LEARNING OBJECTIVES

After studying this chapter, you should be able to:

1. Describe the nature, type, and valuation of current liabilities.
2. Explain the classification issues of short-term debt expected to be refinanced.
3. Identify types of employee-related liabilities.
4. Identify the criteria used to account for and disclose gain and loss contingencies.
5. Explain the accounting for different types of loss contingencies.
6. Indicate how current liabilities and contingencies are presented and analyzed.

Microsoft's Liabilities—Good or Bad?

Users of financial statements generally examine current liabilities to assess a company’s liquidity and overall financial flexibility. This is because many current liabilities such as accounts payable, wages payable, and taxes payable must be paid sooner rather than later. Thus, when these liabilities increase substantially, it raises a red flag about a company’s financial position.

This is not always the case for all current liabilities. For example, Microsoft has a current liability entitled “Unearned Revenue” that has increased substantially year after year. Unearned revenue is a liability that arises from sales of Microsoft products such as Windows and Office. At the time of a sale, customers pay not only for the current version of the software but also for future improvements to the software. In this case, Microsoft recognizes sales revenue from the current version of the software and records as a liability (unearned revenue) the value of future upgrades to the software that are “owed” to customers.

Market analysts indicate that such an increase in unearned revenue, rather than raising a red flag, often provides a positive signal about sales and profitability. How can information from a liability account provide information about profitability? It works this way: When Microsoft sales are growing, its unearned revenue account increases. Thus, an increase in a liability is good news about Microsoft sales.

What happens if the unearned revenue liability declines? After steady increases in recent years, Microsoft’s unearned revenue declined from the second to the third quarter of 1999. In response to this decline in unearned revenue, a number of mutual funds sold part of their Microsoft holdings. Many believed that a decline in Microsoft’s unearned revenue is bad news for investors. As one analyst noted, when the growth in unearned revenues slows or reverses, as it did for Microsoft, it indicates that sales are slowing. Thus, increases in current liabilities can sometimes be viewed as good signs instead of bad.1

---

As the opening story indicates, careful analysis of current liabilities can provide insights about a company’s liquidity and profitability. The purpose of this chapter is to explain the basic principles regarding accounting and reporting for current and contingent liabilities. Chapter 14 addresses issues related to long-term liabilities.

The content and organization of this chapter are as follows.

**WHAT IS A LIABILITY?**

The question, “What is a liability?” is not easy to answer. For example, one might ask whether preferred stock is a liability or an ownership claim. The first reaction is to say that preferred stock is in fact an ownership claim and should be reported as part of stockholders’ equity. In fact, preferred stock has many elements of debt as well. The issuer (and in some cases the holder) often has the right to call the stock within a specific period of time—making it similar to a repayment of principal. The dividend is in many cases almost guaranteed (cumulative provision)—making it look like interest. And preferred stock is but one of many financial instruments that are difficult to classify.

---

2This illustration is not just a theoretical exercise. In practice, there are a number of preferred stock issues that have all the characteristics of a debt instrument, except that they are called and legally classified preferred stock. In some cases, the IRS has even permitted the dividend payments to be treated as interest expense for tax purposes. This issue is discussed further in Chapter 15.

3The FASB has issued a new standard for addressing this issue: “Accounting for Certain Financial Liabilities with Characteristics of Liabilities and Equity,” *Statement of Financial Accounting Standards No. 149* (Norwalk, Conn.: FASB, 2003).
To help resolve some of these controversies, the FASB, as part of its conceptual framework project, defined liabilities as “probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.”

In other words, a liability has three essential characteristics:

1. It is a present obligation that entails settlement by probable future transfer or use of cash, goods, or services.
2. It is an unavoidable obligation.
3. The transaction or other event creating the obligation has already occurred.

Because liabilities involve future disbursements of assets or services, one of their most important features is the date on which they are payable. Currently maturing obligations must be satisfied promptly and in the ordinary course of business if operations are to be continued. Liabilities with a more distant due date do not, as a rule, represent a claim on the enterprise’s current resources and are therefore in a slightly different category. This feature gives rise to the basic division of liabilities into (1) current liabilities and (2) long-term debt.

Investors and creditors closely monitor a company’s liquidity. That’s because companies with weak liquidity—high levels of current liabilities relative to cash and near-cash assets—lack financial flexibility. As discussed in Chapter 5, a company with a high degree of financial flexibility is better able to survive bad times, to recover from unexpected setbacks, and to take advantage of profitable investment opportunities. A number of companies have experienced the adverse effects of lower liquidity on financial flexibility in the recent economic slowdown.

Companies such as General Motors, El Paso Corp, and Tengasco have increased their reliance on various short-term sources of financing, usually in the form of commercial paper or short-term lines of bank credit. Commercial paper represents short-term loans arranged directly with investors. A line of credit is a bank loan agreement in which the borrower is permitted to draw up to an agreed-upon amount, as needed, on a short-term basis. Relying on these types of short-term liabilities seemed like a good idea for borrowers when the economy was rolling along, especially with the lower interest rates on these obligations relative to long-term debt.

However, in the wake of the World Trade Center disaster in the fall of 2001 and the slowing economy, lenders and short-term investors in commercial paper became reluctant to lend money, thus putting the “squeeze” on short-term borrowers. Many companies experienced a financial flexibility crisis as these short-term obligations came due: They were either unable to refinance, or if they could refinance, it was at much higher rates of interest. In other cases, companies were forced to sell off assets to generate cash for their immediate needs.

Source: Henny Sender, “Firms Feel Consequences of Short-Term Borrowing,” Wall Street Journal Online (October 12, 2001).

---

4“Elements of Financial Statements of Business Enterprises,” Statement of Financial Accounting Concepts No. 6 (Stamford, Conn.: FASB, 1980). The FASB is considering an amendment to the definition of a liability. Under the proposed amendment, some obligations that are settled by issuance of equity shares would be classified as liabilities. “Proposed Amendment to FASB Statement No. 6 to Revise the Definition of Liabilities,” (Norwalk, Conn.: FASB, October 27, 2000).
WHAT IS A CURRENT LIABILITY?

Current assets are cash or other assets that can reasonably be expected to be converted into cash or to be sold or consumed in operations within a single operating cycle or within a year if more than one cycle is completed each year. **Current liabilities** are “obligations whose liquidation is reasonably expected to require use of existing resources properly classified as current assets, or the creation of other current liabilities.”

This definition has gained wide acceptance because it recognizes operating cycles of varying lengths in different industries and takes into consideration the important relationship between current assets and current liabilities.

The **operating cycle** is the period of time elapsed between the acquisition of goods and services involved in the manufacturing process and the final cash realization resulting from sales and subsequent collections. Industries that manufacture products requiring an aging process and certain capital-intensive industries have an operating cycle of considerably more than one year. On the other hand, most retail and service establishments have several operating cycles within a year.

There are many different types of current liabilities. The following ones are covered in this chapter in this order.

1. Accounts payable.
2. Notes payable.
4. Short-term obligations expected to be refinanced.
5. Dividends payable.
6. Returnable deposits.
7. Unearned revenues.
8. Sales taxes payable.
9. Income taxes payable.
10. Employee-related liabilities.

**Accounts Payable**

Accounts payable, or trade accounts payable, are balances owed to others for goods, supplies, or services purchased on open account. Accounts payable arise because of the time lag between the receipt of services or acquisition of title to assets and the payment for them. This period of extended credit is usually found in the terms of the sale (e.g., 2/10, n/30 or 1/10, E.O.M.) and is commonly 30 to 60 days.

Most accounting systems are designed to record liabilities for purchases of goods when the goods are received or, practically, when the invoices are received. Frequently there is some delay in recording the goods and the related liability on the books. If title has passed to the purchaser before the goods are received, the transaction should be recorded at the time of title passage. Attention must be paid to transactions occurring near the end of one accounting period and at the beginning of the next. It is essential to ascertain that the record of goods received (the inventory) is in agreement with the liability (accounts payable) and that both are recorded in the proper period.

Measuring the amount of an account payable poses no particular difficulty because the invoice received from the creditor specifies the due date and the exact outlay in money that is necessary to settle the account. The only calculation that may be necessary concerns the amount of cash discount. See Chapter 8 for illustrations of entries related to accounts payable and purchase discounts.
Notes Payable

Notes payable are written promises to pay a certain sum of money on a specified future date. They may arise from purchases, financing, or other transactions. In some industries, notes (often referred to as trade notes payable) are required as part of the sales/purchases transaction in lieu of the normal extension of open account credit. Notes payable to banks or loan companies generally arise from cash loans. Notes may be classified as short-term or long-term, depending upon the payment due date. Notes may also be interest-bearing or zero-interest-bearing.

Interest-Bearing Note Issued

Assume that Castle National Bank agrees to lend $100,000 on March 1, 2004, to Landscape Co. if Landscape Co. signs a $100,000, 12 percent, 4-month note. The entry to record the cash received by Landscape Co. on March 1 is:

March 1

<table>
<thead>
<tr>
<th>Cash</th>
<th>100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes Payable</td>
<td>100,000</td>
</tr>
</tbody>
</table>

(To record issuance of 12%, 4-month note to Castle National Bank)

If Landscape Co. prepares financial statements semiannually, an adjusting entry is required to recognize interest expense and interest payable of $4,000 ($100,000 / 12% x 4/12) at June 30. The adjusting entry is:

June 30

<table>
<thead>
<tr>
<th>Interest Expense</th>
<th>4,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Payable</td>
<td>4,000</td>
</tr>
</tbody>
</table>

(To accrue interest for 4 months on Castle National Bank note)

If Landscape prepared financial statements monthly, the adjusting entry at the end of each month would have been $1,000 ($100,000 / 12% x 1/12).

At maturity (July 1), Landscape Co. must pay the face value of the note ($100,000) plus $4,000 interest ($100,000 x 12% x 4/12). The entry to record payment of the note and accrued interest is as follows.

July 1

<table>
<thead>
<tr>
<th>Notes Payable</th>
<th>100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Payable</td>
<td>4,000</td>
</tr>
<tr>
<td>Cash</td>
<td>104,000</td>
</tr>
</tbody>
</table>

(To record payment of Castle National Bank interest-bearing note and accrued interest at maturity)

Zero-Interest-Bearing Note Issued

A zero-interest-bearing note may be issued instead of an interest-bearing note. A zero-interest-bearing note does not explicitly state an interest rate on the face of the note. Interest is still charged, however, because the borrower is required at maturity to pay back an amount greater than the cash received at the issuance date. In other words, the borrower receives in cash the present value of the note. The present value equals the face value of the note at maturity minus the interest or discount charged by the lender for the term of the note. In essence, the bank takes its fee “up front” rather than on the date the note matures.

To illustrate, we will assume that Landscape Co. issues a $104,000, 4-month, zero-interest-bearing note to Castle National Bank. The present value of the note is $100,000. The entry to record this transaction for Landscape Co. is as follows.

---

7The bank discount rate used in this example to find the present value is 11.538 percent.
The Notes Payable account is credited for the face value of the note, which is $4,000 more than the actual cash received. The difference between the cash received and the face value of the note is debited to Discount on Notes Payable. **Discount on Notes Payable is a contra account to Notes Payable and therefore is subtracted from Notes Payable on the balance sheet.** The balance sheet presentation on March 1 is as follows.

**ILLUSTRATION 13-1**  
Balance Sheet  
Presentation of Discount

<table>
<thead>
<tr>
<th>Current liabilities</th>
<th>104,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes payable</td>
<td>104,000</td>
</tr>
<tr>
<td>Less: Discount on notes payable</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>100,000</td>
</tr>
</tbody>
</table>

The amount of the discount, $4,000 in this case, represents the cost of borrowing $100,000 for 4 months. Accordingly, the discount is charged to interest expense over the life of the note. That is, the Discount on Notes Payable balance represents interest expense chargeable to future periods. Thus, it would be incorrect to debit Interest Expense for $4,000 at the time the loan is obtained. Additional accounting issues related to notes payable are discussed in Chapter 14.

**Current Maturities of Long-Term Debt**

The portion of bonds, mortgage notes, and other long-term indebtedness that matures within the next fiscal year—**current maturities of long-term debt**—is reported as a current liability. When only a part of a long-term debt is to be paid within the next 12 months (as in the case of serial bonds that are to be retired through a series of annual installments), the maturing portion of long-term debt is reported as a current liability. The balance is reported as a long-term debt.

Long-term debts maturing currently should not be included as current liabilities if they are to be:

1. retired by assets accumulated for this purpose that properly have not been shown as current assets;
2. refinanced, or retired from the proceeds of a new debt issue (see next topic); or
3. converted into capital stock.

In these situations, the use of current assets or the creation of other current liabilities does not occur. Therefore, classification as a current liability is inappropriate. The plan for liquidation of such a debt should be disclosed either parenthetically or by a note to the financial statements.

However, a liability that is **due on demand** (callable by the creditor) or will be due on demand within a year (or operating cycle, if longer) should be classified as a current liability. Liabilities often become callable by the creditor when there is a violation of the debt agreement. For example, most debt agreements specify a given level of equity to debt be maintained, or they specify that working capital be of a minimum amount. If an agreement is violated, classification of the debt as current is required because it is a reasonable expectation that existing working capital will be used to satisfy the debt. Only if it can be shown that it is **probable** that the violation will be cured (satisfied) within the grace period usually given in these agreements can the debt be classified as noncurrent.8

---

8"Classification of Obligations That Are Callable by the Creditor," *Statement of Financial Accounting Standards No. 78* (Stamford, Conn.: FASB, 1983).
Short-Term Obligations Expected to Be Refinanced

Short-term obligations are those debts that are scheduled to mature within one year after the date of an enterprise’s balance sheet or within an enterprise’s operating cycle, whichever is longer. Some short-term obligations are expected to be refinanced on a long-term basis and therefore are not expected to require the use of working capital during the next year (or operating cycle).9

At one time, the accounting profession generally supported the exclusion of short-term obligations from current liabilities if they were “expected to be refinanced.” Because the profession provided no specific guidelines, however, determining whether a short-term obligation was “expected to be refinanced” was usually based solely on management’s intent to refinance on a long-term basis. A company may obtain a 5-year bank loan but, because the bank prefers it, handle the actual financing with 90-day notes, which it must keep turning over (renewing). So in this case, what is the loan—a long-term debt or a current liability? Another example of this problem of classification was the Penn Central Railroad before it went bankrupt. The railroad was deep into short-term debt and commercial paper but classified it as long-term debt. Why? Because the railroad believed it had commitments from lenders to keep refinancing the short-term debt. When those commitments suddenly disappeared, it was “good-bye Pennsy.” As the Greek philosopher Epictetus once said, “Some things in this world are not and yet appear to be.”

Refinancing Criteria

As a result of these classification problems, authoritative criteria have been developed for determining the circumstances under which short-term obligations may properly be excluded from current liabilities. A company is required to exclude a short-term obligation from current liabilities only if both of the following conditions are met:

1. It must intend to refinance the obligation on a long-term basis.
2. It must demonstrate an ability to consummate the refinancing.10

Intention to refinance on a long-term basis means that the enterprise intends to refinance the short-term obligation so that the use of working capital will not be required during the ensuing fiscal year or operating cycle, if longer. The ability to consummate the refinancing may be demonstrated by:

(a) Actually refinancing the short-term obligation by issuing a long-term obligation or equity securities after the date of the balance sheet but before it is issued; or
(b) Entering into a financing agreement that clearly permits the enterprise to refinance the debt on a long-term basis on terms that are readily determinable.

If an actual refinancing occurs, the portion of the short-term obligation to be excluded from current liabilities may not exceed the proceeds from the new obligation or equity securities that are applied to retire the short-term obligation. For example, Montavon Winery with $3,000,000 of short-term debt issued 100,000 shares of common stock subsequent to the balance sheet date but before the balance sheet was issued, intending to use the proceeds to liquidate the short-term debt at its maturity. If the net proceeds from the sale of the 100,000 shares totaled $2,000,000, only that amount of the short-term debt could be excluded from current liabilities. An additional question relates to whether a short-term obligation should be excluded from current liabilities if it is paid off after the balance sheet date and subsequently replaced by long-term debt before the balance sheet is issued. To illustrate,

---

9Refinancing a short-term obligation on a long-term basis means either replacing it with a long-term obligation or with equity securities, or renewing, extending, or replacing it with short-term obligations for an uninterrupted period extending beyond one year (or the operating cycle, if longer) from the date of the enterprise’s balance sheet.

10"Classification of Short-term Obligations Expected to Be Refinanced," Statement of Financial Accounting Standards No. 6 (Stamford, Conn.: FASB, 1975), pars. 10 and 11.
Marquardt Company pays off short-term debt of $40,000 on January 17, 2005, and issues long-term debt of $100,000 on February 3, 2005. Marquardt’s financial statements dated December 31, 2004, are to be issued March 1, 2005. Because repayment of the short-term obligation before funds were obtained through long-term financing required the use of existing current assets, the short-term obligations are included in current liabilities at the balance sheet date (see graphical presentation below).

### Illustration 13-2
Short-Term Debt Paid Off after Balance Sheet Date and Later Replaced by Long-Term Debt

<table>
<thead>
<tr>
<th>Liability</th>
<th>Liability</th>
<th>Liability of Issues long-term debt of</th>
</tr>
</thead>
<tbody>
<tr>
<td>$40,000</td>
<td>$40,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>How to classify?</td>
<td>paid off</td>
<td>classify as current</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2004</td>
<td>Balance sheet date</td>
</tr>
<tr>
<td>January 17, 2005</td>
<td>January 17, 2005</td>
</tr>
<tr>
<td>February 3, 2005</td>
<td>March 1, 2005</td>
</tr>
</tbody>
</table>

### What about that short-term debt?
Investors and creditors are interested in a company’s debt-management strategies. Management decisions that are viewed as prudent will be rewarded with lower debt service costs and a higher stock price. The wrong decisions can bring higher debt costs and lower stock prices.

**General Electric Capital Corp.,** a subsidiary of **General Electric**, recently experienced the negative effects of market scrutiny of its debt-management policies when analysts complained that GE had been slow to refinance its mountains of short-term debt. GE had issued these current obligations, with maturities of 270 days or less, when interest rates were low. However, in light of expectations that the Fed would raise interest rates, analysts began to worry about the higher interest costs GE would pay when these loans were refinanced. Some analysts recommended that it was time to reduce dependence on short-term credit. The reasoning was that a shift to more dependable long-term debt, thereby locking in slightly higher rates for the long-term, would be the better way to go.

Thus, scrutiny of GE debt strategies led to analysts’ concerns about GE’s earnings prospects. Investors took the analysis to heart, and GE experienced a 2-day 6 percent drop in its stock price.

*Source: Adapted from Steven Vames, “Credit Quality, Stock Investing Seem to Go Hand in Hand,” Wall Street Journal (April 1, 2002), p. R4.*

### Dividends Payable
A **cash dividend payable** is an amount owed by a corporation to its stockholders as a result of the board of directors’ authorization. At the date of declaration the corporation assumes a liability that places the stockholders in the position of creditors in the amount of dividends declared. Because cash dividends are always paid within one year of declaration (generally within 3 months), they are classified as current liabilities.

Accumulated but undeclared dividends on cumulative preferred stock are not a recognized liability because preferred dividends in arrears are not an obligation until formal action is taken by the board of directors authorizing the distribution of earnings. Nevertheless, the amount of cumulative dividends unpaid should be disclosed in a note, or it may be shown parenthetically in the capital stock section of the balance sheet.

Dividends payable in the form of additional shares of stock are not recognized as a liability. Such **stock dividends** (as discussed in Chapter 15) do not require future out-
lays of assets or services and are revocable by the board of directors at any time prior to issuance. Even so, such undistributed stock dividends are generally reported in the stockholders’ equity section because they represent retained earnings in the process of transfer to paid-in capital.

**Returnable Deposits**

Current liabilities of a company may include returnable cash deposits received from customers and employees. Deposits may be received from customers to guarantee performance of a contract or service or as guarantees to cover payment of expected future obligations. For example, telephone companies often require a deposit upon installation of a phone. Deposits may also be received from customers as guarantees for possible damage to property left with the customer. Some companies require their employees to make deposits for the return of keys or other company property. The classification of these items as current or noncurrent liabilities is dependent on the time between the date of the deposit and the termination of the relationship that required the deposit.

**Unearned Revenues**

A magazine publisher such as Golf Digest may receive a customer’s check when magazines are ordered, and an airline company, such as American Airlines, often sells tickets for future flights. Restaurants may issue meal tickets that can be exchanged or used for future meals. Who hasn’t received or given a McDonald’s gift certificate? And as discussed in the opening story, a company like Microsoft issues coupons that allow customers to upgrade to the next version of its software. How do these companies account for unearned revenues that are received before goods are delivered or services are rendered?

1. When the advance is received, Cash is debited, and a current liability account identifying the source of the unearned revenue is credited.
2. When the revenue is earned, the unearned revenue account is debited, and an earned revenue account is credited.

To illustrate, assume that Allstate University sells 10,000 season football tickets at $50 each for its five-game home schedule. The entry for the sales of season tickets is:

<table>
<thead>
<tr>
<th>Date</th>
<th>Account Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 6</td>
<td>Cash</td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unearned Football Ticket Revenue</td>
<td></td>
<td>500,000</td>
</tr>
<tr>
<td></td>
<td>(To record sale of 10,000 season tickets)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As each game is completed, the following entry is made:

<table>
<thead>
<tr>
<th>Date</th>
<th>Account Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 7</td>
<td>Unearned Football Ticket Revenue</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Football Ticket Revenue</td>
<td></td>
<td>100,000</td>
</tr>
<tr>
<td></td>
<td>(To record football ticket revenues earned)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unearned Football Ticket Revenue is, therefore, unearned revenue and is reported as a current liability in the balance sheet. As revenue is earned, a transfer from unearned revenue to earned revenue occurs. Unearned revenue is material for some companies: In the airline industry, tickets sold for future flights represent almost 50 percent of total current liabilities. At United Air Lines, unearned ticket revenue is the largest current liability, recently amounting to over $1.4 billion.

Illustration 13-3 (on page 624) shows specific unearned and earned revenue accounts used in selected types of businesses. The balance sheet should report obligations for any commitments that are redeemable in goods and services. The income statement should report revenues earned during the period.
Sales Taxes Payable

Sales taxes on transfers of tangible personal property and on certain services must be collected from customers and remitted to the proper governmental authority. A liability is set up to provide for taxes collected from customers but not yet remitted to the tax authority. The Sales Taxes Payable account should reflect the liability for sales taxes due various governments. The entry below is the proper one for a sale of $3,000 when a 4 percent sales tax is in effect.

\[
\begin{align*}
\text{Cash or Accounts Receivable} & \quad 3,120 \\
\text{Sales} & \quad 3,000 \\
\text{Sales Taxes Payable} & \quad 120
\end{align*}
\]

When the sales tax collections credited to the liability account are not equal to the liability as computed by the governmental formula, an adjustment of the liability account may be made by recognizing a gain or a loss on sales tax collections.

In many companies, however, the sales tax and the amount of the sale are not segregated at the time of sale. Instead, both are credited in total in the Sales account. In that case, to reflect correctly the actual amount of sales and the liability for sales taxes, the Sales account must be debited for the amount of the sales taxes due the government on these sales, and the Sales Taxes Payable account must be credited for the same amount. As an illustration, assume that the Sales account balance of $150,000 includes sales taxes of 4 percent. Because the amount recorded in the Sales account is equal to sales plus 4 percent of sales, or 1.04 times the sales total, sales are $150,000 / 1.04, or $144,230.77. The sales tax liability is $5,769.23 ($144,230.77 \times 0.04; or $150,000 - $144,230.77). The following entry would be made to record the amount due the taxing unit.

\[
\begin{align*}
\text{Sales} & \quad 5,769.23 \\
\text{Sales Taxes Payable} & \quad 5,769.23
\end{align*}
\]

ILLUSTRATION 13-3
Unearned and Earned Revenue Accounts

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Unearned Revenue</th>
<th>Earned Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline</td>
<td>Unearned Passenger Ticket Revenue</td>
<td>Passenger Revenue</td>
</tr>
<tr>
<td>Magazine publisher</td>
<td>Unearned Subscription Revenue</td>
<td>Subscription Revenue</td>
</tr>
<tr>
<td>Hotel</td>
<td>Unearned Rental Revenue</td>
<td>Rental Revenue</td>
</tr>
<tr>
<td>Auto dealer</td>
<td>Unearned Warranty Revenue</td>
<td>Warranty Revenue</td>
</tr>
</tbody>
</table>

Income Taxes Payable

Any federal or state income tax varies in proportion to the amount of annual income. Some consider the amount of income tax on annual income as an estimate because the computation of income (and the tax thereon) is subject to IRS review and approval. The meaning and application of numerous tax rules, especially new ones, are debatable and often dependent on a court’s interpretation. Using the best information and advice available, a business must prepare an income tax return and compute the income tax payable resulting from the operations of the current period. The taxes payable on the income of a corporation, as computed per the tax return, should be classified as a current liability.\(^{11}\)

Unlike the corporation, the proprietorship and the partnership are not taxable entities. Because the individual proprietor and the members of a partnership are subject to personal income taxes on their share of the business’s taxable income, income tax liabilities do not appear on the financial statements of proprietorships and partnerships.

Most corporations must make periodic tax payments throughout the year in an authorized bank depository or a Federal Reserve bank. These payments are based upon estimates of the total annual tax liability. As the estimated total tax liability changes, the periodic contributions also change. If in a later year an additional tax is assessed on the income of an earlier year, Income Taxes Payable should be credited. The related debit should be charged to current operations.

Differences between taxable income under the tax laws and accounting income under generally accepted accounting principles sometimes occur. Because of these differences, the amount of income tax payable to the government in any given year may differ substantially from income tax expense, as reported on the financial statements. Chapter 19 is devoted solely to income tax matters and presents an extensive discussion of this complex and controversial problem.

Employee-Related Liabilities

Amounts owed to employees for salaries or wages at the end of an accounting period are reported as a current liability. In addition, the following items related to employee compensation are often reported as current liabilities.

1. Payroll deductions.
2. Compensated absences.
3. Bonuses. (Accounting for bonuses is covered in Appendix 13A.)

Payroll Deductions

The most common types of payroll deductions are taxes and miscellaneous items such as insurance premiums, employee savings, and union dues. To the extent the amounts deducted have not been remitted to the proper authority at the end of the accounting period, they should be recognized as current liabilities.

Social Security Taxes. Since January 1, 1937, Social Security legislation has provided federal old-age, survivor, and disability insurance (O.A.S.D.I.) benefits for certain individuals and their families through taxes levied on both the employer and the employee. All employers covered are required to collect the employee’s share of this tax, by deducting it from the employee’s gross pay, and to remit it to the federal government along with the employer’s share. Both the employer and the employee are taxed at the same rate, currently 6.2 percent based on the employee’s gross pay up to an $84,900 annual limit.

\(^{11}\)Corporate taxes are based on a progressive tax rate structure. Companies with taxable income of $50,000 or less are taxed at a 15 percent rate, while higher levels of income are taxed at rates ranging up to 39 percent.
In 1965 Congress passed the first federal health insurance program for the aged—popularly known as Medicare. It is a two-part program designed to alleviate the high cost of medical care for those over age 65. The Basic Plan, which provides hospital and other institutional services, is financed by a separate Hospital Insurance tax paid by both the employee and the employer at the rate of 1.45 percent on the employee’s total compensation. The Voluntary Plan takes care of the major part of doctors’ bills and other medical and health services and is financed by monthly payments from all who enroll plus matching funds from the federal government.

The combination of the O.A.S.D.I. tax, often called Federal Insurance Contribution Act (F.I.C.A.) tax, and the federal Hospital Insurance Tax is commonly referred to as the Social Security tax. The combined rate for these taxes, 7.65 percent on an employee’s wages to $84,900 and 1.45 percent in excess of $84,900, is changed intermittently by acts of Congress. The amount of unremitting employer Social Security tax should be reported by the employer as a current liability.

Unemployment Taxes. Another payroll tax levied by the federal government in cooperation with state governments provides a system of unemployment insurance. All employers who (1) paid wages of $1,500 or more during any calendar quarter in the year or preceding year or (2) employed at least one individual on at least one day in each of 20 weeks during the current or preceding calendar year are subject to the Federal Unemployment Tax Act (F.U.T.A.). This tax is levied only on the employer at a rate of 6.2 percent on the first $7,000 of compensation paid to each employee during the calendar year. The employer is allowed a tax credit not to exceed 5.4 percent for contributions paid to a state plan for unemployment compensation. Thus, if an employer is subject to a state unemployment tax of 5.4 percent or more, only 0.8 percent tax is due the federal government.

State unemployment compensation laws differ from the federal law and differ among various states. Therefore, employers must be familiar with the unemployment tax laws in each state in which they pay wages and salaries. Although the normal state tax rate may range from 3 percent to 7 percent or higher, all states provide for some form of merit rating under which a reduction in the state contribution rate is allowed. Employers who display by their benefit and contribution experience that they have provided steady employment may be entitled to this reduction—if the size of the state fund is adequate to provide the reduction. In order not to penalize an employer who has earned a reduction in the state contribution rate, the federal law allows a credit of 5.4 percent even though the effective state contribution rate is less than 5.4 percent.

To illustrate, Appliance Repair Co., which has a taxable payroll of $100,000, is subject to a federal rate of 6.2 percent and a state contribution rate of 5.7 percent. Because of stable employment experience, the company’s state rate has been reduced to 1 percent. The computation of the federal and state unemployment taxes for Appliance Repair Co. is:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>State unemployment tax payment (1% × $100,000)</td>
<td>$1,000</td>
</tr>
<tr>
<td>Federal unemployment tax [(1.45% − 5.4%) × $100,000]</td>
<td>800</td>
</tr>
<tr>
<td><strong>Total federal and state unemployment tax</strong></td>
<td><strong>$1,800</strong></td>
</tr>
</tbody>
</table>

The federal unemployment tax is paid quarterly with a tax form filed annually. State contributions generally are required to be paid quarterly. Because both the federal and the state unemployment taxes accrue on earned compensation, the amount of accrued but unpaid employer contributions should be recorded as an operating expense and as a current liability when financial statements are prepared at year-end.

Income Tax Withholding. Federal and some state income tax laws require employers to withhold from the pay of each employee the applicable income tax due on those
wages. The amount of income tax withheld is computed by the employer according to a government-prescribed formula or withholding tax table. That amount depends on the length of the pay period and each employee’s taxable wages, marital status, and claimed dependents. If the income tax withheld plus the employee and the employer Social Security taxes exceeds specified amounts per month, the employer is required to make remittances to the government during the month.

Illustration 13-5 summarizes various payroll deductions and liabilities.

**Payroll Deductions Illustration.** Assume a weekly payroll of $10,000 entirely subject to F.I.C.A. and Medicare (7.65%), federal (0.8%) and state (4%) unemployment taxes with income tax withholding of $1,320 and union dues of $88 deducted.

The entry to record the wages and salaries paid and the employee payroll deductions would be:

\[
\begin{align*}
\text{Wages and Salaries Expense} & \quad 10,000 \\
\text{Withholding Taxes Payable} & \quad 1,320 \\
\text{F.I.C.A. Taxes Payable} & \quad 765 \\
\text{Union Dues Payable to Local No. 257} & \quad 88 \\
\text{Cash} & \quad 7,827
\end{align*}
\]

The entry to record the employer payroll taxes would be:

\[
\begin{align*}
\text{Payroll Tax Expense} & \quad 1,245 \\
\text{F.I.C.A. Taxes Payable} & \quad 765 \\
\text{Federal Unemployment Tax Payable} & \quad 80 \\
\text{State Unemployment Tax Payable} & \quad 400
\end{align*}
\]

The employer is required to remit to the government its share of F.I.C.A. tax along with the amount of F.I.C.A. tax deducted from each employee’s gross compensation. All unremitting employer F.I.C.A. taxes should be recorded as payroll tax expense and payroll tax payable.\(^{12}\)

**Compensated Absences**

Compensated absences are absences from employment—such as vacation, illness, and holidays—for which employees are paid anyway. A liability should be accrued for the cost of compensation for future absences if all of the following four conditions are met:\(^{13}\)

(a) The employer’s obligation relating to employees’ rights to receive compensation for future absences is attributable to employees’ services already rendered,

(b) The obligation relates to the rights that vest or accumulate,

\(^{12}\) In a manufacturing enterprise, all of the payroll costs (wages, payroll taxes, and fringe benefits) are allocated to appropriate cost accounts such as Direct Labor, Indirect Labor, Sales Salaries, Administrative Salaries, and the like. This abbreviated and somewhat simplified discussion of payroll costs and deductions is not indicative of the volume of records and clerical work that may be involved in maintaining a sound and accurate payroll system.

\(^{13}\) “Accounting for Compensated Absences,” *Statement of Financial Accounting Standards No. 43* (Stamford, Conn.: FASB, 1980), par. 6.
Payment of the compensation is probable, and the amount can be reasonably estimated. An example of an accrual for compensated absences is shown below in an excerpt from the balance sheet of Clarcor Inc. presented in its annual report.

**ILLUSTRATION 13-6**
*Clarcor Inc.*

<table>
<thead>
<tr>
<th>Current liabilities</th>
<th>$ 6,308</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$ 6,308</td>
</tr>
<tr>
<td>Accrued salaries, wages and commissions</td>
<td>2,278</td>
</tr>
<tr>
<td><strong>Compensated absences</strong></td>
<td>2,271</td>
</tr>
<tr>
<td>Accrued pension liabilities</td>
<td>1,023</td>
</tr>
<tr>
<td>Other accrued liabilities</td>
<td>4,572</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>$16,452</td>
</tr>
</tbody>
</table>

If an employer meets conditions (a), (b), and (c) but does not accrue a liability because of a failure to meet condition (d), that fact should be disclosed. An example of such a disclosure is the following note from the financial statements of Gotham Utility Company.

**ILLUSTRATION 13-7**
*Gotham Utility Company*

Employees of the Company are entitled to paid vacation, personal, and sick days off, depending on job status, length of service, and other factors. Due to numerous differing union contracts and other agreements with nonunion employees, it is impractical to estimate the amount of compensation for future absences, and, accordingly, no liability has been reported in the accompanying financial statements. The Company’s policy is to recognize the cost of compensated absences when actually paid to employees; compensated absence payments to employees totaled $2,786,000.

Vested rights exist when an employer has an obligation to make payment to an employee even if his or her employment is terminated. Thus, vested rights are not contingent on an employee’s future service. Accumulated rights are those that can be carried forward to future periods if not used in the period in which earned. For example, assume that you have earned 4 days of vacation pay as of December 31, the end of your employer’s fiscal year, and that you will be paid for this vacation time even if you terminate employment. In this situation, your 4 days of vacation pay are considered vested and must be accrued. Now assume that your vacation days are not vested, but that you can carry the 4 days over into later periods. Although the rights are not vested,

---

14These same four conditions are to be applied to accounting for postemployment benefits. Postemployment benefits are benefits provided by an enterprise to past or inactive employees after employment but prior to retirement. Examples include salary continuation, supplemental unemployment benefits, severance pay, job training, and continuation of health and life insurance coverage. FASB Statement No. 112, “Employers’ Accounting for Postemployment Benefits” requires that the accounting treatment for compensated absences described in FASB Statement No. 43 be applied to postemployment benefits. “Employers’ Accounting for Postemployment Benefits,” Statement of Financial Accounting Standards No. 112 (Norwalk, Conn.: FASB, November 1992), par. 18.
they are accumulated rights for which the employer must provide an accrual, allowing for estimated forfeitures due to turnover.

A modification of the general rules relates to the issue of **sick pay**. If sick pay benefits vest, accrual is required. If sick pay benefits accumulate but do not vest, accrual is permitted but not required. The reason for this distinction is that compensation that is designated as sick pay may be administered in one of two ways. In some companies, employees receive sick pay only if they are absent because of illness. Accrual of a liability is permitted but not required because its payment is contingent upon future employee illness. In other companies, employees are allowed to accumulate unused sick pay and take compensated time off from work even though they are not ill. For this type of sick pay, a liability must be accrued because it will be paid whether or not employees ever become ill.

**The expense and related liability for compensated absences should be recognized in the year earned by employees.** For example, if new employees receive rights to two weeks’ paid vacation at the beginning of their second year of employment, the vacation pay is considered to be earned during the first year of employment.

What rate should be used to accrue the compensated absence cost—the current rate or an estimated future rate? **EASB Statement No. 43** is silent on this subject. Therefore, it is likely that companies will use the current rather than future rate. The future rate is less certain and raises issues concerning the time value of money. To illustrate, assume that Amutron Inc. began operations on January 1, 2003. The company employs ten individuals who are paid $480 per week. Vacation weeks earned by all employees in 2003 were 20 weeks, but none were used during this period. In 2004, the vacation weeks were used when the current rate of pay was $540 per week for each employee. The entry at December 31, 2003, to accrue the accumulated vacation pay is as follows.

\[
\begin{align*}
\text{Wages Expense} & \quad 9,600 \\
\text{Vacation Wages Payable ($480 \times 20)} & \quad 9,600
\end{align*}
\]

At December 31, 2003, the company would report on its balance sheet a liability of $9,600. In 2004, the vacation pay related to 2003 would be recorded as follows.

\[
\begin{align*}
\text{Vacation Wages Payable} & \quad 9,600 \\
\text{Wages Expense} & \quad 1,200 \\
\text{Cash ($540 \times 20)} & \quad 10,800
\end{align*}
\]

In 2004 the vacation weeks were used. Therefore, the liability is extinguished. Note that the difference between the amount of cash paid and the reduction in the liability account is recorded as an adjustment to Wages Expense in the period when paid. This difference arises because the liability account was accrued at the rates of pay in effect during the period when compensated time was earned. The cash paid, however, is based on the rates in effect during the period when compensated time is used. If the future rates of pay had been used to compute the accrual in 2003, then the cash paid in 2004 would have been equal to the liability.\(^{15}\)

**Bonus Agreements**

For various reasons, many companies give a **bonus** to certain or all officers and employees in addition to their regular salary or wage. Frequently the bonus amount is dependent on the company’s yearly profit. For example, **Ford Motor Company** has a plan whereby employees share in the success of the company’s operations on the basis of a complicated formula using net income as its primary basis for computation. From the standpoint of the enterprise, **bonus payments to employees** may be considered additional wages and should be included as a deduction in determining the net income for the year.

\(^{15}\)Some companies have obligations for benefits paid to employees after they retire. The accounting and reporting standards for postretirement benefit payments are complex. These standards relate to two different types of **postretirement benefits**: (1) pensions and (2) postretirement health-care and life insurance benefits. These issues are discussed extensively in Chapter 20.
To illustrate the entries for an employee bonus, assume a company whose income for the year 2004 is $100,000 will pay out bonuses of $10,714.29 in January 2005. (Computations of this and other bonuses are illustrated in Appendix 13A.) An adjusting entry dated December 31, 2004, is made to record the bonus as follows.

Employees’ Bonus Expense 10,714.29
Profit-Sharing Bonus Payable 10,714.29

In January 2005, when the bonus is paid, the journal entry would be:

Profit-Sharing Bonus Payable 10,714.29
Cash 10,714.29

The expense account should appear in the income statement as an operating expense. The liability, profit-sharing bonus payable, is usually payable within a short period of time and should be included as a current liability in the balance sheet.

Similar to bonus arrangements are contractual agreements covering rents or royalty payments conditional on the amount of revenues earned or the quantity of product produced or extracted. Conditional expenses based on revenues or units produced are usually less difficult to compute than bonus arrangements. For example, if a lease calls for a fixed rent payment of $500 per month and 1 percent of all sales over $300,000 per year, the annual rent obligation would amount to $6,000 plus $0.01 of each dollar of revenue over $300,000. Or, a royalty agreement may accrue to the patent owner $1.00 for every ton of product resulting from the patented process, or accrue to the mineral rights owner $0.50 on every barrel of oil extracted. As each additional unit of product is produced or extracted, an additional obligation, usually a current liability, is created.

SECTION 2

CONTINGENCIES

A contingency is defined in FASB Statement No. 5 “as an existing condition, situation, or set of circumstances involving uncertainty as to possible gain (gain contingency) or loss (loss contingency) to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur.”

GAIN CONTINGENCIES

Gain contingencies are claims or rights to receive assets (or have a liability reduced) whose existence is uncertain but which may become valid eventually. The typical gain contingencies are:

1. Possible receipts of monies from gifts, donations, bonuses, and so on.
2. Possible refunds from the government in tax disputes.
3. Pending court cases where the probable outcome is favorable.
4. Tax loss carryforwards (discussed in Chapter 19).

Accountants have adopted a conservative policy in this area. Gain contingencies are not recorded. They are disclosed in the notes only when the probabilities are high that a gain contingency will become a reality. As a result, it is unusual to find infor-
Loss contingencies are situations involving uncertainty as to possible loss. A liability incurred as a result of a loss contingency is by definition a contingent liability. Contingent liabilities are obligations that are dependent upon the occurrence or nonoccurrence of one or more future events to confirm either the amount payable, the payee, the date payable, or its existence. That is, one or more of these factors depend upon a contingency.

When a loss contingency exists, the likelihood that the future event or events will confirm the incurrence of a liability can range from probable to remote. The FASB uses the terms probable, reasonably possible, and remote to identify three areas within that range and assigns the following meanings.

Probable. The future event or events are likely to occur.
Reasonably possible. The chance of the future event or events occurring is more than remote but less than likely.
Remote. The chance of the future event or events occurring is slight.

An estimated loss from a loss contingency should be accrued by a charge to expense and a liability recorded only if both of the following conditions are met.17

1 Information available prior to the issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements.
2 The amount of the loss can be reasonably estimated.

Neither the exact payee nor the exact date payable need be known to record a liability. What must be known is whether it is probable that a liability has been incurred.

The second criterion indicates that an amount for the liability can be reasonably determined. If it cannot, it should not be accrued as a liability. Evidence to determine a reasonable estimate of the liability may be based on the company’s own experience, experience of other companies in the industry, engineering or research studies, legal advice, or educated guesses by personnel in the best position to know. The excerpt from the annual report of Quaker State Oil Refining Corp. shown in Illustration 13-9 (page 632) is an example of an accrual recorded for a loss contingency.

17Those loss contingencies that result in the incurrence of a liability are most relevant to the discussion in this chapter. Loss contingencies that result in the impairment of an asset (e.g., collectibility of receivables or threat of expropriation of assets) are discussed more fully in other sections of this textbook.
Use of the terms probable, reasonably possible, and remote as guidelines for classifying contingencies involves judgment and subjectivity. The items in Illustration 13-10 are examples of loss contingencies and the general accounting treatment accorded them.

Practicing accountants express concern over the diversity that now exists in the interpretation of “probable,” “reasonably possible,” and “remote.” Current practice relies heavily on the exact language used in responses received from lawyers, but such language is necessarily biased and protective rather than predictive. As a result, accruals and disclosures of contingencies vary considerably in practice. Some of the more common loss contingencies discussed in this chapter are:

1. Litigation, claims, and assessments.
2. Guarantee and warranty costs.
3. Premiums and coupons.
4. Environmental liabilities.
5. Self-insurance risks.

---

18Accounting Trends and Techniques—2001 reports that of the 600 companies surveyed, loss contingencies of the following nature and number were reported: litigation 468; environmental 249; insurance 58; possible tax assessments 47; governmental investigation 45; and others 47.
Note that general risk contingencies that are inherent in business operations, such as the possibility of war, strike, uninsurable catastrophes, or a business recession, are not reported in the notes to the financial statements.

Litigation, Claims, and Assessments

The following factors, among others, must be considered in determining whether a liability should be recorded with respect to pending or threatened litigation and actual or possible claims and assessments:

1. The time period in which the underlying cause of action occurred.
2. The probability of an unfavorable outcome.
3. The ability to make a reasonable estimate of the amount of loss.

To report a loss and a liability in the financial statements, the cause for litigation must have occurred on or before the date of the financial statements. It does not matter that the company did not become aware of the existence or possibility of the lawsuit or claims until after the date of the financial statements but before they are issued. To evaluate the probability of an unfavorable outcome, consider the following: the nature of the litigation; the progress of the case; the opinion of legal counsel; the experience of your company and others in similar cases; and any management response to the lawsuit.

The outcome of pending litigation, however, can seldom be predicted with any assurance. Even if the evidence available at the balance sheet date does not favor the defendant, it is hardly reasonable to expect the company to publish in its financial statements a dollar estimate of the probable negative outcome. Such specific disclosures could weaken the company’s position in the dispute and encourage the plaintiff to intensify its efforts. A typical example of the wording of such a disclosure is the note to the financial statements of Apple Computer, Inc. relating to its litigation concerning repetitive stress injuries, as shown in Illustration 13-11.

Apple Computer, Inc.

“Repetitive Stress Injury” Litigation. The Company is named in numerous lawsuits (fewer than 100) alleging that the plaintiff incurred so-called “repetitive stress injury” to the upper extremities as a result of using keyboards and/or mouse input devices sold by the Company. On October 4, in a trial of one of these cases (Dorsey v. Apple) in the United States District Court for the Eastern District of New York, the jury rendered a verdict in favor of the Company, and final judgment in favor of the Company has been entered. The other cases are in various stages of pretrial activity. These suits are similar to those filed against other major suppliers of personal computers. Ultimate resolution of the litigation against the Company may depend on progress in resolving this type of litigation in the industry overall.

With respect to unfiled suits and unasserted claims and assessments, a company must determine (1) the degree of probability that a suit may be filed or a claim or assessment may be asserted and (2) the probability of an unfavorable outcome. For example, assume that Nawtee Company is being investigated by the Federal Trade Commission for restraint of trade, and enforcement proceedings have been instituted. Such proceedings are often followed by private claims of triple damages for redress. In this case, Nawtee Company must determine the probability of the claims being asserted and the probability of triple damages being awarded. If both are probable, if the loss is reasonably estimable, and if the cause for action is dated on or before the date of the financial statements, then the liability should be accrued. 19

19Contingencies involving an unasserted claim or assessment need not be disclosed when no claimant has come forward unless (1) it is considered probable that a claim will be asserted and (2) there is a reasonable possibility that the outcome will be unfavorable.
Guarantee and Warranty Costs

A warranty (product guarantee) is a promise made by a seller to a buyer to make good on a deficiency of quantity, quality, or performance in a product. It is commonly used by manufacturers as a sales promotion technique. Automakers, for instance, “hyped” their sales by extending their new-car warranty to 7 years or 100,000 miles. For a specified period of time following the date of sale to the consumer, the manufacturer may promise to bear all or part of the cost of replacing defective parts, to perform any necessary repairs or servicing without charge, to refund the purchase price, or even to “double your money back.”

Warranties and guarantees entail future costs—frequently significant additional costs—which are sometimes called “after costs” or “post-sale costs.” Although the future cost is indefinite as to amount, due date, and even customer, a liability is probable in most cases and should be recognized in the accounts if it can be reasonably estimated. The amount of the liability is an estimate of all the costs that will be incurred after sale and delivery and that are incident to the correction of defects or deficiencies required under the warranty provisions. Warranty costs are a classic example of a loss contingency.

There are two basic methods of accounting for warranty costs: (1) the cash basis method and (2) the accrual method.

Cash Basis

Under the cash basis method, warranty costs are charged to expense as they are incurred. In other words, warranty costs are charged to the period in which the seller or manufacturer complies with the warranty. No liability is recorded for future costs arising from warranties, nor is the period in which the sale is recorded necessarily charged with the costs of making good on outstanding warranties. Use of this method, the only one recognized for income tax purposes, is frequently justified for accounting on the basis of expediency when warranty costs are immaterial or when the warranty period is relatively short. The cash basis method is required when a warranty liability is not accrued in the year of sale either because

1. It is not probable that a liability has been incurred; or
2. The amount of the liability cannot be reasonably estimated.

Accrual Basis

If it is probable that customers will make claims under warranties relating to goods or services that have been sold and a reasonable estimate of the costs involved can be made, the accrual method must be used. Under the accrual method, warranty costs are charged to operating expense in the year of sale. It is the generally accepted method and should be used whenever the warranty is an integral and inseparable part of the sale and is viewed as a loss contingency. We refer to this approach as the expense warranty approach.

Illustration of Expense Warranty Approach. To illustrate the expense warranty method, assume that Denson Machinery Company begins production on a new machine in July 2004 and sells 100 units at $5,000 each by its year-end, December 31, 2004. Each machine is under warranty for one year. The company has estimated, from past experience with a similar machine, that the warranty cost will probably average $200 per unit. Further, as a result of parts replacements and services rendered in compliance with machinery warranties, the company incurs $4,000 in warranty costs in 2004 and $16,000 in 2005.

The journal entry to record the sale of 100 machines at $5,000 each, July through December 2004, would be:

\[
\begin{align*}
\text{Cash or Accounts Receivable} & \quad 500,000 \\
\text{Sales} & \quad 500,000
\end{align*}
\]
The entry to recognize warranty expense, July through December 2004, would be:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warranty Expense</td>
<td>4,000</td>
</tr>
<tr>
<td>Cash, Inventory, Accrued Payroll (Warranty costs incurred)</td>
<td>4,000</td>
</tr>
<tr>
<td>Warranty Expense</td>
<td>16,000</td>
</tr>
<tr>
<td>Estimated Liability under Warranties</td>
<td>16,000</td>
</tr>
<tr>
<td>(To accrue estimated warranty costs)</td>
<td></td>
</tr>
</tbody>
</table>


The entry to recognize warranty costs incurred in 2005 (on 2004 machinery sales) would be:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Liability under Warranties</td>
<td>16,000</td>
</tr>
<tr>
<td>Cash, Inventory, or Accrued Payroll (Warranty costs incurred)</td>
<td>16,000</td>
</tr>
</tbody>
</table>

If the cash-basis method were applied to the facts in the Denson Machinery Company example, $4,000 would be recorded as warranty expense in 2004 and $16,000 as warranty expense in 2005, with all of the sale price being recorded as revenue in 2004.

In many instances, application of the cash-basis method does not match the warranty costs relating to the products sold during a given period with the revenues derived from such products, and therefore it violates the matching principle. Where ongoing warranty policies exist year after year, the differences between the cash and the expense warranty basis probably would not be so great.

**Sales Warranty Approach.** A warranty is sometimes sold separately from the product. For example, when you purchase a television set or VCR, you will be entitled to the manufacturer’s warranty. You also will undoubtedly be offered an extended warranty on the product at an additional cost.\(^{20}\)

In this case, the seller should recognize separately the sale of the television or VCR with the manufacturer’s warranty and the sale of the extended warranty.\(^ {21}\) This approach is referred to as the **sales warranty approach.** Revenue on the sale of the extended warranty is deferred and is generally recognized on a straight-line basis over the life of the contract. Revenue is deferred because the seller of the warranty has an obligation to perform services over the life of the contract. Only costs that vary with and are directly related to the sale of the contracts (mainly commissions) should be deferred and amortized. Costs such as employees’ salaries, advertising, and general and administrative expenses that would have been incurred even if no contract were sold should be expensed as incurred.

To illustrate, assume you have just purchased a new automobile from Hanlin Auto for $20,000. In addition to the regular warranty on the auto (all repairs will be paid by the manufacturer for the first 36,000 miles or 3 years, whichever comes first), you purchase at a cost of $600 an extended warranty that protects you for an additional 3 years or 36,000 miles. The entry to record the sale of the automobile (with the regular warranty) and the sale of the extended warranty on January 2, 2004, on Hanlin Auto’s books is:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>20,600</td>
</tr>
<tr>
<td>Sales</td>
<td>20,000</td>
</tr>
<tr>
<td>Unearned Warranty Revenue</td>
<td>600</td>
</tr>
</tbody>
</table>

\(^{20}\) A contract is separately priced if the customer has the option to purchase the services provided under the contract for an expressly stated amount separate from the price of the product. An extended warranty or product maintenance contract usually meets these conditions.

The entry to recognize revenue at the end of the fourth year (using straight-line amortization) would be as follows.

```
Unearned Warranty Revenue 200
Warranty Revenue 200
```

Because the extended warranty contract does not start until after the regular warranty expires, revenue is not recognized until the fourth year. If the costs of performing services under the extended warranty contract are incurred on other than a straight-line basis (as historical evidence might indicate), revenue should be recognized over the contract period in proportion to the costs expected to be incurred in performing services under the contract. 22

### Premiums and Coupons

Numerous companies offer (either on a limited or continuing basis) premiums to customers in return for boxtops, certificates, coupons, labels, or wrappers. The premium may be silverware, dishes, a small appliance, a toy, other goods, or free transportation. Also, printed coupons that can be redeemed for a cash discount on items purchased are extremely popular. 23 A more recent marketing innovation is the cash rebate, which the buyer can obtain by returning the store receipt, a rebate coupon, and Universal Product Code (UPC label) or “bar code” to the manufacturer.

These premiums, coupon offers, and rebates are made to stimulate sales, and their costs should be charged to expense in the period of the sale that benefits from the premium plan. At the end of the accounting period many of these premium offers may be outstanding and, when presented in subsequent periods, must be redeemed. The number of outstanding premium offers that will be presented for redemption must be estimated in order to reflect the existing current liability and to match costs with revenues. The cost of premium offers should be charged to Premium Expense. The outstanding obligations should be credited to an account titled Estimated Liability for Premiums.

The following example illustrates the accounting treatment accorded a premium offer. Fluffy Cakemix Company offered its customers a large nonbreakable mixing bowl in exchange for 25 cents and 10 boxtops. The mixing bowl costs Fluffy Cakemix Company 75 cents, and the company estimates that 60 percent of the boxtops will be redeemed. The premium offer began in June 2004 and resulted in the transactions journalized below.

The journal entry to record purchase of 20,000 mixing bowls at 75 cents each would be:

```
Inventory of Premium Mixing Bowls 15,000
Cash 15,000
```

The entry to record sales of 300,000 boxes of cake mix at 80 cents would be:

```
Cash 240,000
Sales 240,000
```

---

22Ibid, par. 3. The FASB recently issued additional disclosure requirements for warranties. A company is required to disclose its accounting policy and the method used to determine its warranty liability, and to present a tabular reconciliation of the changes in the product warranty liability. FASB Interpretation No. 45, “Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others” (Norwalk, Conn.: FASB, 2002).

23Approximately 4 percent of coupons are redeemed. Redeemed coupons eventually make their way to the corporate headquarters of the stores that accept them. From there they are shipped in 50-pound boxes to Mexico’s border towns (Juárez, Tijuana, Nuevo Laredo), where clearinghouses operated by A. C. Nielsen Company (of TV rating fame) count them and report back to the manufacturers who, in turn, reimburse the stores.
The entry to record the actual redemption of 60,000 boxtops, the receipt of 25 cents per 10 boxtops, and the delivery of the mixing bowls would be:

Cash \[ (60,000 \div 10) \times \$0.25 \] 1,500
Premium Expense 3,000
Inventory of Premium Mixing Bowls 4,500
Computation: \( (60,000 \div 10) \times \$0.75 = \$4,500 \)

The end-of-period adjusting entry for estimated liability for outstanding premium offers (boxtops) would be:

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium Expense</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>Estimated Liability for Premiums</td>
<td></td>
<td>6,000</td>
</tr>
</tbody>
</table>

Computation:
- Total boxtops sold in 2004: 300,000
- Total estimated redemptions (60%): 180,000
- Boxtops redeemed in 2004: 60,000
- Estimated future redemptions: 120,000
- Cost of estimated claims outstanding:
  \[ (120,000 \div 10) \times (\$0.75 - \$0.25) = \$6,000 \]

The December 31, 2004, balance sheet of Fluffy Cakemix Company will report an “Inventory of premium mixing bowls” of \$10,500 as a current asset and “Estimated liability for premiums” of \$6,000 as a current liability. The 2004 income statement will report a \$9,000 “Premium expense” among the selling expenses.

Numerous companies offer premiums to customers in the form of a promise of future goods or services as an incentive for purchases today. Premium plans that have widespread adoption are the frequent-flyer programs used by all major airlines. On the basis of mileage accumulated, frequent-flyer members are awarded discounted or free airline tickets. Airline customers can earn miles toward free travel by making long-distance phone calls, staying in selected hotels, and charging gasoline and groceries on a credit card. Those free tickets represent an enormous potential liability because people using them may displace paying passengers.

When airlines first started offering frequent-flyer bonuses, they assumed that they could accommodate the free-ticket holders with otherwise-empty seats. That made the additional cost of the program so minimal that airlines didn’t accrue it or report the small liability. But, as more and more paying passengers have been crowded off flights by frequent-flyer awardees, the loss of revenues has grown enormously. For example, United Airlines recently reported a liability of \$1.4 billion for advance ticket sales, some of which pertains to free frequent-flyer tickets.

Although the accounting for this transaction has been studied by the profession, no authoritative guidelines have been issued.

**Environmental Liabilities**

Estimates to clean up existing toxic waste sites can run to upward of \$752 billion over a 30-year period. In addition, the cost of cleaning up our air and preventing future deterioration of the environment is estimated to cost even more. The average environmental cost per firm in various industries at one time was: high-tech firms \$2 million (6.1 percent of revenues); utilities \$340 million (6.1 percent of revenues); steel and metals \$50 million (2.9 percent of revenues), and oil companies \$430 million (1.9 percent of revenues).
of revenues). Given that the average pretax profit of the 500 largest U.S. manufacturing companies recently was 7.7 percent of sales, these figures are staggering!

These costs will only grow when one considers “Superfund” legislation, which provides not only a government-supported fund to clean up pollution, but also a mandate to clean up existing waste sites. Further it provides the Environmental Protection Agency (EPA) with the power to clean up waste sites and charge the clean-up costs to parties the EPA deems responsible for contaminating the site. These potentially responsible parties have an onerous liability. The EPA estimates that it will likely cost an average of $25 million to clean up each polluted site. For the most troublesome sites, the cost could easily reach $100 million or more.

In addition, in many industries the construction and operation of long-lived assets involves obligations associated with the retirement of those assets. For example, when a mining company opens up a strip mine, it may also make a commitment to restore the land on which the mine is located once the mining activity is completed. Similarly, when an oil company erects an offshore drilling platform, it may be legally obligated to dismantle and remove the platform at the end of its useful life.

**Accounting Recognition of Asset Retirement Obligations**

A company must recognize an asset retirement obligation (ARO) when the company has an existing legal obligation associated with the retirement of a long-lived asset and when the amount of the liability can be reasonably estimated. The ARO should be recorded at fair value.²⁴

**Obligating Events.** Examples of existing legal obligations, which would require recognition of a liability include, but are not limited to:

1. decommissioning nuclear facilities,
2. dismantling, restoring, and reclamation of oil and gas properties,
3. certain closure, reclamation, and removal costs of mining facilities, and
4. closure and post-closure costs of landfills.

In order to capture the benefits of these long-lived assets, the company is generally legally obligated for the costs associated with retirement of the asset, whether the company hires another party to perform the retirement activities or performs the activities with its own workforce and equipment. AROs give rise to various recognition patterns. For example, the obligation may arise at the outset of the asset’s use (e.g., erection of an oil rig), or it may build over time (e.g., a landfill that expands over time).

**Measurement.** An ARO is initially measured at fair value, which is defined as the amount that the company would be required to pay in an active market to settle the ARO. Although active markets do not exist for many AROs, an estimate of fair value should be based on the best information available. Such information could include market prices of similar liabilities, if available. Alternatively, fair value can be estimated based on present value techniques.

**Recognition and Allocation.** To record an ARO in the financial statements, the cost associated with the ARO is included in the carrying amount of the related long-lived asset, and a liability is recorded for the same amount. An asset retirement cost is recorded as part of the related asset because these costs are considered a cost of operating the asset and are necessary to prepare the asset for its intended use. Therefore, the specific asset (e.g., mine, drilling platform, nuclear power plant) should be increased because the future economic benefit comes from the use of this productive asset. The capitalized asset retirement costs should not be recorded in a separate account because there is no future economic benefit that can be associated with these costs alone.

---

In subsequent periods, the cost of the ARO is allocated to expense over the period of the related asset’s useful life. While the straight-line method is acceptable for this allocation, other systematic and rational allocations also are permitted.

**Illustration of ARO Accounting Provisions.** To illustrate the accounting for AROs, assume that on January 1, 2003, Wildcat Oil Company erected an oil platform in the Gulf of Mexico. Wildcat is legally required to dismantle and remove the platform at the end of its useful life, which is estimated to be 5 years. It is estimated that the total cost of dismantling and removal will be $1,000,000. Based on a 10 percent discount rate, the present value of the asset retirement obligation is $620,920 ($1,000,000 × .62092). Wildcat would make the following journal entry to record this ARO.

**January 1, 2003**

Drilling Platform 620,920  
Asset Retirement Obligation 620,920

During the life of the asset, the asset retirement cost is allocated to expense. Using the straight-line method, Wildcat would make the following entries to record this expense.


Depreciation Expense ($620,920 ÷ 5) 124,184  
Accumulated Depreciation 124,184

In addition, interest expense must be accrued each period. The entry at December 31, 2003, to record interest expense and the related increase in the asset retirement obligation is as follows.

**December 31, 2003**

Interest Expense ($620,920 × 10%) 62,092  
Asset Retirement Obligation 62,092

On January 10, 2008, Wildcat contracts with Rig Reclaimers, Inc. to dismantle the platform at a contract price of $995,000. Wildcat would make the following journal entry to record settlement of the ARO.

**January 10, 2008**

Asset Retirement Obligation 1,000,000  
Gain on Settlement of ARO 5,000  
Cash 995,000

More extensive disclosure is needed regarding environmental liabilities. In addition, more of these liabilities should be recorded. The SEC believes that managements should not delay recognition of a liability due to significant uncertainty. The SEC argues that if the liability is within a range and no amount within the range is the best estimate, then management should recognize the minimum amount of the range. That treatment would be in accordance with FASB Interpretation No. 14, “Reasonable Estimation of the Amount of a Loss.” The SEC also believes that environmental liabilities should be reported in the balance sheet independent of recoveries from third parties. Thus, possible insurance recoveries are not permitted to be netted against liabilities but must be shown separately. Because there is much litigation regarding recovery of insurance proceeds, these “assets” appear to be gain contingencies, and therefore companies will not be reporting these on the balance sheet.25

---

25 As indicated earlier, the FASB pronouncements on this topic require that, when some amount within the range appears at the time to be a better estimate than any other amount within the range, that amount is accrued. When no amount within the range is a better estimate than any other amount, the dollar amount at the low end of the range is disclosed. See FASB Interpretation No. 14, “Reasonable Estimation of the Amount of a Loss” (Stamford, Conn.: FASB, 1976), par. 3, and FASB Statement No. 5, “Accounting for Contingencies” (Stamford, Conn.: FASB, 1975).
Self-Insurance

A company may insure against many contingencies such as fire, flood, storm, and accident by taking out insurance policies and paying premiums to insurance companies. Some contingencies, however, are not insurable, or the insurance rates are prohibitive (e.g., earthquakes and riots). For such contingencies, even though insurance may be available, some businesses adopt a policy of self-insurance.

Despite its name, self-insurance is **not insurance**, but risk assumption. Any company that assumes its own risks puts itself in the position of incurring expenses or losses as they occur. There is little theoretical justification for the establishment of a liability based on a hypothetical charge to insurance expense. This is “as if” accounting. The conditions for accrual stated in FASB Statement No. 5 are not satisfied prior to the occurrence of the event; until that time there is no diminution in the value of the property. And unlike an insurance company, which has contractual obligations to reimburse policyholders for losses, a company can have no such obligation to itself and, hence, no liability either before or after the occurrence of damage.²⁶

The following note from the annual report of **Adolph Coors Company** is typical of the self-insurance disclosure.

---

**ILLUSTRATION 13-12**
Disclosure of Self-Insurance

**Adolph Coors Company**
Notes to Financial Statements

**Note 4: Commitments and Contingencies.** It is generally the policy of the Company to act as a self-insurer for certain insurable risks consisting primarily of physical loss to corporate property, business interruption resulting from such loss, employee health insurance programs, and workers’ compensation. Losses and claims are accrued as incurred.

Exposure to **risks of loss resulting from uninsured past injury to others**, however, is an existing condition involving uncertainty about the amount and timing of losses that may develop. In such a case, a contingency exists. A company with a fleet of vehicles would have to accrue uninsured losses resulting from injury to others or damage to the property of others that took place prior to the date of the financial statements (if the experience of the company or other information enables it to make a reasonable estimate of the liability). However, it should not establish a liability for **expected future injury** to others or damage to the property of others, even if the amount of losses is reasonably estimable.

---

**PRESENTATION AND ANALYSIS**

**Presentation of Current Liabilities**

In practice, current liabilities are usually recorded and reported in financial statements at their full maturity value. Because of the short time periods involved, frequently less than one year, the difference between the present value of a current liability and the maturity value is not usually large. The slight overstatement of liabilities that results from carrying current liabilities at maturity value is accepted as immate-

²⁶“Accounting for Contingencies,” FASB Statement No. 5, op. cit., par. 28. A commentary in *Forbes* (June 15, 1974, p. 42) stated its position on this matter quite succinctly: “The simple and unquestionable fact of life is this: Business is cyclical and full of unexpected surprises. Is it the role of accounting to disguise this unpleasant fact and create a fairyland of smoothly rising earnings? Or, should accounting reflect reality, warts and all—floods, expropriations and all manner of rude shocks?”
rial. APB Opinion No. 21, “Interest on Receivables and Payables,” specifically exempts from present value measurements those payables arising from transactions with suppliers in the normal course of business that do not exceed approximately one year.27

The current liabilities accounts are commonly presented as the first classification in the liabilities and stockholders’ equity section of the balance sheet. Within the current liabilities section the accounts may be listed in order of maturity, in descending order of amount, or in order of liquidation preference. Illustration 13-13 presents an excerpt of Best Buy Company’s published financial statements. This presentation is representative of the reports of large corporations.

---

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$746,879</td>
<td>$750,723</td>
</tr>
<tr>
<td>Receivables</td>
<td>209,031</td>
<td>189,301</td>
</tr>
<tr>
<td>Merchandise inventories</td>
<td>1,766,934</td>
<td>1,183,681</td>
</tr>
<tr>
<td>Other current assets</td>
<td>205,819</td>
<td>114,755</td>
</tr>
<tr>
<td>Total current assets</td>
<td>$2,928,663</td>
<td>$2,238,460</td>
</tr>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$1,772,722</td>
<td>$1,313,940</td>
</tr>
<tr>
<td>Accrued compensation and related expenses</td>
<td>154,159</td>
<td>102,065</td>
</tr>
<tr>
<td>Accrued liabilities</td>
<td>545,590</td>
<td>287,888</td>
</tr>
<tr>
<td>Accrued income taxes</td>
<td>127,287</td>
<td>65,366</td>
</tr>
<tr>
<td>Current portion of long-term debt</td>
<td>114,940</td>
<td>15,790</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>$2,714,698</td>
<td>$1,785,049</td>
</tr>
</tbody>
</table>

---

Detail and supplemental information concerning current liabilities should be sufficient to meet the requirement of full disclosure. Secured liabilities should be identified clearly, and the related assets pledged as collateral indicated. If the due date of any liability can be extended, the details should be disclosed. Current liabilities should not be offset against assets that are to be applied to their liquidation. Current maturities of long-term debt should be classified as current liabilities.

A major exception exists when a currently maturing obligation is to be paid from assets classified as long-term. For example, if payments to retire a bond payable are made from a bond sinking fund classified as a long-term asset, the bonds payable should be reported in the long-term liabilities section. Presentation of this debt in the current liabilities section would distort the working capital position of the enterprise.

If a short-term obligation is excluded from current liabilities because of refinancing, the note to the financial statements should include:

1. A general description of the financing agreement.
2. The terms of any new obligation incurred or to be incurred.
3. The terms of any equity security issued or to be issued.

When refinancing on a long-term basis is expected to be accomplished through the issuance of equity securities, it is not appropriate to include the short-term obligation in stockholders’ equity. At the date of the balance sheet, the obligation is a liability and not stockholders’ equity. The disclosure requirements are shown in Illustration 13-14 for an actual refinancing situation.

Presentation of Contingencies

A loss contingency and a liability is recorded if the loss is both probable and estimable. But, if the loss is **either probable or estimable but not both**, and if there is at least a reasonable possibility that a liability may have been incurred, the following disclosure in the notes is required:

1. The nature of the contingency.
2. An estimate of the possible loss or range of loss or a statement that an estimate cannot be made.

Presented in Illustration 13-15 is an extensive litigation disclosure note from the financial statements of **Raymark Corporation**. It shows that although actual losses have been charged to operations and further liability possibly exists, no estimate of this liability is possible.

**Raymark Corporation**

**Note I: Litigation.** Raymark is a defendant or co-defendant in a substantial number of lawsuits alleging wrongful injury and/or death from exposure to asbestos fibers in the air. The following table summarizes the activity in these lawsuits:

<table>
<thead>
<tr>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending at beginning of year</td>
</tr>
<tr>
<td>Received during year</td>
</tr>
<tr>
<td>Settled or otherwise disposed of</td>
</tr>
<tr>
<td>Pending at end of year</td>
</tr>
<tr>
<td>Average indemnification cost</td>
</tr>
<tr>
<td>Average cost per case, including defense costs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trial activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verdicts for the Company</td>
</tr>
<tr>
<td>Total trials</td>
</tr>
</tbody>
</table>

The following table presents the cost of defending asbestos litigation, together with related insurance and workers’ compensation expenses.

| Included in operating profit               | $1,872,000 |
| Nonoperating expense                      | 9,077,000   |
| Total                                      | $10,949,000 |

The Company is seeking to reasonably determine its liability. However, it is not possible to predict which theory of insurance will apply, the number of lawsuits still to be filed, the cost of settling and defending the existing and unfiled cases, or the ultimate impact of these lawsuits on the Company’s consolidated financial statements.
Certain other contingent liabilities that should be disclosed even though the possibility of loss may be remote are the following:

1. Guarantees of indebtedness of others.
2. Obligations of commercial banks under “stand-by letters of credit.”
3. Guarantees to repurchase receivables (or any related property) that have been sold or assigned.

Disclosure should include the nature and amount of the guarantee and, if estimable, the amount that could be recovered from outside parties. Cities Service Company disclosed its guarantees of indebtedness of others in the following note.

**Analysis of Current Liabilities**

The distinction between current liabilities and long-term debt is important because it provides information about the liquidity of the company. Liquidity regarding a liability is the time that is expected to elapse until a liability has to be paid. In other words, a liability soon to be paid is a current liability. A liquid company is better able to withstand a financial downturn. Also, it has a better chance of taking advantage of investment opportunities that develop.

Certain basic ratios such as net cash flow provided by operating activities to current liabilities and the turnover ratios for receivables and inventory are used to assess liquidity. Two other ratios used to examine liquidity are the current ratio and the acid-test ratio.

The **current ratio** is the ratio of total current assets to total current liabilities. The formula is shown below.

\[
\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}
\]

It is frequently expressed as a coverage of so many times. Sometimes it is called the working capital ratio because working capital is the excess of current assets over current liabilities.

A satisfactory current ratio does not disclose that a portion of the current assets may be tied up in slow-moving inventories. With inventories, especially raw materials and work in process, there is a question of how long it will take to transform them into

---

28 As discussed earlier (footnote 22), the FASB recently issued additional disclosure and recognition requirements for guarantees. The interpretation responds to confusion about the application of SFAS No. 5 to guarantees used in certain transactions. The new rules expand existing disclosure requirements for most guarantees, including loan guarantees such as standby letters of credit. It also will result in companies recognizing more liabilities at fair value for the obligations assumed under a guarantee (FASB Interpretation No. 45, op. cit.).
the finished product and what ultimately will be realized in the sale of the merchandise. Elimination of the amount of the inventories, along with the amount of any prepaid expenses from the current assets, might provide better information for the short-term creditors. Many analysts favor an acid-test or quick ratio that relates total current liabilities to cash, marketable securities, and receivables. The formula for this ratio is shown in Illustration 13-18.

ILLUSTRATION 13-18
Formula for Acid-test Ratio

\[
\text{Acid-test ratio} = \frac{\text{Cash} + \text{Marketable securities} + \text{receivables}}{\text{Current liabilities}}
\]

To illustrate the computation of these two ratios, we use the information for Best Buy Co., reported in Illustration 13-13 on page 641. The computation of the current and acid-test ratios for Best Buy are shown in Illustration 13-19.

ILLUSTRATION 13-19
Computation of Current and Acid-Test Ratios for Best Buy Co.

| Current ratio = Current assets - Current liabilities = $2,929 - $2,715 = 1.08 times |
| Acid-test ratio = Cash + Marketable securities + Net receivables - Current liabilities = $956 + $2,715 = 0.35 times |

From this information, it appears that Best Buy’s current position is adequate. The acid-test ratio is well below 1, and a comparison to another retailer, Circuit City, whose acid-test ratio is 0.80, indicates that Best Buy may be carrying more inventory than its industry counterparts.

SUMMARY OF LEARNING OBJECTIVES

1. **Describe the nature, type, and valuation of current liabilities.** Current liabilities are obligations whose liquidation is reasonably expected to require the use of current assets or the creation of other current liabilities. Theoretically, liabilities should be measured by the present value of the future outlay of cash required to liquidate them. In practice, current liabilities are usually recorded in accounting records and reported in financial statements at their full maturity value. There are several types of liabilities: (1) accounts payable, (2) notes payable, (3) current maturities of long-term debt, (4) dividends payable, (5) returnable deposits, (6) unearned revenues, (7) taxes payable, and (8) employee-related liabilities.

2. **Explain the classification issues of short-term debt expected to be refinanced.** An enterprise is required to exclude a short-term obligation from current liabilities if both of the following conditions are met: (1) it must intend to refinance the obligation on a long-term basis, and (2) it must demonstrate an ability to consummate the refinancing.

3. **Identify types of employee-related liabilities.** The employee-related liabilities are: (1) payroll deductions, (2) compensated absences, and (3) bonus agreements.

4. **Identify the criteria used to account for and disclose gain and loss contingencies.** Gain contingencies are not recorded. They are disclosed in the notes only when the probabilities are high that a gain contingency will become a reality. An estimated loss from a loss contingency should be accrued by a charge to expense and a liability
recorded only if both of the following conditions are met: (1) Information available prior to the issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements, and (2) the amount of the loss can be reasonably estimated.

5 Explain the accounting for different types of loss contingencies. The following factors must be considered in determining whether a liability should be recorded with respect to pending or threatened litigation and actual or possible claims and assessments: (1) the time period in which the underlying cause for action occurred; (2) the probability of an unfavorable outcome; and (3) the ability to make a reasonable estimate of the amount of loss.

If it is probable that customers will make claims under warranties relating to goods or services that have been sold and a reasonable estimate of the costs involved can be made, the accrual method must be used. Warranty costs under the accrual basis are charged to operating expense in the year of sale.

Premiums, coupon offers, and rebates are made to stimulate sales, and their costs should be charged to expense in the period of the sale that benefits from the premium plan.

Asset retirement obligations must be recognized when a company has an existing legal obligation related to the retirement of a long-lived asset and the amount can be reasonably estimated.

6 Indicate how current liabilities and contingencies are presented and analyzed. The current liabilities accounts are commonly presented as the first classification in the liabilities and stockholders’ equity section of the balance sheet. Within the current liabilities section the accounts may be listed in order of maturity, in descending order of amount, or in order of liquidation preference. Detail and supplemental information concerning current liabilities should be sufficient to meet the requirement of full disclosure. If the loss is either probable or estimable but not both, and if there is at least a reasonable possibility that a liability may have been incurred, disclosure should be made in the notes of the nature of the contingency and an estimate given of the possible loss. Two ratios used to analyze liquidity are the current and acid-test ratios.

Computation of Employees’ Bonuses

Because the amount of a bonus is an expense of the business, the problem of computing the amount of bonus based on income becomes more difficult. Say a company has income of $100,000 determined before considering the bonus expense. According to the terms of the bonus agreement, 20 percent of the income is to be set aside for distribution among the employees. If the bonus were not itself an expense to be deducted in arriving at the amount of income on which the bonus

gain contingencies, 630 liabilities, 617 litigation, claims, and assessments, 633 loss contingencies, 631 notes payable (trade notes payable), 619 operating cycle, 618 preferred dividends in arrears, 622 premiums, 636 probable (contingency), 631 reasonably possible (contingency), 631 remote (contingency), 631 returnable cash deposits, 623 sales warranty approach, 635 self-insurance, 640 short-term obligations expected to be refinanced, 621 Social Security tax, 626 trade accounts payable, 618 trade notes payable, 619 unearned revenues, 623 vested rights, 628 warranty, 634

APPENDIX 13A

Computation of Employees’ Bonuses

Because the amount of a bonus is an expense of the business, the problem of computing the amount of bonus based on income becomes more difficult. Say a company has income of $100,000 determined before considering the bonus expense. According to the terms of the bonus agreement, 20 percent of the income is to be set aside for distribution among the employees. If the bonus were not itself an expense to be deducted in determining net income, the amount of the bonus could be computed very simply as 20 percent of the income before bonus of $100,000. However, the bonus itself is an expense that must be deducted in arriving at the amount of income on which the bonus

gain contingencies, 630 liabilities, 617 litigation, claims, and assessments, 633 loss contingencies, 631 notes payable (trade notes payable), 619 operating cycle, 618 preferred dividends in arrears, 622 premiums, 636 probable (contingency), 631 reasonably possible (contingency), 631 remote (contingency), 631 returnable cash deposits, 623 sales warranty approach, 635 self-insurance, 640 short-term obligations expected to be refinanced, 621 Social Security tax, 626 trade accounts payable, 618 trade notes payable, 619 unearned revenues, 623 vested rights, 628 warranty, 634

APPENDIX 13A

Computation of Employees’ Bonuses

Because the amount of a bonus is an expense of the business, the problem of computing the amount of bonus based on income becomes more difficult. Say a company has income of $100,000 determined before considering the bonus expense. According to the terms of the bonus agreement, 20 percent of the income is to be set aside for distribution among the employees. If the bonus were not itself an expense to be deducted in determining net income, the amount of the bonus could be computed very simply as 20 percent of the income before bonus of $100,000. However, the bonus itself is an expense that must be deducted in arriving at the amount of income on which the bonus...
A similar problem results from the relationship of bonus payments to federal income taxes. Assume income of $100,000 computed without subtracting either the employees’ bonus or taxes on income. The bonus is to be based on income after deducting income taxes but before deducting the bonus. The rate of income tax is 40 percent, and the bonus of 20 percent is a deductible expense for tax purposes. The bonus is, therefore, equal to 20 percent of $100,000 minus the tax, and the tax is equal to 40 percent of $100,000 minus the bonus. Thus we have two simultaneous equations. By using \( B \) as the symbol for the bonus and \( T \) for the tax, they may be stated algebraically as follows.

\[
\begin{align*}
B &= 0.20 (100,000 - T) \\
T &= 0.40 (100,000 - B)
\end{align*}
\]

These may be solved by substituting the value of \( T \) as indicated in the second equation for \( T \) in the first equation.

\[
\begin{align*}
B &= 0.20 \left[100,000 - 0.40 (100,000 - B)\right] \\
0.92B &= 12,000 \\
B &= \frac{12,000}{0.92} \\
B &= 13,043.48
\end{align*}
\]

Substituting this value for \( B \) into the second equation allows us to solve for \( T \):

\[
\begin{align*}
T &= 0.40 (100,000 - 13,043.48) \\
T &= 0.40 (86,956.52) \\
T &= 34,782.61
\end{align*}
\]

To prove these amounts, both should be worked back into the original equation.

\[
\begin{align*}
B &= 0.20 (100,000 - T) \\
13,043.48 &= 0.20 (100,000 - 34,782.61) \\
13,043.48 &= 0.20 (65,217.39) \\
13,043.48 &= 13,043.48
\end{align*}
\]

If the terms of the agreement provide for deducting both the tax and the bonus to arrive at the income figure on which the bonus is computed, the equations would be:

\[
\begin{align*}
B &= 0.20 (100,000 - B - T) \\
T &= 0.40 (100,000 - B)
\end{align*}
\]
Substituting the value of T from the second equation into the first equation enables us to solve for B:

\[
\begin{align*}
B &= 0.20 \left( \$100,000 - B - 0.40 \left( \$100,000 - B \right) \right) \\
B &= 0.20 \left( \$100,000 - B - \$40,000 + 0.4B \right) \\
B &= 0.20 \left( \$60,000 - 0.6B \right) \\
B &= \$12,000 - 0.12B \\
1.12B &= \$12,000 \\
B &= \frac{\$12,000}{1.12} \\
B &= \$10,714.29
\end{align*}
\]

The value for B may then be substituted in the second equation above, and that equation solved for T:

\[
\begin{align*}
T &= 0.40 \left( \$100,000 - \$10,714.29 \right) \\
T &= 0.40 \left( \$89,285.71 \right) \\
T &= \$35,714.28
\end{align*}
\]

If these values are then substituted in the original bonus equation, they prove themselves as follows.

\[
\begin{align*}
B &= 0.20 \left( \$100,000 - B - T \right) \\
\$10,714.29 &= 0.20 \left( \$100,000 - \$10,714.29 - \$35,714.28 \right) \\
\$10,714.29 &= 0.20 \left( \$53,571.43 \right) \\
\$10,714.29 &= \$10,714.29
\end{align*}
\]

Drawing up a legal document such as a bonus agreement is a task for a lawyer, not an accountant, although accountants are frequently called on to express an opinion on the agreement’s feasibility. In this respect, one should always insist that the agreement state specifically whether income taxes and the bonus itself are expenses deductible in determining income for purposes of the bonus computation.

**SUMMARY OF LEARNING OBJECTIVE FOR APPENDIX 13A**

Compute employee bonuses under differing arrangements. Because the bonus is based on net income and is deductible in determining net income, the bonus may have to be determined algebraically. Its computation is made more difficult by the bonus being deductible for tax purposes and the taxes being deductible from the income on which the bonus is based.

*Note:* All asterisked Brief Exercises, Exercises, and Problems relate to material contained in the appendix to the chapter.

**QUESTIONS**

1. Distinguish between a current liability and a long-term debt.
2. Assume that your friend Greg Jonas, who is a music major, asks you to define and discuss the nature of a liability. Assist him by preparing a definition of a liability and by explaining to him what you believe are the elements or factors inherent in the concept of a liability.
3. Why is the liabilities section of the balance sheet of primary significance to bankers?
4. How are current liabilities related by definition to current assets? How are current liabilities related to a company’s operating cycle?
5. Jon Bryant, a newly hired loan analyst, is examining the current liabilities of a corporate loan applicant. He ob-
serves that unearned revenues have declined in the current year compared to the prior year. Is this a positive indicator about the client’s liquidity? Explain.

8. How is present value related to the concept of a liability?
9. What is the nature of a “discount” on notes payable?
10. How should a debt callable by the creditor be reported in the debtor’s financial statements?
11. Under what conditions should a short-term obligation be excluded from current liabilities?
12. What evidence is necessary to demonstrate the ability to consummate the refinancing of short-term debt?
13. Discuss the accounting treatment or disclosure that should be accorded a declared but unpaid cash dividend; an accumulated but undeclared dividend on cumulative preferred stock; a stock dividend distributable.
14. How does deferred or unearned revenue arise? Why can it be classified properly as a current liability? Give several examples of business activities that result in unearned revenues.
15. What are compensated absences?
16. Under what conditions must an employer accrue a liability for the cost of compensated absences?
17. Under what conditions is an employer required to accrue a liability for sick pay? Under what conditions is an employer permitted but not required to accrue a liability for sick pay?
18. Caitlin Carter operates a health food store, and she has been the only employee. Her business is growing, and she is considering hiring some additional staff to help her in the store. Explain to her the various payroll deductions that she will have to account for, including their potential impact on her financial statements, if she hires additional staff.
19. Define (a) a contingency and (b) a contingent liability.
20. Under what conditions should a contingent liability be recorded?
21. Distinguish between a current liability and a contingent liability. Give two examples of each type.
22. How are the terms “probable,” “reasonably possible,” and “remote” related to contingent liabilities?

23. Contrast the cash basis method and the accrual method of accounting for warranty costs.
24. Kren Company has had a record-breaking year in terms of growth in sales and profitability. However, market research indicates that it will experience operating losses in two of its major businesses next year. The controller has proposed that the company record a provision for these future losses this year, since it can afford to take the charge and still show good results. Advise the controller on the appropriateness of this charge.
25. How does the expense warranty approach differ from the sales warranty approach?
26. Zucker-Abrahams Airlines Inc. awards members of its Flightline program a second ticket at half price, valid for 2 years anywhere on its flight system, when a full-price ticket is purchased. How would you account for the full-fare and half-fare tickets?
27. Northeast Airlines Co. awards members of its Frequent Fliers Club one free round-trip ticket, anywhere on its flight system, for every 50,000 miles flown on its planes. How would you account for the free ticket award?
28. When must a company recognize an asset retirement obligation?
29. Should a liability be recorded for risk of loss due to lack of insurance coverage? Discuss.
30. What factors must be considered in determining whether or not to record a liability for pending litigation? For threatened litigation?
31. Within the current liabilities section, how do you believe the accounts should be listed? Defend your position.
32. How does the acid-test ratio differ from the current ratio? How are they similar?
33. When should liabilities for each of the following items be recorded on the books of an ordinary business corporation?
   (a) Acquisition of goods by purchase on credit.
   (b) Officers’ salaries.
   (c) Special bonus to employees.
   (d) Dividends.
   (e) Purchase commitments.

**BRIEF EXERCISES**

BE13-1 Congo Corporation uses a periodic inventory system and the gross method of accounting for purchase discounts. On July 1, Congo purchased $40,000 of inventory, terms 2/10, n/30, FOB shipping point. Congo paid freight costs of $1,200. On July 3, Congo returned damaged goods and received credit of $6,000. On July 10, Congo paid for the goods. Prepare all necessary journal entries for Congo.

Brief Exercises

**BE13-3** Kawasaki Corporation borrowed $50,000 on November 1, 2004, by signing a $51,125, 3-month, zero-interest-bearing note. Prepare Kawasaki’s November 1, 2004, entry; the December 31, 2004, annual adjusting entry; and the February 1, 2005, entry.

**BE13-4** At December 31, 2004, Fifa Corporation owes $500,000 on a note payable due February 15, 2005. (a) If Fifa refinances the obligation by issuing a long-term note on February 14 and using the proceeds to pay off the note due February 15, how much of the $500,000 should be reported as a current liability at December 31, 2004? (b) If Fifa pays off the note on February 15, 2005, and then borrows $1,000,000 on a long-term basis on March 1, how much of the $500,000 should be reported as a current liability at December 31, 2004?

**BE13-5** Game Pro Magazine sold 10,000 annual subscriptions on August 1, 2004, for $18 each. Prepare Game Pro’s August 1, 2004, journal entry and the December 31, 2004, annual adjusting entry.

**BE13-6** Flintstones Corporation made credit sales of $30,000 which are subject to 6% sales tax. The corporation also made cash sales which totaled $19,610 including the 6% sales tax. (a) Prepare the entry to record Flintstones’ credit sales. (b) Prepare the entry to record Flintstones’ cash sales.

**BE13-7** Future Zone Corporation’s weekly payroll of $23,000 included FICA taxes withheld of $1,426, federal taxes withheld of $2,990, state taxes withheld of $920, and insurance premiums withheld of $250. Prepare the journal entry to record Future Zone’s payroll.

**BE13-8** Tale Spin Inc. provides paid vacations to its employees. At December 31, 2004, 30 employees have each earned 2 weeks of vacation time. The employees’ average salary is $600 per week. Prepare Tale Spin’s December 31, 2004, adjusting entry.

**BE13-9** Gargoyle Corporation provides its officers with bonuses based on income. For 2004, the bonuses total $450,000 and are paid on February 15, 2005. Prepare Gargoyle’s December 31, 2004, adjusting entry and the February 15, 2005, entry.

**BE13-10** Justice League Inc. is involved in a lawsuit at December 31, 2004. (a) Prepare the December 31 entry assuming it is probable that Justice League will be liable for $700,000 as a result of this suit. (b) Prepare the December 31 entry, if any, assuming it is not probable that Justice League will be liable for any payment as a result of this suit.

**BE13-11** Kohlbeck Company recently was sued by a competitor for patent infringement. Attorneys have determined that it is probable that Kohlbeck will lose the case and that a reasonable estimate of damages to be paid by Kohlbeck is $200,000. In light of this case, Kohlbeck is considering establishing a $100,000 self-insurance allowance. What entry(ies), if any, should Kohlbeck record to recognize this loss contingency?

**BE13-12** Darby’s Drillers erects and places into service an off-shore oil platform on January 1, 2005, at a cost of $10,000,000. Darby is legally required to dismantle and remove the platform at the end of its useful life in 10 years. The estimated present value of the dismantling and removal costs at January 1, 2005, is $500,000. Prepare the entry to record the asset retirement obligation.

**BE13-13** Frantic Factory provides a 2-year warranty with one of its products which was first sold in 2004. In that year, Frantic spent $70,000 servicing warranty claims. At year-end, Frantic estimates that an additional $500,000 will be spent in the future to service warranty claims related to 2004 sales. Prepare Frantic’s journal entry to record the $70,000 expenditure, and the December 31 adjusting entry.

**BE13-14** Herzog Zwei Corporation sells VCRs. The corporation also offers its customers a 2-year warranty contract. During 2004, Herzog Zwei sold 15,000 warranty contracts at $99 each. The corporation spent $180,000 servicing warranties during 2004, and it estimates that an additional $900,000 will be spent in the future to service the warranties. Prepare Herzog Zwei’s journal entries for (a) the sale of contracts, (b) the cost of servicing the warranties, and (c) the recognition of warranty revenue.

**BE13-15** Klax Company offers a set of building blocks to customers who send in 3 UPC codes from Klax cereal, along with 50¢. The blocks sets cost Klax $1.10 each to purchase and 60¢ each to mail to customers. During 2004, Klax sold 1,000,000 boxes of cereal. The company expects 30% of the UPC codes to be sent in. During 2004, 120,000 UPC codes were redeemed. Prepare Klax’s December 31, 2004, adjusting entry.

**BE13-16** Locke Company provides its president, Cyan Garamonde, with a bonus equal to 10% of income after deducting income tax and bonus. Income before deducting income tax and bonus is $265,000, and the tax rate is 40%. Compute the amount of Cyan Garamonde’s bonus.
EXERCISES

E13-1 (Balance Sheet Classification of Various Liabilities) How would each of the following items be reported on the balance sheet?

(a) Accrued vacation pay.
(b) Estimated taxes payable.
(c) Service warranties on appliance sales.
(d) Bank overdraft.
(e) Employee payroll deductions unremitted.
(f) Unpaid bonus to officers.
(g) Deposit received from customer to guarantee performance of a contract.
(h) Sales taxes payable.
(i) Gift certificates sold to customers but not yet redeemed.
(j) Premium offers outstanding.
(k) Discount on notes payable.
(l) Personal injury claim pending.
(m) Current maturities of long-term debts to be paid from current assets.
(n) Cash dividends declared but unpaid.
(o) Dividends in arrears on preferred stock.
(p) Loans from officers.

E13-2 (Accounts and Notes Payable) The following are selected 2004 transactions of Sean Astin Corporation.

Sept. 1 Purchased inventory from Encino Company on account for $50,000. Astin records purchases gross and uses a periodic inventory system.
Oct. 1 Issued a $50,000, 12-month, 12% note to Encino in payment of account.
Oct. 1 Borrowed $50,000 from the Shore Bank by signing a 12-month, noninterest-bearing $56,000 note.

Instructions
(a) Prepare journal entries for the selected transactions above.
(b) Prepare adjusting entries at December 31.
(c) Compute the total net liability to be reported on the December 31 balance sheet for:
   (1) the interest-bearing note.
   (2) the non-interest-bearing note.

E13-3 (Refinancing of Short-Term Debt) On December 31, 2004, Hattie McDaniel Company had $1,200,000 of short-term debt in the form of notes payable due February 2, 2005. On January 21, 2005, the company issued 25,000 shares of its common stock for $38 per share, receiving $950,000 proceeds after brokerage fees and other costs of issuance. On February 2, 2005, the proceeds from the stock sale, supplemented by an additional $250,000 cash, are used to liquidate the $1,200,000 debt. The December 31, 2004, balance sheet is issued on February 23, 2005.

Instructions
Show how the $1,200,000 of short-term debt should be presented on the December 31, 2004, balance sheet, including note disclosure.

E13-4 (Refinancing of Short-Term Debt) On December 31, 2004, Chris Atkins Company has $7,000,000 of short-term debt in the form of notes payable to Blue Lagoon State Bank due periodically in 2005. On January 28, 2005, Atkins enters into a refinancing agreement with Blue Lagoon that will permit it to borrow up to 60% of the gross amount of its accounts receivable. Receivables are expected to range between a low of $6,000,000 in May to a high of $8,000,000 in October during the year 2005. The interest cost of the maturing short-term debt is 15%, and the new agreement calls for a fluctuating interest at 1% above the prime rate on notes due in 2009. Atkin’s December 31, 2004, balance sheet is issued on February 15, 2005.

Instructions
Prepare a partial balance sheet for Atkins at December 31, 2004, showing how its $7,000,000 of short-term debt should be presented, including footnote disclosure.

E13-5 (Compensated Absences) Zero Mostel Company began operations on January 2, 2003. It employs 9 individuals who work 8-hour days and are paid hourly. Each employee earns 10 paid vacation days and 6 paid sick days annually. Vacation days may be taken after January 15 of the year following the year in which they are earned. Sick days may be taken as soon as they are earned; unused sick days accumulate. Additional information is as follows.

| Actual Hourly | Vacation Days Used | Sick Days Used |
| Wage Rate | by Each Employee | by Each Employee |
| $10 | $11 | 0 | 9 | 4 | 5 |
Zero Mostel Company has chosen to accrue the cost of compensated absences at rates of pay in effect during the period when earned and to accrue sick pay when earned.

Instructions
(a) Prepare journal entries to record transactions related to compensated absences during 2003 and 2004.
(b) Compute the amounts of any liability for compensated absences that should be reported on the balance sheet at December 31, 2003 and 2004.

E13-6 (Compensated Absences) Assume the facts in the preceding exercise, except that Zero Mostel Company has chosen not to accrue paid sick leave until used, and has chosen to accrue vacation time at expected future rates of pay without discounting. The company used the following projected rates to accrue vacation time.

<table>
<thead>
<tr>
<th>Year in Which Vacation Time Was Earned</th>
<th>Projected Future Pay Rates Used to Accrue Vacation Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>$10.75</td>
</tr>
<tr>
<td>2004</td>
<td>11.60</td>
</tr>
</tbody>
</table>

Instructions
(a) Prepare journal entries to record transactions related to compensated absences during 2003 and 2004.
(b) Compute the amounts of any liability for compensated absences that should be reported on the balance sheet at December 31, 2003, and 2004.

E13-7 (Adjusting Entry for Sales Tax) During the month of June, R. Attenborough Boutique had cash sales of $233,200 and credit sales of $153,700, both of which include the 6% sales tax that must be remitted to the state by July 15.

Instructions
Prepare the adjusting entry that should be recorded to fairly present the June 30 financial statements.

E13-8 (Payroll Tax Entries) The payroll of Rene Auber Company for September 2003 is as follows.

<table>
<thead>
<tr>
<th>Payroll</th>
<th>Wages Due</th>
<th>F.I.C.A.</th>
<th>Federal</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory</td>
<td>$120,000</td>
<td>$120,000</td>
<td>$40,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>Sales</td>
<td>32,000</td>
<td>32,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Administrative</td>
<td>36,000</td>
<td>36,000</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$188,000</td>
<td>$188,000</td>
<td>$44,000</td>
<td>$44,000</td>
</tr>
</tbody>
</table>

At this point in the year some employees have already received wages in excess of those to which payroll taxes apply. Assume that the state unemployment tax is 2.5%. The F.I.C.A. rate is 7.65% on an employee’s wages to $84,900 and 1.45% in excess of $84,900. Of the $188,000 wages subject to F.I.C.A. tax, $20,000 of the sales wages is in excess of $84,900. Federal unemployment tax rate is 0.8% after credits. Income tax withheld amounts to $16,000 for factory, $7,000 for sales, and $6,000 for administrative.

Instructions
(a) Prepare a schedule showing the employer’s total cost of wages for November by function. (Round all computations to nearest dollar.)
(b) Prepare the journal entries to record the factory, sales, and administrative payrolls including the employer’s payroll taxes.
E13-10 (Warranties) Soundgarden Company sold 200 copymaking machines in 2004 for $4,000 apiece, together with a one-year warranty. Maintenance on each machine during the warranty period averages $330.

Instructions
(a) Prepare entries to record the sale of the machines and the related warranty costs, assuming that the accrual method is used. Actual warranty costs incurred in 2004 were $17,000.
(b) On the basis of the data above, prepare the appropriate entries, assuming that the cash basis method is used.

E13-11 (Warranties) Sheryl Crow Equipment Company sold 500 Rollomatics during 2004 at $6,000 each. During 2004, Crow spent $20,000 servicing the 2-year warranties that accompany the Rollomatic. All applicable transactions are on a cash basis.

Instructions
(a) Prepare 2004 entries for Crow using the expense warranty approach. Assume that Crow estimates the total cost of servicing the warranties will be $120,000 for 2 years.
(b) Prepare 2004 entries for Crow assuming that the warranties are not an integral part of the sale. Assume that of the sales total, $150,000 relates to sales of warranty contracts. Crow estimates the total cost of servicing the warranties will be $120,000 for 2 years. Estimate revenues earned on the basis of costs incurred and estimated costs.

E13-12 (Premium Entries) Yanni Company includes 1 coupon in each box of soap powder that it packs, and 10 coupons are redeemable for a premium (a kitchen utensil). In 2004, Yanni Company purchased 8,800 premiums at 80 cents each and sold 110,000 boxes of soap powder at $3.30 per box; 44,000 coupons were presented for redemption in 2004. It is estimated that 60% of the coupons will eventually be presented for redemption.

Instructions
Prepare all the entries that would be made relative to sales of soap powder and to the premium plan in 2004.

E13-13 (Contingencies) Presented below are three independent situations. Answer the question at the end of each situation.

1. During 2004, Salt-n-Pepa Inc. became involved in a tax dispute with the IRS. Salt-n-Pepa’s attorneys have indicated that they believe it is probable that Salt-n-Pepa will lose this dispute. They also believe that Salt-n-Pepa will have to pay the IRS between $900,000 and $1,400,000. After the 2004 financial statements were issued, the case was settled with the IRS for $1,200,000. What amount, if any, should be reported as a liability for this contingency as of December 31, 2004?

2. On October 1, 2004, Alan Jackson Chemical was identified as a potentially responsible party by the Environmental Protection Agency. Jackson’s management along with its counsel have concluded that it is probable that Jackson will be responsible for damages, and a reasonable estimate of these damages is $5,000,000. Jackson’s insurance policy of $9,000,000 has a deductible clause of $500,000. How should Alan Jackson Chemical report this information in its financial statements at December 31, 2004?

3. Melissa Etheridge Inc. had a manufacturing plant in Bosnia, which was destroyed in the civil war. It is not certain who will compensate Etheridge for this destruction, but Etheridge has been assured by governmental officials that it will receive a definite amount for this plant. The amount of the compensation will be less than the fair value of the plant, but more than its book value. How should the contingency be reported in the financial statements of Etheridge Inc.?

E13-14 (Asset Retirement Obligation) Oil Products Company purchases an oil tanker depot on January 1, 2004, at a cost of $600,000. Oil Products expects to operate the depot for 10 years, at which time it is legally required to dismantle the depot and remove the underground storage tanks. It is estimated that it will cost $75,000 to dismantle the depot and remove the tanks at the end of the depot’s useful life.

Instructions
(a) Prepare the journal entries to record the depot and the asset retirement obligation for the depot on January 1, 2004. Based on an effective interest rate of 6%, the present value of the asset retirement obligation on January 1, 2004, is $41,879.
(b) Prepare any journal entries required for the depot and the asset retirement obligation at December 31, 2004. Oil Products uses straight-line depreciation; the estimated residual value for the depot is zero.
(c) On December 31, 2013, Oil Products pays a demolition firm to dismantle the depot and remove the tanks at a price of $80,000. Prepare the journal entry for the settlement of the asset retirement obligation.
E13-15 (Premiums)  Presented below are three independent situations.

1. Fred McGriff Stamp Company records stamp service revenue and provides for the cost of redemptions in the year stamps are sold to licensees. McGriff’s past experience indicates that only 80% of the stamps sold to licensees will be redeemed. McGriff’s liability for stamp redemptions was $13,000,000 at December 31, 2003. Additional information for 2004 is as follows.

   | Stamp service revenue from stamps sold to licensees | $9,500,000 |
   | Cost of redemptions (stamps sold prior to 1/1/04)      | 6,000,000  |

If all the stamps sold in 2004 were presented for redemption in 2005, the redemption cost would be $5,200,000. What amount should McGriff report as a liability for stamp redemptions at December 31, 2004?

2. In packages of its products, Sam Sosa Inc. includes coupons that may be presented at retail stores to obtain discounts on other Sosa products. Retailers are reimbursed for the face amount of coupons redeemed plus 10% of that amount for handling costs. Sosa honors requests for coupon redemption by retailers up to 3 months after the consumer expiration date. Sosa estimates that 60% of all coupons issued will ultimately be redeemed. Information relating to coupons issued by Sosa during 2004 is as follows.

   | Consumer expiration date | 12/31/04 |
   | Total face amount of coupons issued | $800,000 |
   | Total payments to retailers as of 12/31/04 | 330,000 |

What amount should Sam Sosa report as a liability for unredeemed coupons at December 31, 2004?

3. Bruce Kim Company sold 700,000 boxes of pie mix under a new sales promotional program. Each box contains one coupon, which submitted with $4.00, entitles the customer to a baking pan. Kim pays $6.00 per pan and $0.50 for handling and shipping. Kim estimates that 70% of the coupons will be redeemed, even though only 250,000 coupons had been processed during 2004. What amount should Kim report as a liability for unredeemed coupons at December 31, 2004?

E13-16 (Financial Statement Impact of Liability Transactions)  Presented below is a list of possible transactions.

1. Purchased inventory for $80,000 on account (assume perpetual system is used).
2. Issued an $80,000 note payable in payment on account (see item 1 above).
3. Recorded accrued interest on the note from item 2 above.
4. Borrowed $100,000 from the bank by signing a 6-month, $112,000, noninterest-bearing note.
5. Recognized 4 months’ interest expense on the note from item 4 above.
6. Recorded cash sales of $75,260, which includes 6% sales tax.
7. Recorded wage expense of $35,000. The cash paid was $25,000; the difference was due to various amounts withheld.
8. Recorded employer’s payroll taxes.
9. Accrued accumulated vacation pay.
10. Recorded an asset retirement obligation.
11. Recorded bonuses due to employees.
12. Recorded a contingent loss on a lawsuit that the company will probably lose.
13. Accrued warranty expense (assume expense warranty approach).
14. Paid warranty costs that were accrued in item 13 above.
15. Recorded sales of product and related warranties (assume sales warranty approach).
16. Paid warranty costs under contracts from item 15 above.
17. Recognized warranty revenue (see item 15 above).
18. Recorded estimated liability for premium claims outstanding.

Instructions
Set up a table using the format shown below and analyze the effect of the 18 transactions on the financial statement categories indicated.

<table>
<thead>
<tr>
<th>#</th>
<th>Assets</th>
<th>Liabilities</th>
<th>Owners’ Equity</th>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use the following code:
I: Increase  D: Decrease  NE: No net effect
E13-17 (Ratio Computations and Discussion) Sprague Company has been operating for several years, and on December 31, 2004, presented the following balance sheet.

**SPRAGUE COMPANY**
**BALANCE SHEET**
**DECEMBER 31, 2004**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$40,000</td>
<td>Accounts payable</td>
</tr>
<tr>
<td>Receivables</td>
<td>75,000</td>
<td>Mortgage payable</td>
</tr>
<tr>
<td>Inventories</td>
<td>95,000</td>
<td>Common stock ($1 par)</td>
</tr>
<tr>
<td>Plant assets (net)</td>
<td>220,000</td>
<td>Retained earnings</td>
</tr>
<tr>
<td></td>
<td>$430,000</td>
<td></td>
</tr>
</tbody>
</table>

The net income for 2004 was $25,000. Assume that total assets are the same in 2003 and 2004.

**Instructions**
Compute each of the following ratios. For each of the four indicate the manner in which it is computed and its significance as a tool in the analysis of the financial soundness of the company.

(a) Current ratio.
(b) Acid-test ratio.
(c) Debt to total assets.
(d) Rate of return on assets.

E13-18 (Ratio Computations and Analysis) Hood Company’s condensed financial statements provide the following information.

**HOOD COMPANY**
**BALANCE SHEET**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 52,000</td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Accounts receivable (net)</td>
<td>198,000</td>
<td>80,000</td>
</tr>
<tr>
<td>Marketable securities (short-term)</td>
<td>80,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>440,000</td>
<td>360,000</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>3,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Total current assets</td>
<td>$773,000</td>
<td>$547,000</td>
</tr>
<tr>
<td>Property, plant, and equipment (net)</td>
<td>857,000</td>
<td>853,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,630,000</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>240,000</td>
<td>160,000</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>400,000</td>
<td>400,000</td>
</tr>
<tr>
<td>Common stockholders’ equity</td>
<td>990,000</td>
<td>840,000</td>
</tr>
<tr>
<td>Total liabilities and stockholders’ equity</td>
<td>$1,630,000</td>
<td>$1,400,000</td>
</tr>
</tbody>
</table>

**INCOME STATEMENT**
**FOR THE YEAR ENDED 2004**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$1,640,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>(800,000)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>840,000</td>
</tr>
<tr>
<td>Selling and administrative expense</td>
<td>(440,000)</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(40,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>$ 360,000</td>
</tr>
</tbody>
</table>

**Instructions**
(a) Determine the following for 2004.
   (1) Current ratio at December 31.
   (2) Acid-test ratio at December 31.
   (3) Accounts receivable turnover.
   (4) Inventory turnover.
   (5) Rate of return on assets.
   (6) Profit margin on sales.

(b) Prepare a brief evaluation of the financial condition of Hood Company and of the adequacy of its profits.
E13-19 (Ratio Computations and Effect of Transactions)  

Presented below is information related to Carver Inc.

**CARVER INC.**  
**BALANCE SHEET**  
**DECEMBER 31, 2004**

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$45,000</td>
</tr>
<tr>
<td>Receivables</td>
<td>$110,000</td>
</tr>
<tr>
<td>Less: Allowance</td>
<td>$15,000</td>
</tr>
<tr>
<td>Inventories</td>
<td>$170,000</td>
</tr>
<tr>
<td>Prepaid insurance</td>
<td>$8,000</td>
</tr>
<tr>
<td>Land</td>
<td>$20,000</td>
</tr>
<tr>
<td>Equipment (net)</td>
<td>$150,000</td>
</tr>
<tr>
<td>Notes payable (short-term)</td>
<td>$50,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$32,000</td>
</tr>
<tr>
<td>Accrued liabilities</td>
<td>$5,000</td>
</tr>
<tr>
<td>Capital stock (par $5)</td>
<td>$260,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>$141,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$488,000</strong></td>
</tr>
</tbody>
</table>

**INCOME STATEMENT**  
**FOR THE YEAR ENDED DECEMBER 31, 2004**

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td></td>
</tr>
<tr>
<td>Inventory, Jan. 1, 2004</td>
<td>$200,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>$790,000</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td>$990,000</td>
</tr>
<tr>
<td>Inventory, Dec. 31, 2004</td>
<td>$170,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$820,000</td>
</tr>
<tr>
<td>Gross profit on sales</td>
<td>$580,000</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>$170,000</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td><strong>$410,000</strong></td>
</tr>
</tbody>
</table>

**Instructions**

(a) Compute the following ratios or relationships of Carver Inc. Assume that the ending account balances are representative unless the information provided indicates differently.

1. Current ratio.
2. Inventory turnover.
3. Receivables turnover.
4. Earnings per share.
5. Profit margin on sales.
6. Rate of return on assets on December 31, 2004.

(b) Indicate for each of the following transactions whether the transaction would improve, weaken, or have no effect on the current ratio of Carver Inc. at December 31, 2004.

1. Write off an uncollectible account receivable, $2,200.
2. Purchase additional capital stock for cash.
3. Pay $40,000 on notes payable (short-term).
4. Collect $23,000 on accounts receivable.
5. Buy equipment on account.

E13-20 (Bonus Computation)  
Jud Buechler, president of the Supporting Cast Company, has a bonus arrangement with the company under which he receives 15% of the net income (after deducting taxes and bonuses) each year. For the current year, the net income before deducting either the provision for income taxes or the bonus is $299,750. The bonus is deductible for tax purposes, and the effective tax rate may be assumed to be 40%.

**Instructions**

(a) Compute the amount of Jud Buechler’s bonus.
(b) Compute the appropriate provision for federal income taxes for the year.
(c) Prepare the December 31 journal entry to record the bonus (which will not be paid until next year).

E13-21 (Bonus Computation and Income Statement Preparation)  
The incomplete income statement of Scottie Pippen Company follows.
**SCOTIE PIPPEN COMPANY**

**INCOME STATEMENT**

**FOR THE YEAR 2004**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>7,000,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Administrative and selling expenses</td>
<td>?</td>
</tr>
<tr>
<td>Profit-sharing bonus to employees</td>
<td>?</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>?</td>
</tr>
<tr>
<td>Income taxes</td>
<td>?</td>
</tr>
<tr>
<td>Net income</td>
<td>$     ?</td>
</tr>
</tbody>
</table>

The employee profit-sharing plan requires that 20% of all profits remaining after the deduction of the bonus and income taxes be distributed to the employees by the first day of the fourth month following each year-end. The federal income tax is 45%, and the bonus is tax-deductible.

**Instructions**

Complete the condensed income statement of Scottie Pippen Company for the year 2004.

*E13-22 (Bonus Compensation)* Alan Iverson Company has a profit-sharing agreement with its employees that provides for deposit in a pension trust for the benefit of the employees of 25% of the net income after deducting (1) federal taxes on income, (2) the amount of the annual pension contribution, and (3) a return of 10% on the stockholders' equity as of the end of the year 2004.

**Instructions**

Compute the amount of the pension contribution under the assumption that the stockholders' equity at the end of 2004 before adding the net income for the year is $700,000; that net income for the year before either the pension contribution or tax is $300,000; and that the pension contribution is deductible for tax purposes. Use 40% as the applicable rate of tax.

## PROBLEMS

**P13-1 (Current Liability Entries and Adjustments)** Described below are certain transactions of James Edwards Corporation.

1. On February 2, the corporation purchased goods from Jack Haley Company for $50,000 subject to cash discount terms of 2/10, n/30. Purchases and accounts payable are recorded by the corporation at net amounts after cash discounts. The invoice was paid on February 26.
2. On April 1, the corporation bought a truck for $40,000 from General Motors Company, paying $4,000 in cash and signing a one-year, 12% note for the balance of the purchase price.
3. On May 1, the corporation borrowed $80,000 from Chicago National Bank by signing a $92,000 non-interest-bearing note due one year from May 1.
4. On August 1, the board of directors declared a $300,000 cash dividend that was payable on September 10 to stockholders of record on August 31.

**Instructions**

(a) Make all the journal entries necessary to record the transactions above using appropriate dates.

(b) James Edwards Corporation's year-end is December 31. Assuming that no adjusting entries relative to the transactions above have been recorded, prepare any adjusting journal entries concerning interest that are necessary to present fair financial statements at December 31. Assume straight-line amortization of discounts.

**P13-2 (Current Liability Entries and Adjustments)** Listed below are selected transactions of Kobe Bryant Department Store for the current year ending December 31.

1. On December 5, the store received $500 from the Phil Jackson Players as a deposit to be returned after certain furniture to be used in stage production was returned on January 15.
2. During December, cash sales totaled $834,750, which includes the 5% sales tax that must be remitted to the state by the fifteenth day of the following month.
3. On December 10, the store purchased for cash three delivery trucks for $99,000. The trucks were purchased in a state that applies a 5% sales tax.
4. The store determined it will cost $100,000 to restore the area surrounding one of its store parking lots, when the store is closed in 2 years. Bryant estimates the fair value of the obligation at December 31 is $84,000.

**Instructions**
Prepare all the journal entries necessary to record the transactions noted above as they occurred and any adjusting journal entries relative to the transactions that would be required to present fair financial statements at December 31. Date each entry. For simplicity, assume that adjusting entries are recorded only once a year on December 31.

**P13-3 (Payroll Tax Entries)** Star Wars Company pays its office employee payroll weekly. Below is a partial list of employees and their payroll data for August. Because August is their vacation period, vacation pay is also listed.

<table>
<thead>
<tr>
<th>Employee</th>
<th>Earnings to July 31</th>
<th>Weekly Pay</th>
<th>Vacation Pay to Be Received in August</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Hamill</td>
<td>$4,200</td>
<td>$180</td>
<td>—</td>
</tr>
<tr>
<td>Carrie Fisher</td>
<td>3,500</td>
<td>150</td>
<td>$300</td>
</tr>
<tr>
<td>Harrison Ford</td>
<td>2,700</td>
<td>110</td>
<td>220</td>
</tr>
<tr>
<td>Alec Guinness</td>
<td>7,400</td>
<td>250</td>
<td>—</td>
</tr>
<tr>
<td>Peter Cushing</td>
<td>8,000</td>
<td>290</td>
<td>580</td>
</tr>
</tbody>
</table>

Assume that the federal income tax withheld is 10% of wages. Union dues withheld are 2% of wages. Vacations are taken the second and third weeks of August by Fisher, Ford, and Cushing. The state unemployment tax rate is 2.5% and the federal is 0.8%, both on a $7,000 maximum. The F.I.C.A. rate is 7.65% on employee and employer on a maximum of $84,900 per employee. In addition, a 1.45% rate is charged both employer and employee for an employee’s wage in excess of $84,900.

**Instructions**
Make the journal entries necessary for each of the four August payrolls. The entries for the payroll and for the company’s liability are made separately. Also make the entry to record the monthly payment of accrued payroll liabilities.

**P13-4 (Payroll Tax Entries)** Below is a payroll sheet for Empire Import Company for the month of September 2004. The company is allowed a 1% unemployment compensation rate by the state; the federal unemployment tax rate is 0.8% and the maximum for both is $7,000. Assume a 10% federal income tax rate for all employees and a 7.65% F.I.C.A. tax on employee and employer on a maximum of $84,900. In addition, 1.45% is charged both employer and employee for an employee’s wage in excess of $84,900 per employee.

<table>
<thead>
<tr>
<th>Name</th>
<th>Earnings to Aug. 31</th>
<th>September Earnings</th>
<th>Income Tax Withholding</th>
<th>F.I.C.A.</th>
<th>State U.C.</th>
<th>Federal U.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.D. Williams</td>
<td>$ 6,800</td>
<td>$ 800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Prowse</td>
<td>6,300</td>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. Baker</td>
<td>7,600</td>
<td>1,100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Oz</td>
<td>13,600</td>
<td>1,900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Daniels</td>
<td>105,000</td>
<td>15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. Mayhew</td>
<td>112,000</td>
<td>16,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Instructions**
(a) Complete the payroll sheet and make the necessary entry to record the payment of the payroll.
(b) Make the entry to record the payroll tax expenses of Empire Import Company.
(c) Make the entry to record the payment of the payroll liabilities created. Assume that the company pays all payroll liabilities at the end of each month.

**P13-5 (Warranties, Accrual, and Cash Basis)** Jerry Royster Corporation sells portable computers under a 2-year warranty contract that requires the corporation to replace defective parts and to provide the necessary repair labor. During 2004 the corporation sells for cash 300 computers at a unit price of $3,500. On the basis of past experience, the 2-year warranty costs are estimated to be $155 for parts and $185 for labor per unit. (For simplicity, assume that all sales occurred on December 31, 2004.) The warranty is not sold separately from the computer.

**Instructions**
(a) Record any necessary journal entries in 2004, applying the cash basis method.
(b) Record any necessary journal entries in 2004, applying the expense warranty accrual method.
What liability relative to these transactions would appear on the December 31, 2004, balance sheet and how would it be classified if the cash basis method is applied?

In 2005 the actual warranty costs to Jerry Royster Corporation were $21,400 for parts and $24,900 for labor.

Record any necessary journal entries in 2005, applying the cash basis method.

In 2005, Brett Perriman Company incurred actual costs relative to 2004 television warranty sales of $2,000 for parts and $3,000 for labor.

Record any necessary journal entries in 2005 relative to 2004 television warranties.

What amounts relative to the 2004 television warranties would appear on the December 31, 2005, balance sheet and how would they be classified?

Instructions

(a) Record any necessary journal entries in 2004.

(b) What liability relative to these transactions would appear on the December 31, 2004, balance sheet and how would it be classified?

In 2005, Brett Perriman Company incurred actual costs relative to 2004 television warranty sales of $2,000 for parts and $3,000 for labor.

(c) Record any necessary journal entries in 2005 relative to 2004 television warranties.

(d) What amounts relative to the 2004 television warranties would appear on the December 31, 2005, balance sheet and how would they be classified?

P13-7 (Warranties, Accrual, and Cash Basis) Albert Pujols Company sells a machine for $7,400 under a 12-month warranty agreement that requires the company to replace all defective parts and to provide the repair labor at no cost to the customers. With sales being made evenly throughout the year, the company sells 650 machines in 2005 (warranty expense is incurred half in 2005 and half in 2006). As a result of product testing, the company estimates that the warranty cost is $370 per machine ($170 parts and $200 labor).

Instructions

Assuming that actual warranty costs are incurred exactly as estimated, what journal entries would be made relative to the following facts?

(a) Under application of the expense warranty accrual method for:
   (1) Sale of machinery in 2005.
   (2) Warranty costs incurred in 2005.
   (4) Warranty costs incurred in 2006.

(b) Under application of the cash basis method for:
   (1) Sale of machinery in 2005.
   (2) Warranty costs incurred in 2005.
   (4) Warranty costs incurred in 2006.

(c) What amount, if any, is disclosed in the balance sheet as a liability for future warranty costs as of December 31, 2005, under each method?

(d) Which method best reflects the income in 2005 and 2006 of Albert Pujols Company? Why?

P13-8 (Premium Entries) To stimulate the sales of its Alladin breakfast cereal, Khamsah Company places 1 coupon in each box. Five coupons are redeemable for a premium consisting of a children’s hand puppet. In 2005, the company purchases 40,000 puppets at $1.50 each and sells 440,000 boxes of Alladin at $3.75 a box. From its experience with other similar premium offers, the company estimates that 40% of the coupons issued will be mailed back for redemption. During 2005, 105,000 coupons are presented for redemption.

Instructions

Prepare the journal entries that should be recorded in 2005 relative to the premium plan.

P13-9 (Premium Entries and Financial Statement Presentation) Roberto Hernandez Candy Company offers a CD single as a premium for every five candy bar wrappers presented by customers together with $2.00. The candy bars are sold by the company to distributors for 30 cents each. The purchase price of each CD to the company is $1.80; in addition it costs 30 cents to mail each CD. The results of the premium plan for the years 2004 and 2005 are as follows. (All purchases and sales are for cash.)
<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDs purchased</td>
<td>250,000</td>
<td>330,000</td>
</tr>
<tr>
<td>Candy bars sold</td>
<td>2,895,400</td>
<td>2,743,600</td>
</tr>
<tr>
<td>Wrappers redeemed</td>
<td>1,200,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>2004 wrappers expected to be redeemed in 2005</td>
<td>290,000</td>
<td></td>
</tr>
<tr>
<td>2005 wrappers expected to be redeemed in 2006</td>
<td></td>
<td>350,000</td>
</tr>
</tbody>
</table>

Instructions
(a) Prepare the journal entries that should be made in 2004 and 2005 to record the transactions related to the premium plan of the Roberto Hernandez Candy Company.
(b) Indicate the account names, amounts, and classifications of the items related to the premium plan that would appear on the balance sheet and the income statement at the end of 2004 and 2005.

P13-10 (Loss Contingencies: Entries and Essay) On November 24, 2004, 26 passengers on Tom Paris Airlines Flight No. 901 were injured upon landing when the plane skidded off the runway. Personal injury suits for damages totaling $5,000,000 were filed on January 11, 2005, against the airline by 18 injured passengers. The airline carries no insurance. Legal counsel has studied each suit and advised Paris that it can reasonably expect to pay 60% of the damages claimed. The financial statements for the year ended December 31, 2004, were issued February 27, 2005.

Instructions
(a) Prepare any disclosures and journal entries required by the airline in preparation of the December 31, 2004, financial statements.
(b) Ignoring the Nov. 24, 2005, accident, what liability due to the risk of loss from lack of insurance coverage should Tom Paris Airlines record or disclose? During the past decade the company has experienced at least one accident per year and incurred average damages of $3,200,000. Discuss fully.

P13-11 (Loss Contingencies: Entries and Essays) Shoyo Corporation, in preparation of its December 31, 2004, financial statements, is attempting to determine the proper accounting treatment for each of the following situations.

1. As a result of uninsured accidents during the year, personal injury suits for $350,000 and $60,000 have been filed against the company. It is the judgment of Shoyo’s legal counsel that an unfavorable outcome is unlikely in the $60,000 case but that an unfavorable verdict approximating $225,000 will probably result in the $350,000 case.
2. Shoyo Corporation owns a subsidiary in a foreign country that has a book value of $5,725,000 and an estimated fair value of $8,700,000. The foreign government has communicated to Shoyo its intention to expropriate the assets and business of all foreign investors. On the basis of settlements other firms have received from this same country, Shoyo expects to receive 40% of the fair value of its properties as final settlement.
3. Shoyo’s chemical product division consisting of five plants is uninsurable because of the special risk of injury to employees and losses due to fire and explosion. The year 2004 is considered one of the safest (luckiest) in the division’s history because no loss due to injury or casualty was suffered. Having suffered an average of three casualties a year during the rest of the past decade (ranging from $60,000 to $700,000), management is certain that next year the company will probably not be so fortunate.

Instructions
(a) Prepare the journal entries that should be recorded as of December 31, 2004, to recognize each of the situations above.
(b) Indicate what should be reported relative to each situation in the financial statements and accompanying notes. Explain why.

P13-12 (Warranties and Premiums) Gloria Estefan’s Music Emporium carries a wide variety of musical instruments, sound reproduction equipment, recorded music, and sheet music. Estefan’s uses two sales promotion techniques—warranties and premiums—to attract customers.

Musical instruments and sound equipment are sold with a one-year warranty for replacement of parts and labor. The estimated warranty cost, based on past experience, is 2% of sales.

The premium is offered on the recorded and sheet music. Customers receive a coupon for each dollar spent on recorded music or sheet music. Customers may exchange 200 coupons and $20 for a CD player. Estefan’s pays $34 for each CD player and estimates that 60% of the coupons given to customers will be redeemed.

Estefan’s total sales for 2004 were $7,200,000—$5,400,000 from musical instruments and sound reproduction equipment and $1,800,000 from recorded music and sheet music. Replacement parts and labor
for warranty work totaled $164,000 during 2004. A total of 6,500 CD players used in the premium program were purchased during the year and there were 1,200,000 coupons redeemed in 2004. The accrual method is used by Estefan’s to account for the warranty and premium costs for financial reporting purposes. The balances in the accounts related to warranties and premiums on January 1, 2004, were as shown below.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory of Premium CD Players</td>
<td>$39,950</td>
</tr>
<tr>
<td>Estimated Premium Claims Outstanding</td>
<td>44,800</td>
</tr>
<tr>
<td>Estimated Liability from Warranties</td>
<td>136,000</td>
</tr>
</tbody>
</table>

Instructions
Gloria Estefan’s Music Emporium is preparing its financial statements for the year ended December 31, 2004. Determine the amounts that will be shown on the 2004 financial statements for the following.

1. Warranty Expense.
2. Estimated Liability from Warranties.
3. Premium Expense.
4. Inventory of Premium CD Players.
5. Estimated Premium Claims Outstanding.

(CMA adapted)

P13-13 (Liability Errors) You are the independent auditor engaged to audit Christine Agazzi Corporation’s December 31, 2004, financial statements. Christine Agazzi manufactures household appliances. During the course of your audit, you discovered the following contingent liabilities.

1. Christine Agazzi began production on a new dishwasher in June 2004 and, by December 31, 2004, sold 100,000 to various retailers for $500 each. Each dishwasher is under a one-year warranty. The company estimates that its warranty expense per dishwasher will amount to $25. At year-end, the company had already paid out $1,000,000 in warranty expenses. Christine Agazzi’s income statement shows warranty expenses of $1,000,000 for 2004. Agazzi accounts for warranty costs on the accrual basis.

2. In response to your attorney’s letter, Robert Sklodowski, Esq., has informed you that Agazzi has been cited for dumping toxic waste into the Kishwaukee River. Clean-up costs and fines amount to $3,330,000. Although the case is still being contested, Sklodowski is certain that Agazzi will most probably have to pay the fine and clean-up costs. No disclosure of this situation was found in the financial statements.

3. Christine Agazzi is the defendant in a patent infringement lawsuit by Heidi Goldman over Agazzi’s use of a hydraulic compressor in several of its products. Sklodowski claims that, if the suit goes against Agazzi, the loss may be as much as $5,000,000; however, Sklodowski believes the loss of this suit to be only reasonably possible. Again, no mention of this suit occurs in the financial statements.

As presented, these contingencies are not reported in accordance with GAAP, which may create problems in issuing a clean audit report. You feel the need to note these problems in the work papers.

Instructions
Heading each page with the name of the company, balance sheet date, and a brief description of the problem, write a brief narrative for each of the above issues in the form of a memorandum to be incorporated in the audit work papers. Explain what led to the discovery of each problem, what the problem really is, and what you advised your client to do (along with any appropriate journal entries) in order to bring these contingencies in accordance with GAAP.

*P13-14 (Bonus Computation) Henryk Inc. has a contract with its president, Nathalie Sarrarute, to pay her a bonus during each of the years 2003, 2004, 2005, and 2006. The federal income tax rate is 40% during the 4 years. The profit before deductions for bonus and federal income taxes was $250,000 in 2003, $308,000 in 2004, $350,000 in 2005, and $380,000 in 2006. The president’s bonus of 12% is deductible for tax purposes in each year and is to be computed as follows.

(a) In 2003 the bonus is to be based on profit before deductions for bonus and income tax.
(b) In 2004 the bonus is to be based on profit after deduction of bonus but before deduction of income tax.
(c) In 2005 the bonus is to be based on profit before deduction of bonus but after deduction of income tax.
(d) In 2006 the bonus is to be based on profit after deductions for bonus and income tax.

Instructions
Compute the amounts of the bonus and the income tax for each of the 4 years.

P13-15 (Warranty, Bonus, and Coupon Computation) Victor Hugo Company must make computations and adjusting entries for the following independent situations at December 31, 2004.

1. Its line of amplifiers carries a 3-year warranty against defects. On the basis of past experience the estimated warranty costs related to dollar sales are: first year after sale—2% of sales; second year
after sale—3% of sales; and third year after sale—4% of sales. Sales and actual warranty expendi-
ditures for the first 3 years of business were:

<table>
<thead>
<tr>
<th>Warranty Expenditures</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$ 6,500</td>
</tr>
<tr>
<td>2003</td>
<td>17,200</td>
</tr>
<tr>
<td>2004</td>
<td>62,000</td>
</tr>
</tbody>
</table>

Instructions
Compute the amount that Hugo Company should report as a liability in its December 31, 2004, balance sheet. Assume that all sales are made evenly throughout each year with warranty expenses also evenly spaced relative to the rates above.

Instructions
Compute the amount that Hugo Company should report as a liability in its December 31, 2004, balance sheet. Assume that all sales are made evenly throughout each year with warranty expenses also evenly spaced relative to the rates above.

*2. Hugo Company’s profit-sharing plan provides that the company will contribute to a fund an amount equal to one-fourth of its net income each year. Income before deducting the profit-sharing contribution and taxes for 2004 is $1,035,000. The applicable income tax rate is 40%, and the profit-sharing contribution is deductible for tax purposes.

Instructions
Compute the amount to be contributed to the profit-sharing fund for 2004.

3. With some of its products, Hugo Company includes coupons that are redeemable in merchandise. The coupons have no expiration date and, in the company’s experience, 40% of them are redeemed. The liability for unredeemed coupons at December 31, 2003, was $9,000. During 2004, coupons worth $25,000 were issued, and merchandise worth $8,000 was distributed in exchange for coupons redeemed.

Instructions
Compute the amount of the liability that should appear on the December 31, 2004, balance sheet.

(AICPA adapted)

**CONCEPTUAL CASES**

C13-1 (Nature of Liabilities) Presented below is the current liabilities section of Nizami Corporation.

<table>
<thead>
<tr>
<th>($000)</th>
<th>2003</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes payable</td>
<td>$ 68,713</td>
<td>$ 7,700</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>179,496</td>
<td>101,379</td>
</tr>
<tr>
<td>Compensation to employees</td>
<td>60,312</td>
<td>31,649</td>
</tr>
<tr>
<td>Accrued liabilities</td>
<td>158,198</td>
<td>77,621</td>
</tr>
<tr>
<td>Income taxes payable</td>
<td>10,486</td>
<td>26,491</td>
</tr>
<tr>
<td>Current maturities of long-term debt</td>
<td>16,592</td>
<td>6,649</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>$493,797</td>
<td>$251,489</td>
</tr>
</tbody>
</table>

Instructions
Answer the following questions.

(a) What are the essential characteristics that make an item a liability?
(b) How does one distinguish between a current liability and a long-term liability?
(c) What are accrued liabilities? Give three examples of accrued liabilities that Nizami might have.
(d) What is the theoretically correct way to value liabilities? How are current liabilities usually valued?
(e) Why are notes payable reported first in the current liabilities section?
(f) What might be the items that comprise Nizami’s liability for “Compensation to employees”?

C13-2 (Current versus Noncurrent Classification) D’Annunzio Corporation includes the following items in its liabilities at December 31, 2004.

1. Notes payable, $25,000,000, due June 30, 2005.
2. Deposits from customers on equipment ordered by them from D’Annunzio, $6,250,000.

Instructions
Indicate in what circumstances, if any, each of the three liabilities above would be excluded from current liabilities.
Levi Eshkol Corporation reports in the current liability section of its balance sheet at December 31, 2004 (its year-end), short-term obligations of $15,000,000, which includes the current portion of 12% long-term debt in the amount of $11,000,000 (matures in March 2005). Management has stated its intention to refinance the 12% debt whereby no portion of it will mature during 2005. The date of issuance of the financial statements is March 25, 2005.

Instructions
(a) Is management’s intent enough to support long-term classification of the obligation in this situation?
(b) Assume that Eshkol Corporation issues $13,000,000 of 10-year debentures to the public in January 2005 and that management intends to use the proceeds to liquidate the $11,000,000 debt maturing in March 2005. Furthermore, assume that the debt maturing in March 2005 is paid from these proceeds prior to the issuance of the financial statements. Will this have any impact on the balance sheet classification at December 31, 2004? Explain your answer.
(c) Assume that Eshkol Corporation issues common stock to the public in January and that management intends to entirely liquidate the $11,000,000 debt maturing in March 2005 with the proceeds of this equity securities issue. In light of these events, should the $11,000,000 debt maturing in March 2005 be included in current liabilities at December 31, 2004?
(d) Assume that Eshkol Corporation, on February 15, 2005, entered into a financing agreement with a commercial bank that permits Eshkol Corporation to borrow at any time through 2006 up to $15,000,000 at the bank’s prime rate of interest. Borrowings under the financing agreement mature three years after the date of the loan. The agreement is not cancelable except for violation of a provision with which compliance is objectively determinable. No violation of any provision exists at the date of issuance of the financial statements. Assume further that the current portion of long-term debt does not mature until August 2005. In addition, management intends to refinance the $11,000,000 obligation under the terms of the financial agreement with the bank, which is expected to be financially capable of honoring the agreement.
(1) Given these facts, should the $11,000,000 be classified as current on the balance sheet at December 31, 2004?
(2) Is disclosure of the refinancing method required?

C13-4 (Refinancing of Short-Term Debt)

Medvedev Inc. issued $10,000,000 of short-term commercial paper during the year 2003 to finance construction of a plant. At December 31, 2003, the corporation’s year-end, Medvedev intends to refinance the commercial paper by issuing long-term debt. However, because the corporation temporarily has excess cash, in January 2004 it liquidates $4,000,000 of the commercial paper as the paper matures. In February 2004, Medvedev completes an $18,000,000 long-term debt offering. Later during the month of February, it issues its December 31, 2003, financial statements. The proceeds of the long-term debt offering are to be used to replenish $4,000,000 in working capital, to pay $6,000,000 of commercial paper as it matures in March 2004, and to pay $8,000,000 of construction costs expected to be incurred later that year to complete the plant.

Instructions
(a) How should the $10,000,000 of commercial paper be classified on the December 31, 2003, January 31, 2004, and February 28, 2004, balance sheets? Give support for your answer and also consider the cash element.
(b) What would your answer be if, instead of a refinancing at the date of issuance of the financial statements, a financing agreement existed at that date?

C13-5 (Loss Contingencies)

On February 1, 2004, one of the huge storage tanks of Paunee Manufacturing Company exploded. Windows in houses and other buildings within a one-mile radius of the explosion were severely damaged, and a number of people were injured. As of February 15, 2004 (when the December 31, 2003, financial statements were completed and sent to the publisher for printing and public distribution), no suits had been filed or claims asserted against the company as a consequence of the explosion. The company fully anticipates that suits will be filed and claims asserted for injuries and damages. Because the casualty was uninsured and the company considered at fault, Paunee Manufacturing will have to cover the damages from its own resources.

Instructions
Discuss fully the accounting treatment and disclosures that should be accorded the casualty and related contingent losses in the financial statements dated December 31, 2003.

C13-6 (Loss Contingency)

Presented below is a note disclosure for Ralph Ellison Corporation.

Litigation and Environmental: The Company has been notified, or is a named or a potentially responsible party in a number of governmental (federal, state and local) and private actions associated
with environmental matters, such as those relating to hazardous wastes, including certain sites which are on the United States EPA National Priorities List ("Superfund"). These actions seek cleanup costs, penalties and/or damages for personal injury or to property or natural resources.

In 2002, the Company recorded a pre-tax charge of $56,229,000, included in the "Other Expense (Income)—Net" caption of the Company's Consolidated Statements of Income, as an additional provision for environmental matters. These expenditures are expected to take place over the next several years and are indicative of the Company’s commitment to improve and maintain the environment in which it operates. At December 31, 2002, environmental accruals amounted to $69,931,000, of which $61,535,000 are considered noncurrent and are included in the "Deferred Credits and Other Liabilities" caption of the Company’s Consolidated Balance Sheets.

While it is impossible at this time to determine with certainty the ultimate outcome of environmental matters, it is management’s opinion, based in part on the advice of independent counsel (after taking into account accruals and insurance coverage applicable to such actions) that when the costs are finally determined they will not have a material adverse effect on the financial position of the Company.

**Instructions**

Answer the following questions.

(a) What conditions must exist before a loss contingency can be recorded in the accounts?

(b) Suppose that Ralph Ellison Corporation could not reasonably estimate the amount of the loss, although it could establish with a high degree of probability the minimum and maximum loss possible. How should this information be reported in the financial statements?

(c) If the amount of the loss is uncertain, how would the loss contingency be reported in the financial statements?

---

C13-7 (Warranties and Loss Contingencies)  The following two independent situations involve loss contingencies.

**Part 1**

Clarke Company sells two products, John and Henrick. Each carries a one-year warranty.

1. Product John—Product warranty costs, based on past experience, will normally be 1% of sales.
2. Product Henrick—Product warranty costs cannot be reasonably estimated because this is a new product line. However, the chief engineer believes that product warranty costs are likely to be incurred.

**Instructions**

How should Clarke report the estimated product warranty costs for each of the two types of merchandise above? Discuss the rationale for your answer. Do not discuss deferred income tax implications, or disclosures that should be made in Clarke’s financial statements or notes.

---

**Part 2**

Toni Morrison Company is being sued for $4,000,000 for an injury caused to a child as a result of alleged negligence while the child was visiting the Toni Morrison Company plant in March 2004. The suit was filed in July 2004. Toni Morrison’s lawyer states that it is probable that Toni Morrison will lose the suit and be found liable for a judgment costing anywhere from $400,000 to $2,000,000. However, the lawyer states that the most probable judgment is $800,000.

**Instructions**

How should Toni Morrison report the suit in its 2004 financial statements? Discuss the rationale for your answer. Include in your answer disclosures, if any, that should be made in Toni Morrison’s financial statements or notes.

---

C13-8 (Warranties)  The Ray Company, owner of Bleacher Mall, charges Creighton Clothing Store a rental fee of $600 per month plus 5% of yearly profits over $500,000. Harry Creighton, the owner of the store, directs his accountant, Burt Wilson, to increase the estimate of bad debt expense and warranty costs in order to keep profits at $475,000.

**Instructions**

Answer the following questions.

(a) Should Wilson follow his boss’s directive?

(b) Who is harmed if the estimates are increased?

(c) Is Creighton’s directive ethical?
Chapter 13  Current Liabilities and Contingencies

USING YOUR JUDGMENT

FINANCIAL REPORTING PROBLEM

3M Company

The financial statements of 3M are presented in Appendix 5B or can be accessed on the Take Action! CD.

Instructions

Refer to these financial statements and the accompanying notes to answer the following questions.
(a) What was 3M’s short-term debt and related weighted average interest rate on this debt?
(b) What was 3M’s working capital, acid-test ratio, and current ratio? Comment on 3M’s liquidity.
(c) What types of commitments and contingencies has 3M reported in its financial statements? What is management’s reaction to these contingencies?

FINANCIAL STATEMENT ANALYSIS CASES

Case 1 Northland Cranberries

Despite being a publicly traded company only since 1987, Northland Cranberries of Wisconsin Rapids, Wisconsin, is one of the world’s largest cranberry growers. Despite its short life as a publicly traded corporation, it has engaged in an aggressive growth strategy. As a consequence, the company has taken on significant amounts of both short-term and long-term debt. The following information is taken from recent annual reports of the company.

<table>
<thead>
<tr>
<th></th>
<th>Current Year</th>
<th>Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>$ 6,745,759</td>
<td>$ 5,598,054</td>
</tr>
<tr>
<td>Total assets</td>
<td>107,744,751</td>
<td>83,074,339</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>10,168,685</td>
<td>4,484,687</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>73,118,204</td>
<td>49,948,787</td>
</tr>
<tr>
<td>Stockholders’ equity</td>
<td>34,626,547</td>
<td>33,125,552</td>
</tr>
<tr>
<td>Net sales</td>
<td>21,783,966</td>
<td>18,051,355</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>13,057,275</td>
<td>8,751,220</td>
</tr>
<tr>
<td>Interest expense</td>
<td>3,654,006</td>
<td>2,393,792</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>1,051,000</td>
<td>1,917,000</td>
</tr>
<tr>
<td>Net income</td>
<td>1,581,707</td>
<td>2,942,954</td>
</tr>
</tbody>
</table>

Instructions

(a) Evaluate the company’s liquidity by calculating and analyzing working capital and the current ratio.
(b) The following discussion of the company’s liquidity was provided by the company in the Management Discussion and Analysis section of the company’s annual report. Comment on whether you agree with management’s statements, and what might be done to remedy the situation.

The lower comparative current ratio in the current year was due to $3 million of short-term borrowing then outstanding which was incurred to fund the Yellow River Marsh acquisitions last year. As a result of the extreme seasonality of its business, the company does not believe that its current ratio or its underlying stated working capital at the current, fiscal year-end is a meaningful indication of the Company’s liquidity. As of March 31 of each fiscal year, the Company has historically carried no significant amounts of inventories and by such date all of the Company’s accounts receivable from its crop sold for processing under the supply agreements have been paid in cash, with the resulting cash received from such payments used to reduce indebtedness. The Company utilizes its revolving bank credit facility, together with cash generated from operations, to fund its working capital requirements throughout its growing season.
**Case 2 Mohican Company**

Presented below is the current liabilities section and related note of Mohican Company.

<table>
<thead>
<tr>
<th>(dollars in thousands)</th>
<th>Current Year</th>
<th>Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current portion of long-term debt</td>
<td>$15,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Short-term debt</td>
<td>2,668</td>
<td>405</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>29,495</td>
<td>42,427</td>
</tr>
<tr>
<td>Accrued warranty</td>
<td>16,843</td>
<td>16,741</td>
</tr>
<tr>
<td>Accrued marketing programs</td>
<td>17,512</td>
<td>16,585</td>
</tr>
<tr>
<td>Other accrued liabilities</td>
<td>35,653</td>
<td>33,290</td>
</tr>
<tr>
<td>Accrued and deferred income taxes</td>
<td>16,206</td>
<td>17,348</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>$133,377</td>
<td>$136,796</td>
</tr>
</tbody>
</table>

**Notes to Consolidated Financial Statements**

1 (in part): Summary of Significant Accounting Policies and Related Data

**Accrued Warranty**—The company provides an accrual for future warranty costs based upon the relationship of prior years' sales to actual warranty costs.

**Instructions**

Answer the following questions.

(a) What is the difference between the cash basis and the accrual basis of accounting for warranty costs?

(b) Under what circumstance, if any, would it be appropriate for Mohican Company to recognize deferred revenue on warranty contracts?

(c) If Mohican Company recognized deferred revenue on warranty contracts, how would it recognize this revenue in subsequent periods?

---

**COMPARATIVE ANALYSIS CASE**

**The Coca-Cola Company and PepsiCo, Inc.**

**Instructions**

Go to the Take Action! CD and use information found there to answer the following questions related to The Coca-Cola Company and PepsiCo, Inc.

(a) How much working capital do each of these companies have at the end of 2001? Comment on the appropriateness of the working capital they maintain.

(b) Compute both company's (a) current cash debt coverage ratio, (b) cash debt coverage ratio, (c) current ratio, (d) acid-test ratio, (e) receivable turnover ratio and (f) inventory turnover ratio for 2001. Comment on each company's overall liquidity.

(c) In PepsiCo's financial statements, it reports in the long-term debt section “short-term borrowings, reclassified.” How can short-term borrowings be classified as long-term debt?

(d) What types of loss or gain contingencies do these two companies have at December 31, 2001?

**RESEARCH CASES**

**Case 1**

**Instructions**

Obtain the most recent edition of Accounting Trends and Techniques. Examine the disclosures included under the section regarding gain contingencies, and answer the following questions.

(a) Determine the nature of each of the disclosed gain contingencies. Are there any common themes?

(b) How many of the footnotes include dollar amounts?

(c) What are the smallest and largest amounts disclosed?
Case 2

The January 25, 2002, edition of the Wall Street Journal contained an article by Schad Terhune entitled “Georgia Pacific Says Asbestos Charge Will Result in Fourth Quarter Net Loss.” (Subscribers to Business Extra can access the article at that site.)

Instructions

Read the article and answer the following questions.

(a) Under what conditions does GAAP require firms to take charges for “anticipated claims”? Based on the information in the article, does it appear that Georgia-Pacific (GP) meets those conditions? Why or why not?

(b) Prepare the journal entry to record GP’s $221 million charge. How would it be reported in the financial statements?

(c) Estimated losses must be based on a “reasonable” estimate. How did GP arrive at its estimate? Do you think this process would result in a reasonable estimate? Why or why not?

International Reporting Case

An important difference between U.S. and international accounting standards is the accounting for liabilities related to provisions. Due in part to differences in tax laws, accounting standards in some countries and the standards issued by the International Accounting Standards Board (IASB) allow recognition of liabilities for items that would not meet the definition of a liability under U.S. GAAP. The following note disclosure for liabilities related to provisions was provided by Hoechst A.G., a leading German drug company, in its annual report. Hoechst prepares its statements in accordance with IASB standards.

<table>
<thead>
<tr>
<th>Other provisions</th>
<th>Current Year</th>
<th>Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes</td>
<td>2,350</td>
<td>2,349</td>
</tr>
<tr>
<td>Restructuring</td>
<td>709</td>
<td>1,109</td>
</tr>
<tr>
<td>Damage and product liability claims</td>
<td>795</td>
<td>553</td>
</tr>
<tr>
<td>Environmental protection</td>
<td>869</td>
<td>814</td>
</tr>
<tr>
<td>Self-insurance loss provisions</td>
<td>631</td>
<td>870</td>
</tr>
<tr>
<td>Employee-related commitments</td>
<td>1,123</td>
<td>1,243</td>
</tr>
<tr>
<td>Other</td>
<td>2,274</td>
<td>2,538</td>
</tr>
<tr>
<td>Total</td>
<td>8,751</td>
<td>9,476</td>
</tr>
<tr>
<td>Current portion thereof</td>
<td>(5,013)</td>
<td>(5,679)</td>
</tr>
</tbody>
</table>

Hoechst reported the following additional items in its annual report. Data for Merck & Co., a U.S. drug company, are provided for comparison.

<table>
<thead>
<tr>
<th></th>
<th>Hoechst (DM millions)</th>
<th>Merck ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>20,528</td>
<td>10,229</td>
</tr>
<tr>
<td>Average current liabilities</td>
<td>5,346</td>
<td>5,819</td>
</tr>
<tr>
<td>Liquid assets</td>
<td>391</td>
<td>3,356</td>
</tr>
<tr>
<td>Receivables (net)</td>
<td>14,362</td>
<td>3,374</td>
</tr>
<tr>
<td>Cash flow from operations</td>
<td>4,628</td>
<td>5,328</td>
</tr>
</tbody>
</table>

Instructions

(a) Compute the following ratios for Hoechst and Merck: current ratio, acid-test ratio, and the current cash debt coverage ratio. Compare the liquidity of these two drug companies based on these ratios.

(b) Identify items in Hoechst’s provision disclosure that likely would not be recognized as liabilities under U.S. GAAP. (Hint: Refer to Illustration 13-10 in the chapter.)

(c) Discuss how the items identified in (b) would affect the comparative analysis in part (a). What adjustments would you make in your analysis? Assume that 75% of the provisions for restructuring and self-insurance are current liabilities.
PROFESSIONAL SIMULATION

Using Your Judgment

Directions

In this simulation, you will be asked various questions concerning the accounting for current liabilities. Prepare responses to all parts.

Situation

Accounting for Current Liabilities

(a) Rodriguez sells subscriptions to several magazines for a 1-year, 2-year, or 3-year period. Cash receipts from subscribers are credited to magazine subscriptions collected in advance, and this account had a balance of $2,300,000 at December 31, 2003. Outstanding subscriptions at December 31, 2003, expire as follows:

During 2004—$600,000
During 2005— 500,000
During 2006— 800,000

(b) On January 2, 2003, Rodriguez discontinued collision, fire, and theft coverage on its delivery vehicles and became self-insured for these risks. Actual losses of $50,000 during 2003 were charged to delivery expense. The 2002 premium for the discontinued coverage amounted to $80,000, and the controller wants to set up a reserve for self-insurance by a debit to delivery expense of $30,000 and a credit to the reserve for self-insurance of $30,000.

(c) A suit for breach of contract seeking damages of $1,000,000 was filed by an author against Rodriguez on July 1, 2003. The company’s legal counsel believes that an unfavorable outcome is probable. A reasonable estimate of the court’s award to the plaintiff is in the range between $300,000 and $700,000. No amount within this range is a better estimate of potential damages than any other amount.

(d) The following items are listed as liabilities on the balance sheet on December 31, 2003.

Accounts payable $420,000
Notes payable 750,000
Bonds payable 2,250,000

The accounts payable represent obligations to suppliers that were due in January 2004. The notes payable mature on various dates during 2004. The bonds payable mature on July 1, 2004.

Explanation

Prepare a brief memorandum explaining the general rule for classifying a liability as current or non-current. Explain the conditions under which notes payable might be classified as current or non-current.

Remember to check the Take Action! CD and the book’s companion Web site to find additional resources for this chapter.