Under the allowance method, the amount of uncollectibles is estimated at the end of each accounting period. Then an adjusting journal entry is made to reduce revenue via a contra revenue account, and a contra account to accounts receivable, allowance for doubtful accounts, is credited. Later, when the uncollectible is actually realized, both the value of accounts receivable and the allowance account are reduced.

● *Major concerns of financial statement users in the area of receivables reporting.*

For many companies, accounts receivable are a significant percentage of total and current assets. Accordingly, the methods used to account for them can have direct and often significant effects on such measures as current assets, working capital, the current ratio, the quick ratio, the collection period, and net income. Financial statement users must realize that managers can influence these measures by speeding up or slowing down the recognition of revenue and related receivables and that the estimate of uncollectibles is very subjective. Such practices can affect a company's credit rating, determine whether debt terms are violated, accelerate bankruptcy proceedings, and bring about sizable lawsuits against managers and auditors. In this area, users must pay close attention to the activity in sales, accounts receivable, bad debt expense, and allowance for doubtful accounts.

KEY TERMS

Note: Definitions for these terms are provided in the glossary at the end of the text.

Accounts receivable (p. 251)
Aging schedule (p. 262)
Allowance method (p. 257)
Cash (sales) discounts (p. 255)
Compensating balances (p. 249)
Current asset (p. 243)
Current ratio (p. 245)
Escrow (p. 249)
Exchange rate (p. 269)
Exchange rate loss (p. 269)
Gross method (p. 255)
Hedging (p. 269)
Markdown (p. 255)

Multinational corporations (p. 269)
Net realizable value (p. 254)
Open accounts (p. 0251)
Operating cycle (p. 243)
Percentage-of-credit-sales approach
  (p. 258)
Petty cash (p. 250)
Physical control (p. 251)
Quantity discount (p. 255)
Quick ratio (p. 245)
Record control (p. 251)
Window dressing (p. 247)
Working capital (p. 245)

ETHICS in the Real World

Allied Bancshares, a Houston-based group of banks, reported a string of 31 quarterly earnings increases. In an interview with three Goldman Sachs security analysts, one of the bank's senior officers explained that the bank intentionally overstates its bad debt expense in good quarters and understates it in poor quarters. In this manner, the fluctuations in earnings from one quarter to the next can be smoothed out. The bank's auditors have written clean opinions on the bank's financial statements over this time period, and this strategy maximizes the bonuses paid to the bank's executives. In addition, presumably it is in the best interest of the bank's shareholders, partly because it helps the bank maintain its legal reserve requirements.

ETHICAL ISSUE Is it ethical for companies like Allied Bancshares to intentionally overstate expenses in some periods and understate them in others to achieve consistent increases in reported net income across time?

INTERNET RESEARCH EXERCISE

For the most recent year, complete the chart below for JPMorgan Chase. Begin your search at www.jpmorganchase.com.

Activity in the *Allowance for Loan Losses* account:

Allowance for loan losses at January 1	?
Total provision for loan losses	?
Net charge-offs	?
Allowance for loan losses at December 31	?

BRIEF EXERCISES

REAL DATA

BE6–1

Analysis of
accounts receivable

The following information was taken from the 2009 annual report of Emerson Electric Co., a leader in the network power sector (dollars in millions):

	2009	2008
Balance Sheet:		
Receivables, less allowance for uncollectibles of $93 and $90, respectively	**$3,623**	**$4,618**

a. Compute total accounts receivable as of the end of 2009 and 2008, and compute the bad debt allowance as a percentage of total accounts receivable. Did the percentage increase or decrease?

b. The bad debt expense reported on Emerson's 2009 income statement did not equal $93. Explain why.

REAL DATA

BE6–2

Uncollectible
accounts expense

The following information was taken from the publicly available records of General Electric concerning the allowance for uncollectible account for its financing subsidiary, GE Capital Services (dollars in millions):

	2008	2007
Balance at Jan. 1	**$ 4,238**	**$ 3,945**
Increases	**7,518**	**4,431**
Decreases	**(8,162)**	**(5,966)**
Recoveries	**1,731**	**1,828**
Balance at Dec. 31	**$ 5,325**	**$ 4,238**

a. What dollar amounts of bad debt expense were recognized on the 2008 and 2007 income statements? Why do you think the figure changed so dramatically?

b. What dollar values of customer accounts were written off the books in 2008 and 2007?

c. By what percentage did the allowance account change from 2007 to 2008, and what are several reasons why this may have occurred?

REAL DATA

BE6–3

Uncollectible
accounts expense

General Electric's financing subsidiary (GE Capital Services—GECS) provides financing services for GE's customers. If you purchase a GE appliance, for example, you could finance it through GECS. In 2008, GECS generated over $71 billion in revenue and reported profits of over $7 billion. These numbers represented approximately 40 percent of the company's total revenues ($182 billion) and 40 percent of the company's profits ($17.4 billion). In 2008, the bad debt provision reported on GE's income statement was $7.5 billion.

a. Compute bad debts as a percentage of revenues. Should you use GE overall revenues or revenues generated by GECS? Why?

b. If GECS prepared its own balance sheet, what would you expect to be the largest accounts?

c. Would you consider GE to be a manufacturing, retail, or service company? Discuss.

EXERCISES

E6–1

Classifying cash on
the balance sheet

Boyer International is currently preparing its financial statements for 2011. The company has several different sources of cash and is trying to decide how to classify them. The sources of cash follow:

a. $30,000 in a checking account with The First National Bank.

b. $3,000 in checks dated December 4, 2011, received from customers.

c. $250,000 in certificates of deposit through The First National Bank, which are to mature on November 15, 2014.
d. $40,000 in a savings account with The First National Bank.
e. $1,000 in the petty cash fund. As of December 31, 2011, there are receipts totaling $600 in the petty cash drawer.
f. $50,000 held as a compensating balance for a loan with The First National Bank. The loan agreement requires Boyer International to maintain a compensating balance equal to 10 percent of the loan balance. During 2012, the outstanding principal balance will be reduced to $350,000.
g. $8,000 in a checking account with Interstate Federal Savings.

Indicate how each source listed should be classified on the December 31, 2011, balance sheet. Explain each answer.

E6–2

Classifying cash on the balance sheet

The following items were taken from the financial records of Melvin Construction Company.

a. $2,000 in a checking account.
b. $8,000 invested in a treasury note due to mature in 90 days.
c. $3,000 in a savings account that cannot be withdrawn until a $10,000 outstanding debt is paid off.
d. $18,000 invested in securities that will be sold in two years to finance an expansion of the plant.
e. $2,500 invested in IBM common shares. Management intends to liquidate this investment in less than six months.
f. $15,000 held in escrow by a bank, serving as earnest money that binds management to a real estate contract.
g. A $3,000 money order received in payment from a customer.

Classify each item as either (a) unrestricted cash, (b) restricted cash, or (c) investment.

E6–3

Accounting for cash discounts

On December 12, Woodington sold goods on account for a gross price of $40,000. The terms of the sale were 2/10, n/30. As of December 31, when financial statements were prepared, no payment had been received by Woodington. Full payment was received on January 5 of the following year.

a. Prepare journal entries for these transactions.
b. Assume that full payment was received on December 20. Prepare journal entries and discuss how the timing of the cash receipt affected the income statement and statement of cash flows.

E6–4

Accounting for cash discounts

On May 1, 2012, Crab Cove Fishing Company sold Maine lobster on account for a gross price of $30,000. On May 5, the company also sold cod on account for a gross price of $20,000. The terms of both sales were 3/10, n/30. Crab Cove received payment for the first sale on May 6, 2012, and payment for the second sale on May 31, 2012.

Provide all necessary journal entries.

E6–5

Bad debts under the allowance method

Arlington Cycle Company began operations on January 1, 2011. The company reported the following selected items in its 2012 financial report:

	2012	2011
Gross sales	$1,400,000	$1,500,000
Accounts receivable	600,000	650,000
Actual bad debt write-offs	22,000	10,000

Arlington estimates bad debts at 2 percent of gross sales.

Analyze the activity in the allowance for doubtful accounts T-account, and comment on whether the bad debt estimate has been sufficient to cover the write-offs.

E6–6

Accounting for
uncollectibles

In its 2011 financial report, Sound Unlimited reported the following items:

1. A credit balance of $200,000 in allowance for doubtful accounts.
2. A debit balance of $7,500,000 in accounts receivable.
3. Sales of $3,250,000.

During 2011, the company was involved in the following transactions that affected allowance for doubtful accounts.

1. Wrote off accounts considered uncollectible totaling $195,000.
2. Recovered $45,000 that had previously been written off.

Assume that historically 5 percent of sales has proven to be uncollectible.

a. Compute the December 31, 2010, balance in allowance for doubtful accounts.
b. Assume that all sales were on credit and cash collections from customers during 2011 totaled $4,200,000. Compute the 12/31/10 balance in accounts receivable.

REAL DATA

E6–7

Accounting for
doubtful accounts:
The allowance
method

The following items were extracted from the 2008 financial records of Cummins, Inc. (dollars in millions):

Allowance for doubtful accounts   12 (cr.)

During the following year, the company wrote off $11 of accounts receivable as uncollectible and then estimated $9 of the year's receivables to be uncollectible. The company did not recover any previously written-off accounts.

a. Prepare the entry to record the bad debt expense.
b. Compute the final balance in allowance for doubtful accounts.

E6–8

Inferring bad debt
write-offs and
reconstructing
related journal
entries

The 2012 annual report of Johnson Services reveals the following information. The dollar amounts are end-of-year balances.

	2012	2011
Credit sales	$75,300	$61,500
Accounts receivable	9,400	9,200
Allowance for doubtful accounts	1,300	1,000
Bad debt recoveries	55	70

Johnson estimates bad debts each year at 2 percent of credit sales.

a. Compute the actual amount of write-offs during 2012.
b. Infer the journal entries that explain the activity in accounts receivable and the related allowance account during 2012.

REAL DATA

E6–9

IFRS, bad debts,
and the statement
of cash flows

Kyocera is a Japanese telecommunications company that publishes IFRS-based financial statements. On its March 31, 2009, statement of cash flows in the operating section it reported a "provisions for doubtful accounts" of 671 million yen, and a "decrease in receivables" of 75,866 million yen.

a. Why were these two amounts reported in the operating section of the statement of cash flows?
b. How were these two amounts treated in the reconciliation of net income with net cash provided by operating activities?
c. During 2009 net cash from operating activities was more than 68,288 million yen higher than net income. Explain why.

E6–10

Preparing an
aging schedule

Potter Stables uses the aging method to estimate its bad debts. Sherman Potter, the company president, has given you the following aging of accounts receivable as of December 31, 2009, along with the historical probabilities that the account balances will not be collected.

Account Age	Balance	Noncollection Probability
Current	$290,000	2%
1–45 days past due	110,000	5%
46–90 days past due	68,000	8%
Over 90 days past due	40,000	15%

Compute total receivables and expected bad debts as of December 31, 2012.

E6–11

Exchange gains/losses on outstanding receivables

On January 1, 2012, Outreach Incorporated sold services to a Canadian supply company and accepted a three-year note in the amount of 11,000 Canadian dollars. Assume that exchange rates between the U.S. dollar and the Canadian dollar are as follows:

Date	U.S. Dollars Per Canadian Dollars
January 1, 2012	$0.95
December 31, 2012	0.99
December 31, 2013	0.90

Provide the journal entries (in U.S. dollars) prepared by Outreach to record the receipt of the note and the exchange gains/losses recognized on December 31, 2012, and December 31, 2013. Ignore any interest on the note.

E6–12

Hedging to reduce the risk of currency fluctuations

Assume that Outreach (in E6–10) hedged the 11,000 (Canadian dollar) receivable by borrowing 11,000 Canadian dollars from a Canadian bank on January 1, 2012. Use journal entries to demonstrate how this transaction removes Outreach's exposure to the risk of fluctuating exchange rates. Explain.

PROBLEMS

P6–1

Classifying cash on the balance sheet

On September 30, 2011, Print-O-Matic Inc. entered into an arrangement with its bank to borrow $250,000. The principal is due on October 1, 2016, and the note has a stated annual interest rate of 10 percent. Under the borrowing agreement, Print-O-Matic agreed to maintain a compensating balance of $60,000 in a non-interest-bearing account. As of December 31, 2011, Print-O-Matic has an additional $225,000 in various savings and checking accounts that earn an annual rate of 6 percent. The controller intends to classify the entire $285,000 in cash as a current asset.

REQUIRED:

a. Do you agree with the classification of the $285,000 of cash as a current asset? Explain your answer.

b. Print-O-Matic reported interest expense associated with this note for the year ended December 31, 2011, in the amount of $6,250 [($250,000 × 10%) × 1/4]. Do you agree with this classification? Should any other factors be considered in the interest cost? Explain.

P6–2

Cash discounts

During the month of March, QNI Corporation made the following credit sales and had the following related collections. QNI prepares financial statements for the first quarter of operations at the end of March.

March 3	**Sold goods to AAA company for a gross price of $1,400. The terms of the sale were 2/10, n/30.**
March 8	**Sold goods to BBB company for a gross price of $800. The terms of the sale were 2/10, n/30.**

March 11	**Received full payment from AAA.**
March 28	**Received full payment from BBB.**
March 29	**Sold goods to CCC company for a gross price of $1,800.** **The terms of the sale were 2/10, n/30.**

REQUIRED:
a. Prepare the journal entries to record these transactions.
b. Note that BBB missed the discount period by ten days. Compute the annual interest rate BBB paid for the use of the $800 for that ten-day period. Assuming that BBB can borrow money from the bank at 9 percent, what should BBB have done differently?

P6–3

Bad debts over time

Financial information for CNG Inc. follows:

	2012	2011	2010
Credit sales	$205,000	$200,000	$180,000
Actual bad debt write-offs	11,000	10,000	6,000

The company estimates bad debts for financial reporting purposes at 3 percent of credit sales. The balance in allowance for doubtful accounts as of January 1, 2010, was $10,000.

REQUIRED:
a. Provide the journal entries related to allowance for doubtful accounts for 2010, 2011, and 2012.
b. Compute the balance in allowance for doubtful accounts as of December 31, 2012.
c. Comment on the sufficiency of the bad debt expense and allowance over the three-year period. How did you come to your conclusion?

P6–4

Accounting for uncollectibles over two periods

Glacier Ice Company uses a percentage-of-net-sales method to account for estimated bad debts. Historically, 3 percent of net sales have proven to be uncollectible. During 2011 and 2012, the company reported the following:

	2012	2011
Gross sales	$1,500,000	$1,800,000
Sales discounts	100,000	130,000
Sales returns	50,000	20,000

REQUIRED:
a. Prepare the necessary adjusting entry on December 31, 2011, to record the estimated bad debt expense for 2011.
b. Assume that the January 1, 2011 balance in allowance for doubtful accounts was $65,000 (credit) and that $70,000 in bad debts were written off the books during 2011. What is the December 31, 2011, balance in this account *after adjustments*?
c. Prepare the necessary adjusting entry on December 31, 2012, to record the estimated bad debt expense for 2012.
d. What is the December 31, 2012, balance in allowance for doubtful accounts? Assume that $85,000 in bad debts was written off the books during 2012.

P6–5

Accounting for uncollectibles over three periods

Albertson's Locksmith Corporation started operations on January 1, 2010. Albertson's estimates uncollectibles using the percentage-of-credit-sales method. The following information

pertains to the company's sales, receivables, and collections for the first three years of operation:

	2012	2011	2010
Credit sales	$240,000	$190,000	$105,000
Cash sales	8,000	4,000	1,000
Total sales	$248,000	$194,000	$106,000
Write-offs	8,400	6,000	3,000
Cash collections of A/R	214,000	161,000	92,000

Albertson's estimates uncollectible accounts at 4 percent of credit sales.

REQUIRED:

a. What is the balance of the allowance for uncollectibles account as of the end of 2010, 2011, and 2012?
b. What is the (net) balance of the accounts receivable account as of the end of 2010, 2011, and 2012?
c. Comment on Albertson's annual estimates.

REAL DATA

P6–6

Analyzing the activity in the allowance account

The information below was taken from the footnotes of JPMorgan Chase's 2008 annual report. The December 31, 2008, balance in the allowance account was $23,164 (dollars in millions).

	2008	2007	2006
Allowance at Jan. 1	$ 9,234	$ 7,279	$7,090
Provision for losses	23,765	6,549	3,231
Recoveries	929	829	842

REQUIRED:

Compute the actual write-offs recognized by JPMorgan Chase in 2006, 2007, and 2008. Comment on JPMorgan Chase's annual estimates. Discuss the reasons underlying the 2008 amounts.

P6–7

Ignoring potential bad debts can lead to serious overstatements

The following financial information represents Hadley Company's first year of operations, 2011:

Income Statement		Balance Sheet	
Sales	$200,000	Cash	$ 5,000
Cost of goods sold	102,000	Accounts receivable	85,000
Gross profit	$ 98,000	Other assets	40,000
Expenses	65,000	Total assets	$130,000
Net income	$ 33,000	Current liabilities	$ 13,000
		Long-term notes payable	80,000
		Shareholders' equity	37,000
		Total liabilities and	
		shareholders' equity	$130,000

After reading Hadley's financial statements, you conclude that the company had a very successful first year of operations. However, after further examination, you note that the sales figure on the income statement was not adjusted for a bad debt expense. You also realize that a large percentage of Hadley's sales were to three customers, one of which, Litzenberger Supply, is in very questionable financial health, although still in business. Litzenberger owes Hadley $50,000 as of the end of 2011.

REQUIRED:

a. Adjust the financial statements of Hadley Company to reflect a more conservative reporting with respect to bad debts. That is, establish a provision for the uncollectibility of

Litzenberger's account. Recompute net income. How does this adjustment affect your assessment of Hadley's first year of operations?

b.   Why would auditors probably require that Hadley choose the more conservative reporting?

c.   Hadley's chief financial officer claims that no bad debt expense should be recorded, because Litzenberger is still conducting operations as of the end of 2011. How would you respond to this claim?

P6–8

Estimating uncollectibles, financial ratios, and loan agreements

Excerpts from the 2011 financial statements of Finley, Ltd., a service company, follow:

Fees earned	**$240,000**
Accounts receivable	**68,000**
Allowance for doubtful accounts	**3,400**
Total current assets	**105,000**
Total current liabilities	**65,000**
Net income	**15,000**
Dividends declared	**5,000**
Bad debt expense	**3,400**

Auditors from Price and Company reviewed the financial records of Finley and found that a credit sale of $10,000 (for services rendered), which was included in the fees earned amount above, should not have been recognized until January 20, 2012. The auditors also noted that a more reasonable estimate of future bad debts would be 10 percent of the accounts receivable balance. The auditors have informed Finley's management that the audit opinion will be qualified if Finley does not adjust the financial statements accordingly.

REQUIRED:

a.   Compute the effect of the auditors' recommended adjustment on the 2011 fees earned, accounts receivable, allowance for doubtful accounts, current ratio, working capital, and net income reported by Finley.

b.   Assume that Finley has a loan agreement with a bank, requiring it to maintain a current ratio of 1.5 and limiting its annual dividend payment to 50 percent of net income. How might these restrictions have influenced the reporting decisions of Finley's managers?

P6–9

Uncollectibles: Ignoring an allowance

Fine Linen Service began operations on January 28, 2008. The company does not establish an allowance for doubtful accounts. It simply recognizes a bad debt expense when an account is deemed uncollectible. The company has written off the following items over the past five years:

July 6, 2008	**Wrote off $10,000 as uncollectible from a sale made on March 1, 2008.**
Feb. 3, 2009	**Wrote off $50,000 as uncollectible from a sale made on October 28, 2008.**
Mar. 11, 2010	**Wrote off $25,000 as uncollectible from a sale made on December 20, 2008 ($12,000) and a sale made on May 10, 2008 ($13,000).**
Mar. 24, 2010	**Recovered $5,000 that had been written off on February 3, 2009. It is company policy to credit bad debt expense when an account is recovered.**
Aug. 8, 2011	**Wrote off $75,000 as uncollectible from sales made in 2008 ($20,000), in 2009 ($25,000), and in 2010 ($30,000).**
Dec. 2, 2011	**Wrote off $5,000 as uncollectible from a sale made on April 26, 2011.**
Sept. 19, 2012	**Wrote off $90,000 as uncollectible from sales in 2008 ($5,000), in 2009 ($30,000), in 2010 ($25,000), in 2011 ($20,000), and in 2012 ($10,000).**

Over the period 2008 to 2012, Fine Linen Service realized the following sales and reported the following ending balances in accounts receivable.

	Sales	Accounts Receivable
2008	$1,000,000	$ 950,000
2009	975,000	900,000
2010	1,025,000	1,200,000
2011	1,032,000	1,175,000
2012	990,000	1,095,000

At the beginning of operations, a consultant had informed Fine Linen Service that the company should expect not to collect 8 percent of total sales.

REQUIRED:

a. List the bad debt expense and the balance sheet value of accounts receivable for each year over the five-year period under both Fine Linen's current method and the allowance method. Use the following format:

	2008	2009	2010	2011	2012
Current method:					
Bad debt expense					
Accounts receivable value					
Allowance method:					
Bad debt expense					
Accounts receivable value					

b. Compute the total bad debt expense over the five-year period under the two methods. Why is the allowance method preferred to Fine Linen's current method?

P6–10

Accounting for uncollectibles and the aging estimate

In an attempt to include all relevant information for decision-making purposes, Merimore Company estimates bad debts using the aging method. However, for external reporting purposes, the company estimates bad debts as a percentage of credit sales. Merimore prepares monthly adjusting journal entries. From trends over the past five years, the company controller has estimated that 2 percent of monthly credit sales will prove to be uncollectible. Following are the monthly credit sales and bad debt write-offs for Merimore Company for 2011.

Month	Cash Collections	Credit Sales	Write-Offs
January	$ 1,200,000	$ 1,000,000	
February	1,050,000	925,000	
March	910,000	1,010,000	
April	1,000,000	975,000	$ 87,000
May	875,000	950,000	
June	1,080,000	1,200,000	
July	950,000	1,150,000	52,000
August	1,011,000	1,075,000	
September	1,105,000	1,025,000	
October	980,000	980,000	
November	1,100,000	900,000	
December	865,000	750,000	100,000
Total	$12,126,000	$11,940,000	$239,000

On December 31, 2011, the controller prepared the following aging of accounts receivable:

Account Classification	Balance	Percent Uncollectible
Current	$ 700,000	2.0%
1–30 days past due	1,200,000	5.5%
31–75 days past due	550,000	10.0%
Over 75 days past due	800,000	25.0%

The allowance for doubtful accounts balance on January 1, 2011, was a credit of $70,000.

REQUIRED:

a. Prepare the adjusting journal entry necessary on December 31, 2011, so that the statements will be in accordance with the company's external reporting policies. Remember that the company prepares monthly adjusting journal entries.

b. Compute the balance in allowance for doubtful accounts after the entry in (a) has been recorded and posted.

c. Compute the balance in accounts receivable as of January 1, 2011.

d. Prepare the December 31 adjusting entry for bad debts, using the percentage-of-credit-sales method, and compute the estimated bad debts, using the aging method.

e. Why would a company want to estimate bad debts using two different methods? Which of the two methods is more costly and time-consuming to implement? Which provides more useful information?

P6–11

Inferring reporting strategies

Excerpts from the financial statements of Ticheley Enterprises are as follows.

	2012	2011	2010
Income Statement			
Bad debt expense	$ 1,700	$ 2,900	$ 2,100
Net income	15,800	15,300	14,400
Balance Sheet			
Accounts receivable	$27,400	$23,200	$23,100
Allowance for doubtful accounts (cr.)	2,100	3,000	2,300
Shareholders' equity	78,500	75,000	71,400

On December 27, 2011, Ticheley sent merchandise with a sales price of $8,500 to a major customer. The merchandise was in transit as of December 31. The cost of the inventory shipped was $2,900, and the company chose to record the sale and outflow of inventory on January 4, 2012, when the customer received the shipment. Ticheley's management is compensated partially on an annual bonus, where all managers share equally in a $10,000 bonus pool if reported net income exceeds 20 percent of shareholders' equity.

REQUIRED:

a. Ticheley's president recently stated in a letter to the shareholders that the company has reported profit increases consistently over the last three years. Comment on this statement.

b. Why would a company establish a management compensation system where a bonus is paid if reported income exceeds a certain percentage of shareholders' equity?

c. Identify any reporting strategy that Ticheley may be using, and support your position with calculations.

d. Explain why Ticheley may be using the strategy you mentioned above, and support your position with calculations.

P6–12

Exchange gains and losses

Hughes International is a U.S. company that conducts business throughout the world. Listed below are selected transactions entered into by the company during 2011.

1. Sold merchandise to Royal Equipment Company (a United Kingdom company) in exchange for an account receivable in the amount of 320,000 pounds. At the time, the exchange rate was 0.50 British pound per U.S. dollar.

2.   Sold merchandise to Honda Automobile Company (a Japanese company) in exchange for a note receivable that calls for a payment of 350,000 yen. The exchange rate was 125 yen to the U.S. dollar.

3.   Purchased inventory from Venice Leathers (an Italian company) in exchange for a note payable that calls for a payment of 500 euros. The exchange rate was 0.75 euro to the U.S. dollar.

4.   Purchased inventory from B. C. Lumber (a Canadian company) in exchange for an account payable in the amount of 200,000 Canadian dollars. The exchange rate was 1.10 Canadian dollars per U.S. dollar.

On December 31, 2011, the exchange rates were as follows:

Foreign Currency	Currency Per U.S. Dollar
British pound	0.60
Japanese yen	115
Euro	0.85
Canadian dollar	1.05

REQUIRED:

a.   Convert each transaction above to the equivalent amount in U.S. dollars.
b.   Prepare journal entries to record each transaction.
c.   Assume that the receivables and payables are still outstanding as of December 31, 2011. Compute the amount of exchange gain or loss for each transaction.
d.   Why do fluctuating exchange rates give rise to exchange gains and losses?

P6–13

Fluctuating exchange rates, debt covenants, and hedging

International Services entered into a debt covenant requiring it to maintain a current ratio of at least 1.5:1. The company's condensed balance sheet as of December 31 follows:

Assets		Liabilities and Shareholders' Equity	
Current assets	$ 80,000	Current liabilities	$ 50,000
Noncurrent assets	200,000	Long-term liabilities	100,000
		Shareholders' equity	130,000
		Total liabilities and	
Total assets	$280,000	shareholders' equity	$280,000

International's primary customer is Buckingham, Ltd., a company located in Britain. As of December 31, Buckingham owed International 40,000 British pounds. The exchange rate as of December 31 between U.S. dollars and British pounds was $1.70 per pound.

REQUIRED:

a.   What dollar amount of International's current assets on the balance sheet is associated with the receivable owed by Buckingham?
b.   Assume that all account balances remain the same over the next year. Below what exchange rate (U.S. dollars per British pound) would International be in violation of the debt covenant?
c.   Assume that $1,600 of accounts payable on the balance sheet represents a debt of 1,000 British pounds to a British bank. Below what exchange rate would International be in violation of the debt covenant now? Consider both the receivable and the payable.
d.   Describe how International could hedge to reduce the risk of being in violation of the debt covenant.

ISSUES FOR DISCUSSION

REAL DATA

ID6–1

Restricted cash and solvency ratios

Safeguard Scientifics, Inc. reported the following in its 2008 financial statements.

Note 7: Long-Term Debt.

The credit facility required the company to maintain cash collateral equal to the company's borrowings (amounts in thousands).

Cash held in escrow—current	**$ 6,433**
Cash held in escrow—long-term	**501**
Total Assets	**$232,402**

REQUIRED:

a. Why would a potential investor or creditor want to know about restrictions on cash?
b. Assume that the loans under the credit facility are expected to remain outstanding for two years. Should the restricted cash be disclosed as current or noncurrent? Discuss.
c. How might the disclosure of such a restriction affect the calculation of working capital, the current ratio, and the quick ratio?

REAL DATA

ID6–2

Revenue recognition, ethics, and reputation

The *Wall Street Journal* reported, "For more than ten years, IBM has quietly turned to Merrill Lynch & Co. and others to execute a rare financial maneuver that propped up the results of IBM's big leasing business. The maneuver allowed IBM to book immediately all the revenue from a long-term computer lease—even though the actual dollars would flow in over the life of the lease. That didn't break any rules, but some accountants term it an end-run that many blue-chip companies would avoid. [IBM's external auditors] called the revenue booster troubling . . . and urged IBM to take immediate action to use the maneuver less." Later, the article states, "Questions about IBM's accounting could be awkward for the wounded computer giant [because] IBM long enjoyed a reputation as the epitome of financial conservatism, with triple-A-rated debt and the bluest of blue-chip stocks."

REQUIRED:

a. Discuss how using an aggressive method to recognize revenue, like the one just described, might affect IBM's reputation as "the epitome of financial conservatism."
b. Discuss some of the economic consequences associated with the use of such a method, mentioning some of the benefits and costs affecting IBM and its management.
c. The article mentions later that IBM requires all employees to swear that they have read the IBM "Business Conduct Guidelines" manual that warns them against not only reporting information inaccurately but also organizing it in a way that is intended to mislead or misinform. Comment on whether this policy is consistent with the use of the aggressive revenue recognition method mentioned above.

REAL DATA

ID6–3

Working capital, debt covenants, and restrictions on management decisions

Excerpts from the June 30, 1994, balance sheet of The Quaker Oats Company (now part of PepsiCo, Inc.) are provided below (dollars in millions).

	1994	1993	1992
Current assets:			
Cash and short-term investments	$ 140.4	$ 61.0	$ 95.2
Receivables	509.4	478.9	575.3
Inventories	385.5	354.0	435.3
Other current assets	218.3	173.7	150.4
Current liabilities	1,259.1	1,105.1	1,087.5

REQUIRED:

a. The notes to the company's 1992 financial statements state that "under the most restrictive terms of the various loan agreements . . . minimum working capital of $150 million must be maintained." Compute how close The Quaker Oats Company came to this restriction at the end of 1992, and discuss what has happened since that time.

b. In Quaker Oats' 1994 annual report, it states, "Under the most restrictive terms of the Revolving Credit Agreements, the company must maintain total shareholders' equity greater than $300 million." Comment on possible explanations for the changing restrictions.

REAL DATA

ID6–4

Analyzing the allowance account

The footnotes to the 2008 financial statements of Citigroup, the holding company for Citibank, contained the following information (dollars in millions):

	Allowance for Credit Losses		
	2008	2007	2006
Allowance for loan losses at beginning of year	$?	$?	$9,782
Provision for credit losses—consumer	28,282	15,599	6,224
Provision for credit losses—corporate	5,392	1,233	96
Consumer credit losses	20,002	10,645	8,629
Corporate credit losses	1,922	948	312
Consumer recoveries	1,600	1,661	1,547
Corporate recoveries	149	277	232
Allowance for loan losses at end of year	?	?	?

REQUIRED:

a. Fill in the missing values and comment on any trends across the three-year period.

b. As of the end of 2008, the company had outstanding loan receivables of $694,216: $519,673 in consumer loans and $174,543 in corporate loans. Which of the two categories appears to be the riskier? Why?

REAL DATA

ID6–5

Managing reserves for uncollectible receivables

The *Wall Street Journal* (March 12, 2007) reported that an analyst with the Center for Financial Research and Analysis found an interesting item in an earnings report from New Century Financial Corporation, a mortgage lending company specializing in "subprime" loans to borrowers with checkered credit histories. The analyst discovered that New Century had for the first time combined two categories of reserves for losses. New Century combined the reserve for losses on defaulted loans with a reserve for losses on real estate that had been acquired through foreclosure. By putting the two reserve accounts together, New Century could show that total reserves for losses had increased only slightly from the prior period. Hidden, though, was the fact that the reserve for losses on bad loans actually dropped by 8.7 percent. The Center for Financial Research and Analysis pointed out the discrepancy of a drop in reserves at a time when defaults on subprime mortgages were increasing across the country.

REQUIRED:

Discuss the effect of "reserves for loan losses" on the financial statements and why a company such as New Century might be reluctant to increase the reserve. Discuss what economic factors influence loan defaults (and especially loans in the subprime mortgage market).

REAL DATA

ID6–6

Provisions for loan losses and profits

Publicly traded companies release financial statements (unaudited) on a quarterly basis. For the quarter ended December 31, 2009, MarketWatch reported that Bank of America (B of A) and Wells Fargo had improved their results over the same period in 2008 but that "lingering signs of credit trouble" still existed for the banks. B of A reported a smaller loss than in 2008, but past-due loans in home mortgages, home equity loans, and commercial real estate loans all grew, as did past-due loans in its business loan portfolio. At Wells, the company showed a quarterly profit versus the prior year's loss, but its net write-offs as a percentage of loans rose to 2.71 percent from 2.11 percent for the same period a year earlier. MarketWatch

quoted an analyst who follows the banking industry as saying that he believes the problem loan situation is worse than what the banks have been disclosing.

REQUIRED:

Discuss the implications of a weakened real estate market on bank profitability. How would high unemployment, in addition to soft housing prices, affect banks' earnings? How does the provision for loan loss affect the balance sheet and the income statement of banks? Why do banks adjust the provision when market conditions change, and why do analysts sometimes question the amount of the reserve set aside by the banks?

REAL DATA

ID6–7

Bad debts, statement of cash flows, and U.S. GAAP vs. IFRS

Excerpts from the operating sections of the 2008 statement of cash flows for Target and Toyota are provided below. Target publishes U.S. GAAP-based financial statements and Toyota publishes IFRS-based financial statements (dollars in millions).

	Target	Toyota
Net earnings	$2,214	$17,146
. . .	. . .	. . .
Bad debt provision	1,251	1,226
. . .	. . .	. . .
Change in accounts receivable	(458)	(2,064)
. . .	. . .	. . .
Net cash from operations	$4,430	$29,760

REQUIRED:

a. What is the bad debt provision, and on which other financial statement would you find it?
b. Explain why the bad debt provision and the change in accounts receivable appear in the operating section of the statement of cash flows.
c. Provide several reasons why net cash from operations is so much larger than net earnings for both companies.
d. Does it look like U.S. GAAP and IFRS account for bad debts much differently? Explain.

REAL DATA

ID6–8

Earnings restatement due to misstated loan losses

In July 2006, Par Pharmaceuticals announced that it would restate financial results for fiscal years 2004 and 2005 and for the first quarter of fiscal 2006 due to an understatement of the allowance for uncollectibles for accounts receivable. The understatement resulted from delays in recognizing customer credits and uncollectible customer accounts. The company expects the restatement would total a deduction of $55 million of revenues for the time period.

The investing Web site seekingalpha.com (posted July 7, 2006) responded to Par's announcement with some calculations regarding receivables. Seekingalpha.com figured that receivables dropped 3.7 percent from 2004 to 2005 but that revenue dropped an even greater 37.2 percent over the same period. The relative growth in receivables (as compared to sales size) implies a slowing of the collection period. The Web site calculated that accounts receivables days grew from 79 days to 121 days; the site further states, "From this we see that on top of the decline in sales for 2005, the quality of the sales also declined—the company made sales on credit that it ultimately was unable to collect."

REQUIRED:

Discuss the implications of selling on credit to customers who ultimately do not pay. How is the basic accounting equation affected at the time of the sale and at the time of the realization that too many of the receivables will not be collected? What does it mean when receivables "days" increases? How can a reader of financial statements predict future restatements of revenue?

REAL DATA

ID6–9

Concentrations of credit risk

The following quote was taken from the 2009 annual report of Hewlett-Packard.

HP sells a significant portion of its products through third-party distributors and resellers and, as a result, maintains individually significant receivable balances with these parties.

If the financial condition or operations of these distributors and resellers deteriorates substantially, HP's operating results could be adversely affected. The ten largest distributor and reseller receivable balances collectively, which were concentrated primarily in North America, represented approximately 22% of gross accounts receivable at October 31, 2009 and 18% at October 31, 2008. No single customer accounts for more than 10% of accounts receivable.

REQUIRED:
a. Why would an investor or other user of HP's financial statements be concerned that certain individual customers represent a large portion of the receivables balance?
b. If problems arose with some of these customers, explain how it might affect HP's financial statements.

REAL DATA

ID6–10

Boosting earnings with bad debt estimates

Forbes noted that "Fairfield Company does set aside a reserve for bad debts, but last year it began tinkering with its provision for loan losses, reducing it from $6.5 million in one year to $5.39 million the next. It may not sound like much, but the reserve now covers only 4% of the company's time share sales, down from 6.5%—even though sales have increased by 30%. But, hey, that's tomorrow's problem. Today, Fairfield gets an extra $1 million in earnings."

REQUIRED:
a. Provide several reasons why a company may reduce its bad debt reserve from $6.5 to $5.39 million. Would these reasons seem to be as reasonable when sales have increased by 30 percent?
b. What does *Forbes* mean in the article by "that's tomorrow's problem"?

REAL DATA

ID6–11

Macroeconomic conditions and uncollectibles

In its November, 2009, press release discussing third quarter financial results, the construction management and consulting firm Hill International specifically cited an increase in bad debt expense as a drag on otherwise improved operating profits. Hill provides its services globally to companies involved in large construction projects.

REQUIRED:
Discuss the effects of an international real estate recession on construction projects and why this macroeconomic event would affect a company's bad debt expense. Who is on the other side of a company's bad debt expense? How does this expense affect the income statement and the balance sheet? How could an analyst following the global construction markets use a company's disclosure on bad debts to better understand the industry?

REAL DATA

ID6–12

Accounting for foreign currencies— An economic consequence

An article in *Forbes* noted that "accounting rules . . . can often change the way companies do business." Under the accounting rule covering receivables and payables denominated in foreign currencies, for example, "it is very important for companies to monitor their currency dealings." A case in point is R.J. Reynolds Industries, which "opened regional treasury offices in London and Hong Kong to keep tabs on worldwide cash flow and direct local borrowings." In that same article, a partner from a major accounting firm indicated that "more and more companies are centralizing their treasury-management function. Those that don't may be operating at a disadvantage."

REQUIRED:
a. Explain why the methods of accounting for foreign currencies might cause a company to centralize its treasury-management function and why those that don't may be operating at a disadvantage.
b. What is one of the main strategies used by U.S. companies to reduce the risks of holding receivables or payables denominated in non-U.S. currencies?
c. Explain how the strategy in (b) works. Specifically, how might it be used to reduce the possibility of violating a covenant on an outstanding debt?

ID6–13

The SEC Form
10-K of NIKE

The SEC Form 10-K of NIKE is reproduced in Appendix C.

REQUIRED:

Review the SEC 10-K Form for NIKE, and answer the following questions.

a. Compute the change in NIKE's current ratio and working capital from 2008 to 2009. Which accounts are the most important in explaining that change?
b. What is included in NIKE's balance sheet cash account?
c. How large are NIKE's receivables relative to current assets and total assets? How important is receivables management to NIKE's operations? How large is the reserve (allowance) for bad debts? Explain.
d. What percent of revenue and accounts receivable results from international sales? What strategies does NIKE employ to mitigate risks related to foreign currency?
e. Why is the increase in accounts receivable listed in the operating section of the statement of cash flows?