After the cash is actually paid out, you reverse the accrual entry. You debit to reduce the liability account (accrued payroll expenses) and credit cash account, to account for the payment. Doing these extra entries may seem like a lot of extra work, but if you didn’t match the payroll expenses for March with the revenues for March, your income statements wouldn’t reflect the actual state of your affairs. Without the payroll accrual, your March payroll would be understated.

Testing an Adjusted Trial Balance

In Chapter 5, you find out why and how you run a trial balance on the accounts in your general ledger. Adjustments to your books call for another trial balance, the adjusted trial balance, to ensure that your adjustments are correct and ready to be posted to the general ledger. You track all the adjusting entries on a worksheet similar to the one shown in Chapter 5. You need to use this worksheet only if you’re doing your books manually. It’s not necessary if you’re using a computerized accounting system.

The key difference in the worksheet for the adjusted trial balance is that additional columns must be added to the worksheet. Columns include

- **Column 1**: Account titles.
- **Columns 2 and 3**: Unadjusted trial balance — the trial balance before the adjustments are made — with Column 2 for debits and Column 3 for credits.
- **Columns 4 and 5**: Adjustments. All adjustments to the trial balance are listed in Column 4 for debits and Column 5 for credits.
- **Columns 6 and 7**: Adjusted trial balance. A new trial balance is calculated that includes all the adjustments. Be sure that the credits equal the debits when you total that new trial balance. If they don’t, find any errors before posting entries to the balance sheet and income statement columns.
- **Other columns**: Use data from the adjusted trial balance columns and create columns for a balance sheet and an income statement.

When you’re confident that all the accounts are in balance, post your adjustments to the general ledger so that all the balances in the general ledger include the adjusting entries. With the adjustments, the general ledger can be used to generate financial statements. After you finalize your general ledger for the year, you may want to make changes to your chart of accounts, which lists all the accounts in your accounting system. You may add or subtract accounts, depending on the activity in your business.
### Acme Trucking

#### Income Statement

**For the Period Ending: December 31st, 2014**

<table>
<thead>
<tr>
<th>Revenue</th>
<th>$400,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping fees</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>$15,000</td>
</tr>
<tr>
<td>Insurance</td>
<td>20,000</td>
</tr>
<tr>
<td>Marketing</td>
<td>50,000</td>
</tr>
<tr>
<td>Payroll</td>
<td>400,000</td>
</tr>
<tr>
<td>Office expenses</td>
<td>25,000</td>
</tr>
<tr>
<td>Rent - office building</td>
<td>30,000</td>
</tr>
<tr>
<td>Truck repair and maintenance</td>
<td>10,000</td>
</tr>
</tbody>
</table>

| Total Expenses        | $550,000 |
| Net Income            | 50,000   |

### Acme Trucking

#### Balance Sheet

**December 31st, 2014**

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$10,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>50,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>150,000</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$220,000</td>
</tr>
<tr>
<td>Long - term assets</td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>270,000</td>
</tr>
<tr>
<td>Vehicles</td>
<td>90,000</td>
</tr>
<tr>
<td><strong>Total long - term assets</strong></td>
<td>360,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>680,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and equity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current liabilities</td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>210,000</td>
</tr>
<tr>
<td>Accrued wages</td>
<td>60,000</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>270,000</td>
</tr>
<tr>
<td>Long - term liabilities</td>
<td></td>
</tr>
<tr>
<td>Bond payable</td>
<td>250,000</td>
</tr>
<tr>
<td><strong>Total long - term liabilities</strong></td>
<td>250,000</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>60,000</td>
</tr>
</tbody>
</table>

| **Total liabilities and equity** | 680,000 |

You can use income statements and balance sheets to prove your business’s credit-worthiness to prospective lenders. Find out how by visiting [www.dummies.com/extras/accountingaio](http://www.dummies.com/extras/accountingaio).
In this book...

✓ Understand accounting standards that govern financial reporting for businesses and nonprofit organizations. To ensure accuracy and transparency, you need to know and comply with these standards.

✓ Prepare an income statement to disclose a company’s bottom line — its net profit or loss. Business owners, executives, and managers, along with investors, often head first to the bottom line to assess an organization’s financial condition.

✓ Report the value of a company’s current assets on the balance sheet. Assets are everything the business uses to generate a profit. See how a business converts current assets into cash and puts it to use within the course of a year.

✓ Disclose debt in the balance sheet’s liabilities section and distinguish short-term from long-term debt. (Hint: Short-term debt must be repaid in less than a year. Long-term debt is repaid over the course of a year or longer.)

✓ Calculate the dollar amount of equity in a company and report it in the equity section of the balance sheet. Discover a business’s equity — what it would be worth if it were to sell all its assets and pay back all its debt.

✓ Use the income statement and balance sheet in tandem to draw conclusions about a company’s financial condition. Viewing these sheets side-by-side reveals more than you may imagine.
Chapter 1

Brushing Up on Accounting Standards

In This Chapter

▶ Looking back at the origins of financial accounting standards
▶ Introducing the accountant’s code of conduct (set by the AICPA)
▶ Reviewing rules set by the Financial Accounting Standards Board (FASB)
▶ Finding out about generally accepted accounting principles (GAAP)

Although accountants often ply their trade as freelancers, accounting isn’t a free-for-all. Accountants are expected to operate according to a professional code of conduct and practice generally accepted accounting principles (GAAP) — best practices for accounting in the United States.

This chapter begins with a whirlwind tour through the history of accounting that highlights the origins of accounting standards. Following this brief historical account is an overview of the financial accounting code of professional conduct, which is set by the American Institute of Certified Public Accountants (AICPA). These standards give you a roadmap to follow when you’re trying to figure out how to interact with your clients or employer. The standards also explain how to handle various accounting transactions taking place during day-to-day business operations.

Finally, you meet the financial accounting standard-setting bodies. You find out why publicly owned companies (those whose stock shares are traded on a public stock exchange) abide by a different set of standards than privately owned companies.
Exploring the Origins of Accounting Standards

Although the history of accounting dates back to prehistoric times, the birth of accounting standards is fairly recent. Here’s a brief timeline that traces the history of accounting up to the present:

- Human ancestors probably traded whatever they had or produced to acquire food and other basic necessities. These trades required some equitable method of measuring the relative value of goods, thus originating the concept of keeping track of — or accounting for — items.

- Later in history, formal accounting records were kept to make sure people paid the required amount of taxes.

- The Industrial Revolution in the 18th and 19th centuries ushered in the mass production of manufactured goods. Mass production required a more sophisticated approach to recording the movement of goods, services, and money. As a result, the accounting field had to operate with a higher level of professionalism and expertise. Many owners needed more people to properly manage the business. Mass production resulted in the separation of ownership from management.

- Accountants plied their trade in a mostly unmonitored and unregulated environment until the stock market crash of 1929. After this horrific event, the American Institute of Accountants, which is now the American Institute of Certified Public Accountants, partnered with the New York Stock Exchange to agree upon five principles of accounting.

- Fast-forwarding to the present, these five principles have expanded into hundreds of principles covering every accounting topic imaginable, from how to prepare financial statements to how to keep the books for different types of businesses.

If you’re just getting started in accounting, you may be wondering why you have to record financial events in such a nit-picky fashion. You may also wonder who the head nit-pickers are and from whence they get their authority. Well, read on! This chapter answers both questions and gives you a good foundation for understanding why accountants perform certain tasks the way they do.

Tip

Sometimes, accountants handle transactions in a certain way simply because that’s the way it’s done. Instead of trying to understand the logic or lack thereof, develop a general understanding of the regulatory system, as explained in this chapter and then go with the flow. As you spend more time working in accounting, the standards will make more sense to you.
Recognizing the Role of the American Institute of Certified Public Accountants (AICPA)

The American Institute of Certified Public Accountants (AICPA) is the national professional organization for all certified public accountants (CPAs). Through its senior technical committee, called the Auditing Standards Board (ASB), the AICPA is responsible for establishing auditing and attestation standards for companies in the United States. To understand what that entails, you need to know the meaning of three key terms:

- **Auditing**: The purpose of auditing is to gather evidence about a company’s financial statements and to use that evidence to determine whether the statements are free of *material* (significant) misstatements. The company creates the financial statements — the auditor is an independent entity who issues an opinion on the company’s financials.

- **Attestation**: Accountants create other reports on financial statements that don’t provide an opinion. Those reports are considered *attestation* services. For example, a company may hire you to calculate the rate of return on the company’s investments (see Book VIII, Chapter 3), making sure your figures match the company’s report on the same topic.

- **Nonpublic**: *Nonpublic* companies are privately owned. Their stock isn’t traded on any open-to-the-public stock exchange. For example, if you start a corporation, you aren’t required to sell any of your shares of stock unless you want to.

**Tying together regulators for audits of publicly traded companies**

Shares of publicly traded companies are available for purchase on stock exchanges, such as the New York Stock Exchange, or over-the-counter markets, such as the NASDAQ. To issue securities to the public, companies must register their securities with the Securities and Exchange Commission (SEC).

The Public Company Accounting Oversight Board (PCAOB) oversees audits of publicly traded companies. The SEC has oversight over the PCAOB. The SEC approves the PCAOB’s rules and standards and its budget.
The AICPA also enforces a code of professional conduct for its members, which governs how accountants perform their duties. Those duties include performing audits and attestation services. The Auditing Standards Board (ASB) sets audit and attestation standards. This organization is a senior committee within the AICPA.

When the company involved is publicly traded, the PCAOB and the SEC have oversight. As a result, auditing standards created by the ASB are adopted by the PCAOB and approved by the SEC. If you look through the standards listed on the PCAOB website, you’ll see a list of auditing standards from the ASB.

Establishing and adhering to accounting standards ensures that financial reports have accurate information so investors and others can make well-informed decisions. As an accountant, you’re responsible for serving at least two masters: the organization that hires you to produce the financial reports and investors who use that information to make investment decisions. Accounting standards help to ensure that everyone is making decisions by using timely and accurate financial information.

You don’t have to be a CPA or a member of the AICPA to perform your job ethically, or to get work as an accountant. However, membership in the AICPA has many benefits, including automatic accounting standards updates, research tools, and educational resources.

**ASB audit and attestation standards**

The ASB is a senior technical committee of the AICPA. The ASB issues the standards and procedures that accountants must follow when conducting attestation and audit services for nonpublic companies. As explained in the prior section, the ASB is also involved with accounting work on publicly traded companies.

The ASB also sets quality control standards to use when conducting peer reviews, which occur when one CPA firm evaluates the operations of another CPA firm. Most ASB members work for public accounting firms (such as KPMG LLP), are university professors or governmentalaccountants, or practice in some other accounting field.

Curious about these mysterious ASB standards? They’re called *Statements on Auditing Standards* (SAS). Here are just a couple of the standards, so you have some idea of what they cover:

- **SAS No. 1 Section 410** establishes that the auditor must state whether the financial statements are presented in accordance with GAAP.

- **SAS No. 85** defines the responsibilities that management of a company has for the preparation of the financial statements. Management also must provide written representations about financial statement preparation to the auditors.
More information about the ASB standards and procedures is available free of charge on the AICPA website at www.aicpa.org. From the home page, select Research and then Standards. You can access all sorts of good financial accounting info on the topics of audit, attest, compilation, and review standards.

A compilation occurs when an accountant prepares financial statements for a company by using only data received from company management. A review occurs when the accountant gives limited assurance that no material modifications need to be made to financial statements prepared by company management.

**AICPA Code of Professional Conduct**

The AICPA's Code of Professional Conduct contains six principles of professional conduct by which its members must abide: responsibilities, serving the public interest, integrity, objectivity and independence, taking due care, and the scope and nature of services.

Following are brief definitions of the six principles:

- **Responsibilities:** As an accountant, you hold yourself to high moral and ethical standards in order to maintain the public’s confidence in your financial reporting. For example, accountants have the responsibility to participate in self-governance by performing peer reviews of other CPA/financial accounting firms’ work to check for accuracy and consistency among the profession.

- **Serving the public interest:** An accountant’s public interest is the company for whom she is preparing the financial statements, as well as the users of the financial statements (such as people thinking about purchasing shares of the company stock).

  The public interest also includes banks and other businesses that are considering granting credit to the company, governmental agencies such as the Internal Revenue Service (which measures the company’s compliance with the tax code), current and prospective investors, and other members of the business and financial community who rely on the objectivity and integrity of CPAs.

- **Integrity:** Having this characteristic means you’re honest when dealing with others. In the world of accounting, integrity means that you serve the company for whom you’re preparing the financial statements to the best of your ability. Keep in mind that this may not be the same as completely agreeing with the way the company wants its financial statements prepared. You can’t be worried that business management is going to be mad at you or fire you if you disagree with them.
Objectivity and independence: When you’re objective, you’re neutral and unbiased in all decision-making processes. You base your opinions only on facts and not on any preconceived notions you may have. You interpret rules and policies, such as GAAP, in a truthful and sincere manner — staying true to both the form and spirit of the particular principle or regulatory issue.

Accountants who provide auditing and other attestation services must be independent in both fact and appearance. Being independent means you have no special relationship to or financial interest with the company that would cause you to disregard evidence and facts when evaluating the company. For example, preparing the financial statements for a business owned by a close relative can justifiably cause those reading your report to doubt your objectivity.

Taking due care: In a nutshell, this principle means you have the education and experience to perform the work at hand. You must be both competent and diligent. In addition, due care means you plan and supervise adequately any professional activity for which you’re responsible.

Scope and nature of services: All the principles in this list lead up to this final one. Accountants consider all the preceding principles when determining whether they can provide specific services in individual circumstances.

For more about these six principles, visit www.aicpa.org/About/code/sec50.htm.

If being a member of the AICPA isn’t mandatory in order to get a job as an accountant, you may wonder why its code of conduct is such a big deal. Well, if you want to be an accountant practicing as a CPA, you must be licensed by your state, which recognizes the authority of the AICPA. State and federal courts consistently hold that all practicing CPAs, regardless of membership in the AICPA, must follow the professional ethical standards contained in the AICPA’s Code of Professional Conduct.

Checking Out the U.S. Securities and Exchange Commission (SEC)

In addition to the AICPA, other organizations give accountants official guidance on how to prepare financial statements. Public and nonpublic corporations have different agencies that monitor their activities. Perhaps the best known of the regulating agencies is the U.S. Securities and Exchange Commission (SEC). The earlier section “Tying together regulators for audits of publicly traded companies” tells you that the SEC has oversight over auditors of public companies.
In response to the stock market crash of 1929 and the ensuing Great Depression, Congress passed the Securities Exchange Act of 1934, which led to the formation of the SEC. The SEC’s mission is to make sure publicly traded companies tell the truth about their businesses and treat investors in a fair fashion by putting the needs of the investor before the needs of the company.

The SEC is run by five commissioners who are appointed to five-year terms by the President of the United States. Their terms are staggered, and no more than three commissioners can be from the same political party at the same time. These commissioners ride herd over the SEC’s power to license and regulate stock exchanges, the companies whose securities are traded on the exchanges, and the brokers and dealers who conduct the trading and sell securities to investors.

The enforcement authority given by Congress allows the SEC to bring civil enforcement actions against individuals or companies alleged to have committed accounting fraud, provided false information, or engaged in insider trading or other violations of the securities law. The SEC also works with criminal law enforcement agencies to prosecute individuals and companies alike for offenses that include criminal violations.

As an accountant, your exposure to the regulatory authority of the SEC will be limited unless you work for a company whose shares of stock are publicly traded or you work for a CPA firm conducting financial statement audits for publicly traded companies.

**Getting to Know the Financial Accounting Standards Board (FASB)**

The Financial Accounting Foundation (FAF) was established as a nonprofit corporation in June 1972. FAF was created in response to congressional criticism of the standard-setting work being done by the American Institute of Certified Public Accountants (AICPA).

The FAF in turn established the Financial Accounting Standards Board (FASB), which is the private sector body establishing GAAP for all nongovernmental entities. FAF also established the Governmental Accounting Standards Board (GASB). Governmental entities follow GASB procedures.

The FASB has five full-time members, who are selected by FAF. All are required to have knowledge of accounting, finance, and business. For more info about the FASB, accounting standards, and FAF, check out the FASB website at www.fasb.org.
In 1984, the FASB formed the Emerging Issues Task Force (EITF) to help identify accounting issues in need of standardization. The EITF is composed of accounting professionals who meet regularly to mull over current economic, business, and industrial developments.

**Understanding generally accepted accounting principles (GAAP)**

Generally accepted accounting principles (GAAP) defines the acceptable practices in the preparation of financial statements in the United States. Specifically, GAAP tells accountants exactly how financial data must be presented on the income statement, balance sheet, and statement of cash flows.

For example, GAAP states that assets, liabilities, and equity must be posted on the balance sheet and not on the income statement. GAAP is also pretty darn picky as to how these accounts are arranged on the balance sheet (you find out more about the balance sheet starting in Chapter 3). In addition, GAAP gives specific rules for separating operating revenue (which is related to the business purpose) from non-operating revenue (non-business-related revenue, such as profit from selling a company asset), as explained in Chapter 3. Some of this detail is also explained in the footnotes of the financial statements. Check out Book V, Chapter 4 for more on footnotes.

Like most rules, the rule that all businesses must follow GAAP has exceptions. Some businesses, including airlines, franchisors, and healthcare entities, can deviate from GAAP. However, these companies are required to justify their deviation from GAAP in their financial statements.

Is GAAP the same for public and nonpublic companies? For now, yes. The SEC has the statutory authority to set accounting standards for publicly held companies, but historically it has relied on private sector bodies to set those standards.

As explained earlier in this chapter the SEC oversees the PCAOB in regard to audits. However, the auditing standards listed by the PCAOB are nearly all written by the AICPA’s Auditing entity. The AICPA is the private sector body setting standards — and the SEC relies on those standards.

But hold onto your hats! How accountants view GAAP changed with the adoption of FASB Accounting Standards Codification. FASB Accounting Standards Codification (ASC) became the single source of authoritative GAAP in the United States. Before you get in a dither, keep in mind that the ASC doesn’t change GAAP; the FASB didn’t rewrite all the accounting rules. Instead, the ASC organizes GAAP in a more user-friendly fashion and (mercifully) uses a consistent format across the board for all GAAP topics.
Looking online for FASB standards

The FASB allows free, limited access to the Accounting Standards Codification. To check it out, visit asc.fasb.org. After you complete the login procedure, you can browse the topics to see how to apply GAAP for accounting topics such as revenue, assets, liabilities and equity, and presentation. Each topic allows you to drill down to more detailed information. For example, if you select Equity, you can further select Treasury Stock to find out how to account for treasury stock under GAAP.

For better search functions that allow for a fully functional view of the codification, you can upgrade to ASC’s professional version for an annual subscription cost. If you’re still in school, ask your accounting instructor whether your school has academic access.

Pick a standard: Domestic or international

For many years, the size of a company — and whether it was public or private — wasn’t considered germane for the accounting and financial reporting standards that should be used by a business. The business world in the United States was under the dominion of one set of accounting and financial reporting standards, GAAP, which applied to all businesses. GAAP was considered the gold standard and good for the rest of the world as well.

In recent years, the movement toward adopting international standards gained momentum. Companies using U.S. GAAP may also be affected by international financial reporting standards (IFRS). If you do business outside the U.S., ask your accounting firm whether any IFRS rules affect your business.

Serious efforts have arisen to simplify accounting and financial reporting for private businesses. The Private Company Council (PCC), established by FAF, is tasked with making recommendations to the FASB for modifying and making exceptions to GAAP to alleviate the burden on private companies in complying with complex GAAP standards.

A movement is underway within the AICPA to allow small- and medium-sized owner-managed entities to deviate even further from GAAP under a frame of reference called Other Comprehensive Basis of Accounting. Where this movement is heading is anyone’s guess, but change seems inevitable. Stay tuned.
Chapter 2

Preparing an Income Statement and Considering Profit

In This Chapter
▶ Getting a grip on what profit is and isn’t
▶ Designing the income statement and deciding what to disclose
▶ Recognizing how profit affects a business and its financial condition
▶ Handling unusual gains and losses in the income statement
▶ Correcting misconceptions about profit

An income statement shows in black and white how much money a business earned and spent over any given period along with a bottom-line figure — net profit or loss. As an accountant, you create income statements for your company and other users, including investors. Business owners and managers use income statements to determine the overall financial condition of their business and to make informed decisions. Investors and lenders may also refer to a company’s income statements when deciding whether to buy or sell shares in the company or loan the company money.

This chapter begins with the components that make up the income statement. It then moves on to disclosures and income statement presentation and leads you through the process of deciding how much information a financial statement reader needs. This chapter also explains extraordinary gains and losses. Finally, you find out about common misconceptions surrounding the calculation and reporting of profit.

Understanding the Nature of Profit

Profit doesn’t have just one universal meaning or definition. Generally, you can separate profit into three categories:
Selling an asset for a gain: You profit when you buy something and sell it for a gain. Real estate and investment companies are in the business of buying assets that appreciate in value.

Selling a product: Manufacturers make a product and sell it for a profit. Retailers buy products as inventory and make a profit when the inventory is sold. Both types of companies sell a product for more than their total costs.

Providing a service: Plumbers, carpenters, and electricians provide a service for a fee. If the total fees generated are more than the total costs, the business earns a profit.

For more about the various ways a business generates profits and reports those profits, keep reading.

Throughout this book, asset is defined as a resource you use to generate profit. Businesses need to raise capital to invest in assets. Chapter 4 explains how companies raise money by using debt. If you’re wondering about selling stock (equity) in your business, check out Chapter 5.

Profit is a calculated number equal to the difference between revenue and expenses. Revenue is on one side of the scale, expenses are on the other side, and profit is the measure of how much the revenue side outweighs the expense side. To locate profit, you must trace the effects of revenue and expenses.

Suppose a business collects cash for all its sales and pays cash for all its expenses during the year. You need to look to only one place — its cash account — to find the business’s profit. However, a business may make credit sales and not collect cash from all its sales during the year. Furthermore, the typical business doesn’t pay all its expenses during the year and pays some expenses before the start of the year. In short, sales and expenses affect several assets, including cash and liabilities.

Choosing the Income Statement Format

The bottom-line profit (or loss) in an income statement draws the most attention, but the income statement is really about revenue and expenses. A business can’t make profit without revenue and expenses.

An income statement reports three basic items of information, in the following order:

- Revenue
- Expenses
- Profit or loss
Income statements are reported in two basic formats (although in actual practice, you see many variations of them):

**Multi-step format:** This format typically presents four measures of profit — gross margin, operating earnings, earnings before income tax, and net income (see Figure 2-1 for an example). One revenue line and four profit lines are presented. One purpose of this format is to disclose gross margin, which is a key determinant in the bottom-line profit performance of businesses that sell products. *Gross margin* is the revenue less cost of goods sold. Any slippage in gross margin as a percent of sales revenue is viewed with alarm.

**Single-step format:** In this format, all expenses are added and their total is deducted from revenue (see Figure 2-2 for an example). Unlike the multi-step format, the single-step format presents only one profit line, which is bottom-line net income.

<table>
<thead>
<tr>
<th>Figure 2-1: Example of multi-step income statement format.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue $26,000,000</td>
</tr>
<tr>
<td>Cost of Goods Sold Expense 14,300,000</td>
</tr>
<tr>
<td>Gross Margin $11,700,000</td>
</tr>
<tr>
<td>Selling and General Expenses 8,700,000</td>
</tr>
<tr>
<td>Operating Earnings $3,000,000</td>
</tr>
<tr>
<td>Interest Expense 400,000</td>
</tr>
<tr>
<td>Earnings Before Income Tax $2,600,000</td>
</tr>
<tr>
<td>Income Tax Expense 910,000</td>
</tr>
<tr>
<td>Net Income $1,690,000</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Figure 2-2: Example of single-step income statement format.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue $26,000,000</td>
</tr>
<tr>
<td>Cost of Goods Sold Expense $14,300,000</td>
</tr>
<tr>
<td>Selling and General Expenses 8,700,000</td>
</tr>
<tr>
<td>Interest Expense 400,000</td>
</tr>
<tr>
<td>Income Tax Expense 910,000 $24,310,000</td>
</tr>
<tr>
<td>Net Income $1,690,000</td>
</tr>
</tbody>
</table>

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The income statement examples shown in Figures 2-1 and 2-2 are simplified versions compared to actual income statements in external financial reports.
Deciding What to Disclose in the Income Statement

After a business decides on the format for reporting its income statement (multi-step or single-step, as explained in the preceding section), the next decision concerns how much information to disclose about its expenses.

Considering expense disclosure

Accountants work with different requirements for expense disclosure, depending on whether the company is public or private.

Public companies are subject to financial disclosure rules issued by the United States Securities and Exchange Commission (SEC). A publicly owned business has no choice but to abide by these rules. Otherwise, trading in its stock shares could be suspended by the SEC — the kiss of death for a public company.

Income statement disclosure standards for nonpublic businesses (that is, those not subject to the SEC’s jurisdiction) are less specific. Generally accepted accounting principles (GAAP) provide broad guidance on how much information should be disclosed about expenses in the income statement. (For more about GAAP and other accounting standards, see Chapter 1.)

Generally speaking, businesses that sell products report their cost of goods sold expenses, and almost all businesses report their interest and income tax expenses. However, generalizing about the disclosure of other expenses is much more difficult.

Figures 2-1 and 2-2 disclose only one large operating expense category: selling and general expenses. Some businesses disclose only this expense because they’re reluctant to reveal any more detail about their operating expenses. Other businesses report five or ten operating expenses in their income statements.

Presenting the right amount of expense information

When deciding how much expense disclosure to include in income statements, consider the following three factors:
Confidentiality: Many businesses don’t want to reveal the compensation of the officers of the business, for example. They argue that this information is private and personal.

Materiality: Most businesses don’t see any point in reporting expense information that’s relatively insignificant and would only clutter the income statement.

Practicality: Businesses limit the income statement contents to what fits on one page. A business can put additional detail about expenses in the footnotes to its financial statements, but many argue that shareowners and lenders have only so much time to read financial statements and putting too much information in their financial reports is counterproductive.

If you’re a major outside shareowner in a business, you may request information about four expenses: repairs and maintenance, advertising, pension and profit-sharing plans, and employee benefit plans. The information could be reported in the income statement itself or in the footnotes to the financial statements. Why these four? Repairs and maintenance expense can be manipulated by management to push profit up or down for the year. Advertising is a discretionary expense that you may want to compare to sales revenue. Pension and profit-sharing plans and employee benefit plans can be large encumbrances on a business.

Examining How Sales and Expenses Change Assets and Liabilities

In a financial report, the income statement may seem disconnected from the balance sheet and the statement of cash flows. Nothing is further from the truth. The three financial statements are interdependent and interconnected. For example, if sales revenue or one of the expenses had been just $10 different from the amount reported in the income statement, a $10 difference would appear somewhere in the balance sheet and statement of cash flows. The following sections explain how income statement activity is connected to the balance sheet and how the two together reflect the financial condition of a business.

Sizing up a business’s financial condition

Financial condition is the status of the firm’s assets, liabilities, and equity at a certain point in time. For this book, financial condition refers to the amounts presented in the balance sheet. This section explains how income statement activity is connected to the balance sheet.
As explained earlier in this chapter, in the section “Choosing the Income Statement Format,” an income statement reports revenue, expenses, and profit (or loss). But an income statement doesn’t report how revenue and expenses change the financial condition of the business. For example, in Figure 2-1, $26,000,000 revenue is reported in the annual income statement of a business. The business also reports $24,310,000 total expenses for the year (the sum of the four expense line items). How did the sales revenue and expenses change its financial condition? The income statement doesn’t answer that question. The balance sheet does, as explained in Chapters 3 to 5.

Business managers rely on their accountants to explain how sales and expenses change the assets and liabilities of their businesses. Business lenders and shareowners also need to understand these effects in order to assess the health of a business.

**Noting how accounting transactions affect the income statement and balance sheet**

Typical accounting transactions — accounting entries that many businesses make every month — affect income statement activity that relates to balance sheet accounts.

Suppose you’re the chief accountant of the business whose income statement is presented in Figure 2-1. The president asks you to explain the financial effects of revenue and expenses reported in its latest annual income statement at the next meeting of its board of directors.

To help organize your thoughts for the presentation, you decide to prepare summary revenue and expense journal entries for the year. Based on your analysis, you prepare the following summary journal entries for revenue and expenses reported in the income statement:

**Revenue and receivables**

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$25,000,000</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$1,000,000</td>
<td>$26,000,000</td>
</tr>
<tr>
<td>Sales revenue</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The business makes credit sales. When recording a credit sale, the asset account *accounts receivable* is debited (increased). When the customer pays, accounts receivable is credited (a decrease). The business initially collected $25,000,000 in cash payments from customers. The accounts receivable balance for the period increased by $1,000,000.
Cost of goods sold expense and inventory

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of goods sold expense</td>
<td>$14,300,000</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>$2,000,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>$14,500,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td></td>
<td>$1,800,000</td>
</tr>
</tbody>
</table>

The business purchases $16,300,000 of product during the year. Of that total, $14,300,000 represents cost of goods sold. The remaining $2,000,000 in purchases remained in inventory. The company didn’t pay cash for all its $16,300,000 in purchases. Its accounts payable for inventory purchases increased $1,800,000. Therefore, cash outlay for purchases during the year was $14,500,000 ($16,300,000 – $1,800,000).

Selling and general expenses and payables

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling and general expenses</td>
<td>$8,700,000</td>
<td></td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>$300,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>$6,900,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td></td>
<td>$850,000</td>
</tr>
<tr>
<td>Accrued expenses payable</td>
<td></td>
<td>$725,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>$525,000</td>
</tr>
</tbody>
</table>

Selling and general expenses is a somewhat complicated entry because operating expenses involve several balance sheet accounts. The business added $300,000 to its prepaid expenses balance during the year. It recorded $525,000 depreciation expense for the year. In this instance, depreciation expense is included in the selling and general expenses debit amount reported in its income statement. That same amount is credited to accumulated depreciation, as shown in the previous table.

Not all expenses were paid for by the end of the year; unpaid expenses caused an $850,000 increase in accounts payable and a $725,000 increase in accrued expenses payable.

Interest expense and payables

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense</td>
<td>$400,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>$350,000</td>
</tr>
<tr>
<td>Accrued expenses payable</td>
<td></td>
<td>$50,000</td>
</tr>
</tbody>
</table>
The business paid $350,000 interest during the year. The amount of unpaid interest at year-end increased $50,000. A general liability account for accrued expenses is shown in this entry. (The business may credit a more specific account, such as accrued interest payable.)

**Income tax expense and payables**

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income tax expense</td>
<td>$910,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>$830,000</td>
</tr>
<tr>
<td>Accrued expenses payable</td>
<td></td>
<td>$80,000</td>
</tr>
</tbody>
</table>

At the end of last year, the business didn’t owe any income tax. During the year, it made $830,000 installment payments toward its estimated income tax. Based on the final determination of its income tax for the year, the business still owes $80,000, which it will pay when it files its tax return. The general liability account for accrued expenses is shown in this entry. (The business may credit a more specific account, such as income tax payable.)

**Considering the Diverse Financial Effects of Making a Profit**

Making sales and incurring expenses cause a multitude of effects on the assets and liabilities of a business. In other words, making profit causes many changes in the financial condition of a business. It would be convenient if a $1 profit caused a $1 cash increase and nothing more, but the effects of making profit are much broader and reach throughout the balance sheet.

This section introduces a tool, called a T-account, to explain how profit affects the entire balance sheet.

**Introducing T-accounts**

The journal entries in the preceding section summarize the effects of sales and expenses on a business’s assets and liabilities. Figure 2-3 shows these changes in T-accounts for the assets and liabilities. T-accounts aren’t the official, formal accounts of a business. Rather, T-accounts are like scratch paper that accountants use to analyze and “think out” the effects of transactions. A T-account has two columns: debits are always put in the left column and credits in the right column. The rules for debits and credits are explained in Book II, Chapter 1.
Figure 2-3 uses seven asset and liability accounts to illustrate the recording of revenue and expenses for the year. Even a relatively small business may have 100 or more asset and liability accounts in its chart of accounts (see Book I, Chapter 2). However, the seven asset and liability accounts in the example are sufficient to illustrate the effects of revenue and expenses on the financial condition of a business.

**Combining activity into one journal entry**

In order to help you understand what profit consists of, the activity in Figure 2-3 is combined into one comprehensive journal entry. In this entry, the $1,690,000 profit for the year is shown as an increase in the retained earnings owners’ equity account.

**Comprehensive Journal Entry that Summarizes Changes in Assets and Liabilities from Profit-Making Activities during the Year**

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$2,420,000</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>$2,000,000</td>
<td></td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>$300,000</td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td></td>
<td>$2,650,000</td>
</tr>
<tr>
<td>Accrued expenses payable</td>
<td></td>
<td>$855,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>$525,000</td>
</tr>
<tr>
<td>Owners’ equity — retained earnings</td>
<td></td>
<td>$1,690,000</td>
</tr>
</tbody>
</table>
The totals for each balance sheet account represent the totals in the T-accounts in Figure 2-3. Simply add the amounts you see in each T-account. The cash total, however, is a little more complicated. For cash, take the $25,000,000 debit and subtract the sum of the credit entries ($22,580,000) to arrive at the $2,420,000 balance in cash.

Profit improves the net worth of a business. Net worth, another name for the owners’ equity, equals total assets minus total liabilities. In this example, the business makes a profit, and the effect on the balance sheet is that assets increase more than liabilities, which is the typical profit effect. To figure out how to calculate retained earnings, head over to Chapter 5.

**Explaining additional transactions related to profit**

The profit-making activities of a business include more than just recording revenue and expenses. Additional transactions are needed, which take place before or after revenue and expense are recorded. You see some common transactions in the “Noting how accounting transactions affect the income statement and balance sheet” section, earlier in this chapter. This section offers a more generic explanation of before-and-after transactions. These explanations apply to dozens of accounting entries in your business.

- Collecting cash from customers for credit sales made to them. The cash is collected after recording the sales revenue.
- Purchasing (or manufacturing) products that are put in inventory and held there until the products are sold sometime later. When a sale occurs, the cost of products sold is charged to expense in order to match costs with the revenue from the sale.
- Paying for products bought on credit and for other items that aren’t charged to expense until sometime after the purchase. These purchased items are considered assets until they’re used (expensed).
- Paying for expenses that have been recorded sometime earlier.
- Making payments to the government for income tax expense that has already been recorded.

Only revenue and expenses are reported in the income statement, but the other transactions change assets and liabilities, and they definitely affect cash flow. See Book V, Chapter 2 for more about cash flow.
Reporting Extraordinary Gains and Losses

When accountants refer to *extraordinary* transactions, they mean activity that’s not related to your day-to-day business. Assume you manufacture blue jeans. You incur costs to buy denim material. You pay labor costs and collect cash from sales. If you happened to sell your headquarters building for a gain, that transaction would be out of the ordinary (extraordinary). After all, you’re in the business of making blue jeans — not selling real estate. Any profit from the sale of the building would be an extraordinary gain.

Segregating the income statement

Extraordinary gains and losses require an income statement that’s split into two distinct sections.

Many businesses report unusual, *extraordinary gains and losses* in addition to their usual revenue, income, and expenses. Remember that recording a gain increases an asset or decreases a liability. And recording a loss decreases an asset or increases a liability. When a business records an extraordinary gain or loss during the period, its income statement is divided into two sections:

- The first section presents the *ordinary, continuing sales, income, and expense operations* of the business for the year.
- The second section presents any *unusual, extraordinary, and nonrecurring gains and losses* that the business recorded in the year.

Considering business disruptions

The road to profit is anything but smooth and straight. Every business experiences an occasional *discontinuity* — a serious disruption that comes out of the blue, doesn’t happen regularly or often, and can dramatically affect its bottom-line profit. In other words, a discontinuity is something that disrupts operations or the regular flow of profit-making activities.

Here are some examples of discontinuities:

- **Downsizing and restructuring the business**: Layoffs may require severance pay or trigger early retirement costs; major segments of the business may be disposed of, causing large losses.
✔ **Abandoning product lines:** When leadership decides to discontinue selling a line of products, the business loses at least some of the money it paid to obtain or manufacture the products, because it either sells the products below cost or writes off products it can’t sell as a loss.

✔ **Settling lawsuits and other legal actions:** Paying damages or fines or receiving awards from favorable rulings are nonrecurring extraordinary losses or gains.

✔ **Writing down (also called writing off) damaged and impaired assets:** If products become damaged and unsellable, or fixed assets need to be replaced unexpectedly, you need to remove these items from the assets accounts. Even when certain assets are in good physical condition, if they lose their ability to generate future sales or other benefits to the business, accounting rules say that the assets have to be taken off the books or at least written down to lower book values (see Book III, Chapter 1).

✔ **Changing accounting methods:** A business may decide to use a different method for recording revenue and expenses than it did in the past, in some cases because the accounting rules (set by the authoritative accounting governing bodies — see Chapter 1) have changed. Often, the new method requires a business to record a one-time cumulative effect caused by the switch in accounting method. These special items can be huge.

✔ **Correcting errors from previous financial reports:** If a business discovers that a past financial report had an accounting error, it must make a correction entry, recording a loss or gain that had nothing to do with the performance of the business in the current year.

According to financial reporting standards, a business must make these one-time losses and gains very visible in its income statement. So in addition to the main part of the income statement that reports normal profit activities, a business with unusual, extraordinary losses or gains must add a second layer to the income statement to disclose these out-of-the-ordinary happenings.

If a business has no unusual gains or losses in the year, its income statement ends with one bottom line, usually called *net income*, as shown in Figures 2-1 and 2-2. When an income statement includes a second layer, the net income line becomes *net income from continuing operations before unusual gains and losses*. Below this line, each significant, nonrecurring gain or loss appears.

Suppose a business suffered a relatively minor loss from ending a product line and a very large loss from a major lawsuit whose final verdict went against the business. The second layer of the business’s income statement would look something like the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income from continuing operations</td>
<td>$267,000</td>
</tr>
<tr>
<td>Discontinued operations, net of income taxes</td>
<td>($20,000)</td>
</tr>
<tr>
<td>Earnings before effect of legal verdict</td>
<td>$247,000</td>
</tr>
<tr>
<td>Loss due to legal verdict, net of income taxes</td>
<td>($456,000)</td>
</tr>
<tr>
<td>Net earnings (loss)</td>
<td>($209,000)</td>
</tr>
</tbody>
</table>
The gains and losses reported in the second layer of an external income statement are generally complex and may be quite difficult to spot. When looking for extraordinary gains or losses, answer the following questions:

- Why wasn’t the loss or gain recorded on a more piecemeal and gradual year-by-year basis instead of as a one-time charge?
- Was the loss or gain really a surprising and sudden event that couldn’t have been anticipated?
- Is such a loss or gain likely to occur again in the future?

**Questioning whether activity is truly unusual**

Every company that stays in business for more than a couple of years experiences a discontinuity of one sort or another. But beware of a business that takes advantage of discontinuities in the following ways:

- **Discontinuities become continuities**: A successful business makes consistent profits from continuing operations. It’s the day-to-day business that drives profit. Beware of a business that makes an extraordinary loss or gain a regular feature on its income statement. Suppose that every year or so, the business loses a major lawsuit, abandons product lines, or restructures itself. It reports “nonrecurring” gains or losses on a recurring basis. You should question whether the company’s core business could be profitable without all the unusual transactions.

- **A discontinuity is used as an opportunity to record all sorts of write-downs and losses**: When recording an unusual loss (such as the cost of settling a lawsuit), the business opts to record other losses at the same time and writes off everything but the kitchen sink (and sometimes that, too). According to this big-bath strategy, you may as well take a big bath now in order to avoid taking little showers in the future. Consider whether all the write-offs truly relate to the event that occurred or whether the company is taking advantage of the situation to expense unrelated items.

A business may just have bad (or good) luck regarding extraordinary events that its managers couldn’t have predicted. If a business is facing a major, unavoidable expense this year, cleaning out all its expenses in the same year so it can start fresh next year can be a clever, legitimate accounting tactic. But where do you draw the line between these accounting manipulations and fraud? Staying alert to these potential problems is an important first step. The subject of fraud is covered in Book IX, Chapter 7.
Correcting Common Misconceptions about Profit

To wrap up this chapter, consider some misconceptions about profit. It’s critical that an accountant understand these issues. The first section covers misconceptions generally. The second discussion focuses on your firm’s profit compared with profit standards in your industry. Finally, you consider an analysis of credit sales and bad debt.

The purpose of this section is to remind business owners to stop and consider what their level of profit really means to the business.

Clearing up profit misconceptions

Many accountants find themselves clearing up these misconceptions for other people in the organization:

- **Profit does not increase cash by the same amount.** Book III, Chapter 6 explains the difference between cash- and accrual-basis accounting. Most companies use the accrual method, which matches revenue earned with expenses incurred to earn the revenue. Using this method, you may post revenue and record expenses without cash moving in or out of your business. As a result, a $20,000 profit doesn’t mean your cash account is immediately $20,000 higher.

- **Some revenue and expense entries are based on estimates.** Another misconception about profit is that the numbers reported in the income statement are precise. Many journal entries are based on estimates, which require using judgment. Recognizing bad debt expense, for example, often requires an estimate of the percentage of customers who won’t pay. The expense may be adjusted later, when the actual amount of bad debt is known. (For more on bad debt expense, see “Waving the red flag when you see revenue and credit sales increase,” later in this chapter.) Profit calculations are partially based on estimates.

- **A high level of profit doesn’t mean that the balance sheet is necessarily attractive to investors.** Consider how a company acquires and uses assets to generate a profit. Assume a company borrows heavily to meet high customer demand. The plan works, and the firm generates a high level of profit. If sales levels go down, profit may decline. The business will have less in revenue to make the larger debt payments. Ramping up spending to meet high demand may become a drag on profits if sales decline. An investor may shy away from investing in a company with a high debt load and declining sales.
Comparing to industry standards

When considering your level of profit, comparing your profit to that of other companies in your industry may be useful. Here are some points to mull over. The percentages used are profit margin percentages (net income divided by sales):

- **Reasonableness:** Your shop sells sporting goods to hikers, mountain bike riders, and other outdoor sports participants. You earn what you believe to be an unusually high level of profit of 25 percent for the year. After some research, you find that similar shops had profits in the same range. Turns out that great weather increased demand for outdoor sporting goods. You conclude that the profit — which is higher than you expected — is reasonable, based on the industry average.

- **Sustainable level of profit:** Assume your grocery store has a 10 percent profit for the year. Stores in your industry typically have an annual profit of 2 percent. You do research to determine whether the 10 percent profit is sustainable. After all, your profits should be in line with the industry’s profit levels over time. You find that your high profit level was due to more demand, due to a nearby grocery store closing. You decide to plan future sales and costs based on the industry’s 2 percent profit.

- **Adding a product line:** You manage a roofing company, which installs and repairs roofs for the residential market. You’re considering adding siding installation to your business. To estimate a profit margin for your new venture, you can consider the industry profit averages. Assume that your roofing business generates a 12 percent profit and the siding industry averages a 5 percent profit. You can consider how your total company profit would look, after you add the new product line.

Your goal is to plan and manage your business based on a reasonable, sustainable level of profit. Industry standards should be part of your analysis.

Waving the red flag when you see revenue and credit sales increase

When comparing income statements from different periods for the same business, watch out for this common big red flag: an increase in revenue that’s tied to an increase in credit sales. (See Book V, Chapter 3 for additional guidance on analyzing financial statements.)
Credit sales mean that you’re selling a product that will be paid for at a later date. When a business increases its credit sales, it needs to consider how much of those sales are credit sales to new customers. New customers, by definition, don’t have a track record of making timely payments on credit sales. You may find that credit sales are increasing, but that bad debt expense is increasing even faster. A business needs to perform some analysis to determine whether sales to new customers will be profitable over the long term.

Here’s an example. You note these results from the prior year:

**Prior year results:** Credit sales $1,200,000, bad debt expense $24,000 (2% of credit sales)

The profit on the credit sales includes all expenses — including bad debt expense.

In the current year, you note an increase in credit sales. You also see that bad debt expense increased to 3.5 percent of credit sales. Here are the current year results:

**Current year results:** Credit sales $1,500,000, bad debt expense $52,500 (3.5% of credit sales)

Bad debt expense increases by $28,500 ($52,500 less $24,000). You can see how this additional expense would eat away at profit. Assuming everything else remained the same, this higher bad debt expense would reduce the profit margin. Every dollar increase in credit sales generates a higher dollar amount of bad debt, compared to the prior year. If you own or run the business, you must consider whether the new customers are worth the risk of bad debt. Book III, Chapter 6 has more information on bad debt expense.
Assessing the Balance Sheet’s Asset Section

In This Chapter
▶ Sticking with an asset’s historic cost
▶ Listing common current assets
▶ Distinguishing between tangible and intangible assets
▶ Preparing the asset section of a balance sheet

A balance sheet reports a company’s assets, liabilities (claims against those assets), and equity (the amount of money left when you sell what you own and pay what you owe). This chapter gets the party started by focusing on assets; Chapter 4 walks you through the liabilities section, and Chapter 5 covers equity.

Assets are resources a company owns and uses to generate revenue. Businesses have many different types of assets, which are categorized as either current or noncurrent. Current assets (such as checking accounts, accounts receivable, and inventory) are liquid, which means they either are cash or can quickly be turned into cash.

Noncurrent assets aren’t liquid; converting them to cash may take time. Converting these assets to cash may result in a loss or a gain on sale. Examples of noncurrent assets include tangible assets (things you can touch) such as a company’s cars, computers, office buildings, or factories.

Not every noncurrent asset is tangible. For example, consider a company’s patents and trademarks, as well as investments that a business makes in other companies — these are all intangible assets. Another intangible asset, goodwill, is created when a business buys another company.

Current? Noncurrent? Tangible? Intangible? The topic of assets may seem a little overwhelming at first because so many kinds of assets exist. But this chapter gives you a straightforward, easy-to-understand tutorial on the ABCs of assets.
Homing in on Historic Cost

Before exploring typical business assets, you need to understand how the value of most assets normally shows up on the balance sheet. Most assets are valued on the balance sheet at their original historic cost — the cost of the item when it was acquired plus any other costs to prepare the asset for use. Historical cost isn’t fair market value, which is what a buyer is willing to pay for the asset in an open marketplace.

Here’s an example: Suppose a company buys a building for $200,000 in 1999. That $200,000 is the building’s historic cost. In 2015, the fair market value of that building is $400,000, but the value of the asset on the balance sheet stays at $200,000 — the historical cost. Book value is defined as cost minus accumulated depreciation. If you consider buying an asset, the “true value” of the asset is its book value. Check out Book III, Chapter 1 for more on book value and depreciation.

Record marketable securities — securities that the company purchases to sell in the short term — at their fair market value. See “Short-term investments,” later in this chapter, for details. Keep in mind that some assets, such as marketable securities, use fair market value as the asset’s value on the balance sheet.

Discovering What Makes an Asset Current

For this book, current assets include cash and any asset that a company anticipates converting to cash within a 12-month period from the date of the balance sheet. On the balance sheet, you should list current assets in order of liquidity. Because cash is the most liquid (it’s already cash), it shows up on the balance sheet first. Other common current assets are short-term investments, accounts receivable, notes receivable, inventory, and prepaid expenses. The following sections cover each type in turn.

Cash

Cash consists of paper bills, coinage, and accounts backed by cash. For example, when you go to the grocery store and use your debit card to pay for your groceries, that debit transaction is the same as paying with cash. That’s because when you swipe your card and enter your PIN, you attest to the fact that funds in your checking account are sufficient and immediately available to cover the cost of your groceries.
Depending on the size of the business, it may organize and manage its revenue and bill paying in one or more types of cash accounts. For example, a retail business probably has a separate operating account and merchant account (an account where credit card transactions deposit). A large service business may have a separate operating account and payroll account. Some companies have cash accounts for which they earn interest income.

You may be wondering why a company complicates its bookkeeping with different bank accounts to pay expenses and accept revenue. In some cases, having different bank accounts creates a safer business environment. For example, having a dedicated payroll account allows payroll disbursing employees to do their job (process payroll paper checks and electronic transfers) while having access to a limited, defined amount of cash.

But with cash accounts, it’s really the Wild West out there in the business world. Some small businesses have more accounts than they actually need, and some large businesses have only one.

In terms of the balance sheet, the most important point to remember about cash accounts is that they’re included in the current section of the balance sheet. However, understanding the business purpose for different types of cash accounts is also important — so here they are, with brief descriptions:

- **Operating checking account**: A business usually earmarks a particular checking account, which it calls its operating account, to handle business activities such as depositing revenue and paying bills.

- **Payroll checking account**: Many companies have a checking account used only to pay employees. The company calculates the total dollar amount of checks or transfers going to pay employees and transfers that amount from its operating account to cover the payroll checks. Often, businesses hire a payroll service to perform these tasks. Head to Book II, Chapters 4 and 5 for more on payroll.

- **Merchant account**: If a business allows customers to pay by credit card, it probably has a dedicated merchant account into which the only deposits are from its merchant provider: the company that helps it process customer credit card transactions. Normally, withdrawals from this account go to the operating cash account to cover bill-paying withdrawals.

- **Petty cash account**: Most companies have a cash box to pay for small daily expenses. This account is also known as an imprest account, which means it always carries the same balance. Anytime the cash box is checked, it should contain cash or receipts equaling the petty cash fund amount. So if the fund balance is $300, cash and receipts in the box must equal $300.
A sweep account is a way for the company to automatically earn investment income. Each evening, any extra cash in the company’s operating account is gathered up and transferred (swept) into investment accounts.

Money from many different companies is pooled into a bigger pot, thereby providing the advantage of a higher rate of return. Then as the company needs the money in order to clear checks and withdrawals, the money is swept back into the operating account.

A negative (credit) balance in a cash account is considered a loan. If you have a negative balance, your account is overdrawn. That means that you owe the bank money. This situation requires an adjustment at the end of an accounting period. You should debit cash (to adjust the account to zero) and credit a loan or payable account. A credit entry increases a liability account.

**Short-term investments**

A business may make short-term investments by purchasing securities issued by other companies to the public. These investments can be equity (stock) and debt (bond) securities that a company uses to invest any idle cash and earn a return. (For more about bonds, see Chapter 4. Stocks are covered in Chapter 5.) Instead of investing idle cash in a bank account, a company invests idle cash in stocks and bonds.

To classify these investments as short-term (current assets), the company must be planning to sell them within 12 months of the balance sheet date. Two types of common short-term investments are trading and available-for-sale securities, which the following sections describe.

**Trading securities**

Trading securities are debt and equity securities that a business purchases to sell in the short term to make a profit. You record trading securities on the balance sheet initially at cost. Then, as their value fluctuates, you record them at fair market value with any unrealized gain or loss going to the income statement. Unrealized means the gain or loss is only on paper. You won’t have realized gain or loss until you actually sell the securities.

You must have a buy and a sell to have a realized gain or loss. An unrealized gain or loss on a security means that a gain or loss would occur if you were to sell the security. Until you sell the asset, the gain or loss is unrealized.
For example, suppose your company buys 100 shares of common stock in ABC Corp. for $1,000. To record this transaction, the balance sheet’s trading securities account is increased by $1,000 and cash is decreased by the same amount.

Sadly, at the end of the month after purchase, these 100 shares are now worth only $900. To adjust the current asset section of the balance sheet, you need to credit (reduce) trading securities by the $100 drop in value. Then you also debit (increase) other losses on the income statement (see Chapter 2) by $100.

As explained previously in the chapter, historic cost isn’t used on the balance sheet when you’re dealing with marketable securities. In this example of ABC Corp. stock dropping in value, the value of ABC Corp. stock on the balance sheet is reflected at less than historic cost.

**Available-for-sale securities**

Available-for-sale securities are debit and equity investments that a company opts not to classify as trading securities. The difference is important because unrealized fluctuations in the value of available-for-sale securities do not show up on the income statement as gain or loss. Instead, any changes (net of tax) go onto the balance sheet as accumulated other comprehensive income.

Here’s how to handle an available-for-sale transaction: Suppose Reeves Corporation buys 2,000 shares of common stock for $5,000, deciding to classify the stock as available-for-sale. At the end of the month, the fair value of the shares is $6,000. Woohoo! That’s an unrealized gain of $1,000!

To record this transaction, you increase (debit) the value of the security on the balance sheet by $1,000 (from $5,000 to $6,000) and increase (credit) accumulated other comprehensive income by $1,000.

**Accounts receivable**

Accounts receivable (A/R) is the amount of money that customers owe a business for merchandise or services they purchased from the business on credit. Many companies sell products and services on credit, because the practice encourages customers to do business. As a result, many companies have accounts receivable balances.
Assume you perform a service and give a client an invoice for $500. A couple weeks later, your client mails you a check for payment in full. In that two-week period between when you performed the service and received the payment, that $500 is on your books as an accounts receivable.

Unfortunately, some customers who buy on credit don’t pay their bills. Under generally accepted accounting principles (GAAP; see Chapter 1), you have to make a valuation adjustment for such uncollectible accounts, called bad debt. If you determine that a customer isn’t going to pay, the receivable balance should be recorded as bad debt expense.

If you extend credit to customers, GAAP requires that you estimate your uncollectible accounts. Companies usually base their estimate on their past experiences with bad debt.

For example, a company finds that 2 percent of all credit sales over the past 5 years were never collected. Those balances were written off as bad debt expense. That history of bad debt experience (2 percent of sales) can be used to estimate bad debt in the current period.

**Using the allowance method for bad debt expense**

The allowance method enables you to estimate the amount of bad debt expense, based on some percentage of credit sales. In the previous example, you estimate that 2 percent of credit sales will be uncollectible.

Suppose sales on account are $50,000. Using the 2 percent figure, the estimate for uncollectible accounts is $1,000 ($50,000 × 0.02). The journal entry to record this amount is to debit (increase) bad debt expense $1,000. Bad debt expense is an income statement account. You also credit (increase) allowance for doubtful accounts $1,000. Allowance for doubtful accounts is considered a contra account.

A contra account carries a balance opposite to the account’s normal balance. Because the normal balance for an asset is a debit, the normal balance for a contra-asset account, such as allowance for doubtful accounts, is a credit.

The amount of money you expect to collect from credit sales is defined as net receivables. Here’s the formula:

\[
\text{Net receivables} = \text{Accounts receivable} - \text{Allowance for doubtful accounts}
\]

*Allowance for doubtful accounts* tells the financial statement reader the dollar amount of credit sales you estimate as bad debt. Until the company is reasonably sure that a customer on account won’t cough up the cash, the journal entry is just an estimate not tied to any particular customer.
When you determine that a particular customer’s account is uncollectible (maybe the company declares bankruptcy), your next step is to remove the amount from both allowance for doubtful accounts and the customer accounts receivable balance. After all, the mystery is over — you know the customer won’t be paying.

For example, Newbury Supplies owes you $1,000. You send it a past-due notice that the post office returns as undeliverable with no forwarding address. After following up, you have no success at locating Newbury. You must make a journal entry to debit (decrease) allowance for doubtful accounts for $1,000 and credit (reduce) Accounts Receivable–Newbury Supplies for $1,000.

Now, what if the owner of Newbury Supplies sends you a check for the $1,000 after you’ve written off the balance due? Then you record the payment by debiting cash and crediting allowance for doubtful accounts. Keep in mind that you already removed (credited) the receivable when you determined the amount was uncollectible. So, when you collect on a receivable that has been written off already, you don’t post an entry to accounts receivable.

The allowance method for bad debt adheres to the accounting principle of conservatism. The principle is discussed throughout this book. When in doubt, the principle instructs the accountant to err on the side of conservatism. That means that you should delay recognizing revenue until you’re certain about your estimate. You should also recognize expense sooner rather than later. The principle helps you generate financial statements that aren’t overly optimistic.

The allowance method posts bad debt expense early. The bad debt entry is based on your estimate of bad debt. When you’re certain that a customer won’t pay, you reduce (debit) the allowance account and reduce (credit) accounts receivable.

**Going over the direct write-off method**

Using the direct write-off method, you post bad debt only when you’re certain that you won’t be paid. It doesn’t use an allowance account to estimate uncollectible balances, so it doesn’t meet GAAP requirements. When an account is determined to be uncollectible, the direct write-off method requires you to debit (increase) bad debt expense and credit (reduce) accounts receivable. For more about the direct write-off method, see Book III, Chapter 6.

Note the difference between the allowance and direct write-off methods. The allowance method posts bad debt when you estimate uncollectible balances. The direct write-off method posts the bad debt only when you’re certain that you won’t be paid. Because the allowance method posts bad debt sooner, the approach is more conservative, thus conforming to GAAP.
**Notes receivable**

A *note receivable* is a short-term debt that someone owes you, meaning it comes due within 12 months of the balance sheet date. In many cases this current asset arises from a *trade receivable*: money your customer owes you for the purchase of goods or services you rendered. This situation can arise if the customer has cash flow problems that prevent it from paying for a purchase. The customer goes to its vendor and asks for extended terms in a formal written document, which replaces the less formal agreement to pay for the goods or services — the invoice.

A note receivable has three major components:

- **Principal**: The amount owed to the company by the debtor.
- **Rate**: The amount of interest the debtor pays on the principal. It’s almost always stated as an annual rate, even if the note is for a period shorter than one year.
- **Time**: The period in which the debtor has to pay back the note.

If you ever have to convert an accounts receivable to a note receivable, you can breathe a sigh of relief because it’s a simple journal entry (see Book I, Chapter 3). You increase (debit) notes receivable and decrease (credit) the customer’s accounts receivable.

A note receivable appears in the current asset part of the balance sheet only for the debt you anticipate will be paid back within 12 months of the balance sheet date. Any portion of the note receivable extending past that 12-month period gets put in the long-term asset section of the balance sheet.

**Inventory**

Inventory is another current asset you need to account for in the asset section of the balance sheet. You need to account for two different types of inventory. The first is *retail inventory*, which is merchandise available for sale in stores and shops. The second, used by manufacturers, is *product inventory*, which includes direct materials: work in process and finished goods.

Book VIII, Chapter 2 is devoted entirely to inventory. The following two sections give you brief descriptions and examples of inventory terms.
Retail (or merchandise) inventory

Accounting for retail inventory is easier than accounting for manufacturing inventory because a merchandising company, such as a retail store, has only one class of inventory to keep track of: goods the business purchases from various manufacturers for resale (the goods on the store’s shelves).

Here’s an example of how a retailer handles an inventory purchase: The associate in charge of lawn mower inventory at a major home improvement store notices that the department is running low on a certain type of mower. He informs the department manager. The manager follows the department store’s purchasing process, and the department receives a shipment of mowers from its vendor. This transaction is a purchase, which is part of inventory (an asset account). When the mowers are sold, the inventory is reclassified as cost of goods sold (an expense account).

Manufacturing inventory

Because a manufacturing company doesn’t simply buy finished goods for resale to customers, it has a more complicated inventory with three major components:

✔ Direct material inventory: Also known as raw materials, this inventory reflects all materials the company owns that it will use to make a product. For the lawn mower manufacturer, raw materials include the steel to form the body, leather or fabric for the seat, and all the other gizmos and parts that make the mower work. In essence, any materials that you can directly trace back to making the mower are direct material inventory.

✔ Work-in-process inventory: At any point in time during the manufacturing process, the company probably has items that are in the process of being made but aren’t yet complete, which is work in process. With a lawn mower manufacturer, this category includes any mowers that aren’t completely assembled at the end of the financial period. The company values its work-in-process inventory based on the mower’s percentage of completion. If the mower is 70 percent complete, the mower’s cost is likely to include 70 percent of the costs incurred.

✔ Finished goods: These are costs you associate with goods that are ready for sale to customers but haven’t yet been sold. For the lawn mower manufacturer, this category consists of mowers not yet sold to retailers, such as hardware stores. Finished goods can end up in two places: If you sell the goods, the cost is posted to cost of sales (an expense account). If you don’t sell the finished goods, the cost is included in ending inventory — an asset account.
Companies can use many different methods to place a dollar value on ending inventory. See Book VIII, Chapter 2 for details.

**Prepaid expenses**

Rounding out the discussion of current assets are prepaid expenses, which are expenses the business pays before they’re due. Many companies pay six months’ worth of business insurance in advance. In a similar way, your car insurance policy requires insurance premium payments before your coverage starts. Companies may also pay rent in advance. Prepaid expenses are considered an asset, because you don’t have to pay for the expense later.

For example, assume a company pays an invoice for $1,200 that covers 12 months of car insurance for the company vehicle. You originally book this amount as an increase (debit) to prepaid expense and a credit (reduction) to cash. Then, as each month goes by, you move the portion of the insurance cost from the balance sheet to the income statement. Each month, you debit (increase) insurance expense for $100 ($1,200/12 months) and credit (reduce) prepaid expense for the same amount. See Book III, Chapter 6 for additional coverage of prepaid expenses.

**Keeping Track of Noncurrent (Long-Term) Assets**

Recall that assets are used to make money in your business. You classify an asset as noncurrent or long-term if the asset will be used up over the course of more than 12 months after the date of the balance sheet. For example, any part of a note receivable that the company expects to receive after the 12-month cutoff date is classified as noncurrent. Natural resources such as coal, oil, and timber are also noncurrent assets. So are mineral deposits, such as gold and diamonds.

This section focuses on the most common types of noncurrent assets you’ll encounter, starting with tangible assets and then moving on to intangibles.
Meeting the tangibles: Property, plant, and equipment (PP&E)

Tangible assets, also called fixed assets, include property, plant, and equipment (PP&E) — a category that includes land, buildings, equipment, furniture, and fixtures. The following sections describe the various tangible assets included in PP&E.

Land

Land, also called real property, is the earth on which the company’s office buildings or manufacturing facilities sit. The cost of the land plus any improvements the company has to make to the land to use it for business operations is your total cost. Land is posted to the balance sheet at historic cost.

Four types of costs are included in the land account:

✔ Contract price: The purchase price for the land.
✔ Closing costs: Expenses to exchange the title of the land from buyer to seller. These costs include real estate broker commissions, legal fees, and title insurance.
✔ Survey costs: Costs for a land surveyor to give you a professional opinion as to where the boundaries of the property lie.
✔ Land improvements: Expenses the company incurs to get the land ready for use, which include the cost of clearing the land if necessary to build the manufacturing plant or adding sidewalks and fences to an existing property.

Because land isn’t considered to be “used up” the way that other PP&E is, land is never depreciated.

If a company buys land as an investment, you record it in the investment section of the balance sheet rather than PP&E. Wondering whether it would go in the current or long-term section? Well, that classification depends on how long the company plans on owning the land. If it anticipates selling the land within 12 months of the balance sheet date, it’s a current asset. Otherwise, record it as noncurrent (long-term).
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Buildings

This category covers the company-owned structures in which the company conducts business operations. It includes office buildings, manufacturing facilities, and retail shops. If the business owns off-site storage facilities or warehouses, these assets go in the buildings category too.

Unlike land, buildings are depreciable (see Book III, Chapter 1). Also, when preparing a balance sheet, make sure you list land and buildings separately because doing so is a GAAP requirement.

To figure out the cost of the land and buildings separately, do one of the following:

✓ If the business purchased the land and buildings together, hire an appraiser to determine the value of the land and the value of the building.

✓ If the business purchased a piece of raw land and constructed its own building, use the purchase agreement to determine the value of the land and all invoices related to erecting the building to determine its value.

Equipment

This category is quite broad, encompassing any equipment a company uses to make the products it sells to customers. For example, a manufacturing company such as a bread baker includes all the mixers, ovens, and packaging machines it uses to turn the yeast and flour into loaves of bread and package them to ship to grocery stores.

A merchandising company (a retailer, which doesn’t make any products) includes in this category any office computer equipment it owns, plus forklifts or mechanized ladders to move inventory around. Retail shops categorize their cash registers as equipment.

Furniture and fixtures

Last up in the parade of PP&E are furniture and fixtures, which include desks, chairs, and filing cabinets. Add to these three very common examples any other furniture items you see in an office setting: credenzas, conference tables, area rugs — the list goes on and on.

A merchandiser has fixtures to present wares for sale, such as glass display cases and display racks. Mannequins are also considered fixtures and, depending on their quality, can be a very high dollar item on the balance sheet.

If the company leases any of its PP&E, the leased items may not be considered company property and don’t show up in the PP&E section of the balance sheet. However, if the lease has aspects of ownership that pass the GAAP sniff test, you do record the leased asset on the balance sheet as a capitalized lease. For more about leases, see Book V, Chapter 4.
**Investigating intangible assets**

The big difference between tangible and _intangible assets_ is that intangible assets (usually) don’t have a physical presence. When you really dig into the subject, you’ll probably find intangibles a lot more interesting than steel desks and swivel chairs. The following sections describe the types of intangible assets and explain how to write off intangible assets and generate intangible assets internally.

**Identifying patents, trademarks, and other intangible assets**

The first type, which is the most common, includes long-lived assets such as patents, trademarks, and copyrights:

- **Patents:** Patents provide licensing for inventions or other unique processes and designs. Items that patents can protect run the gamut from pharmaceuticals to automobile circuitry to unique jewelry designs.

- **Copyrights:** Securing a copyright means that someone can’t use the company’s printed work (such as books or articles) or recorded work (such as musical scores or movies) without permission.

- **Trademarks:** When a company has a trademarked name or symbol (for example, Xerox), no other company can use it without getting permission from the trademark owner.

See “Writing off intangibles by using amortization,” later in this chapter, for details on how to determine the value of these intangible assets and account for them on the balance sheet.

**Introducing goodwill**

The second category of intangibles, _goodwill_, comes into play only when one business purchases another for a price greater than the fair market value of the net assets acquired during the sale. (_Net assets_ are total assets less total liabilities.) For example, ABC Corp. buys XYZ Corp. for $250,000. XYZ’s net assets are $175,000. ABC Corp. acquires $75,000 ($250,000 – $175,000) of goodwill in the transaction. Goodwill is posted as an asset on ABC’s books.

Consider the logic of paying more than the fair market value of the net assets when purchasing a company. Net assets represents the true value of the company. If you sell all the assets and use the cash to pay off all the liabilities, you’re left with net assets (equity). So consider why someone would pay _more_ than the net assets.
The buyer — who pays more than the net asset value — believes that the company has assets or other opportunities not fully valued in the financials. For example, the buyer is willing to pay more for the company’s brand name and reputation in the marketplace. Maybe the company has a customer list, and the buyer believes that he can generate more business from that list. Those are reasons to pay more than the value of net assets.

**Writing off intangibles by using amortization**

Amortization is similar to depreciation (see Book III, Chapter 1) because you use amortization to move the cost of intangible assets from the balance sheet to the income statement. Both amortization and depreciation are expenses.

Most intangibles are amortized on a straight-line basis, using their expected useful life. Assume, for example, that the U.S. government grants patent protection for a period of 20 years. Unless the patent has become obsolete, 20 years would probably be the expected useful life the business uses for its patent amortization. An obsolete patent has no value. The cost would be immediately expensed.

What about the balance sheet cost of intangibles? Leasehold improvements are easy: The amount is the actual cost for any improvements the company makes. The useful life for leasehold improvements is usually the term of the underlying lease. Patents, trademarks, and copyrights the business purchases are treated similarly: You have the cost of purchase as a basis for the amount you amortize.

**Generating intangible assets for company use**

The cost of developing an intangible asset in-house can be minimal. For example, maybe some employees were just spit-balling in a meeting and came up with a catch phrase that eventually became very valuable because of the success of the product associated with the phrase.

In this case, the company can include the legal costs to file the trademark with the federal government in a trademark asset account. Legal expenses incurred to defend the trademark against infringement (unauthorized use) can also be added to the trademark asset account. Keep in mind, however, that most research and development costs to create an intangible asset are expensed as incurred. Those costs aren’t posted to an asset account.

The second category of intangibles, goodwill, is never amortized. Accountants test goodwill yearly for impairment. The company determines whether any goodwill has declined in value and writes off (removes) that value from the balance sheet.
Exploring the Asset Section of the Balance Sheet

To wrap up this chapter, Figure 3-1 shows what the asset section of the balance sheet looks like. Liabilities and equity are each merely a line item in Figure 3-1. Check out Chapter 4 to see the liability section and Chapter 5 to see the equity section of a balance sheet fully developed.

<table>
<thead>
<tr>
<th>Assets:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>3,560</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>1,600</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>10,000</td>
</tr>
<tr>
<td>less allowance for uncollectible accounts</td>
<td>6,800</td>
</tr>
<tr>
<td>Notes receivable - current</td>
<td>3,500</td>
</tr>
<tr>
<td>Inventory</td>
<td>4,300</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td><strong>20,260</strong></td>
</tr>
<tr>
<td>Long-term assets</td>
<td></td>
</tr>
<tr>
<td>Notes receivable - long-term</td>
<td>1,000</td>
</tr>
<tr>
<td>Property, plant and equipment:</td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>15,000</td>
</tr>
<tr>
<td>Building</td>
<td>65,000</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>23,400</td>
</tr>
<tr>
<td>Furniture and fixtures</td>
<td>2,500</td>
</tr>
<tr>
<td>Capital leases</td>
<td>6,000</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>8,000</td>
</tr>
<tr>
<td>less accumulated depreciation and amortization</td>
<td>(67,245)</td>
</tr>
<tr>
<td><strong>Total property, plant and equipment</strong></td>
<td><strong>52,655</strong></td>
</tr>
<tr>
<td>Intangible assets (shown net of amortization)</td>
<td></td>
</tr>
<tr>
<td>Patents</td>
<td>830</td>
</tr>
<tr>
<td>Trademarks</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total intangible assets</strong></td>
<td><strong>1,330</strong></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>75,245</strong></td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>75,245</strong></td>
</tr>
</tbody>
</table>

Current assets are always shown first, in order of liquidity, followed by any long-term assets, which typically include notes receivable (notes due more than 12 months past the balance sheet date).

The company’s PP&E appears next with the accumulated and amortization shown as a separate line item at the bottom of the section. Appearing at the end are any nonphysical intangibles — usually net of amortization, which means that amortization is subtracted before listing the intangibles’ values on the balance sheet.
Chapter 4
Digging for Debt in the Balance Sheet’s Liabilities Section

In This Chapter
▶ Discovering how a company raises cash
▶ Identifying current liabilities
▶ Finding out about long-term debt
▶ Knowing when loss contingencies are reportable
▶ Accounting for bonds

Nobody likes debt, but it’s often an inevitable part of a company keeping its doors open for business. This chapter covers both current and long-term debt, collectively known as liabilities. You discover the types of current liabilities that help a business manage its day-to-day operations. You also find out about long-term debt obligations that businesses use to acquire assets. This chapter discusses basic long-term debt — such as mortgages and notes payable — and bonds, focusing on the many facets of this complicated topic. A third type of liability — loss contingencies — also gets some space in this chapter. These liabilities aren’t always included in financial accounting reports; you get the lowdown on when and how to include them.

Seeing How Businesses Account for Liabilities

Liabilities are claims on company assets (cash) by other businesses or its employees. Because a company uses assets to pay liabilities, accountants refer to liabilities as a “claim on assets.” Examples include:
Accounts payable: Money a company owes to its vendors for services and products it purchased.

Unearned revenues: Money received from clients before the business provides goods or services to the customer. When you pay for a one-year magazine subscription, your payment is unearned revenue to the magazine publisher. The revenue isn’t earned until the publisher starts to deliver magazines to you.

Salaries payable: Wages the company owes to employees.

Generally accepted accounting principles (GAAP, discussed in Chapter 1) dictate that when you prepare the liability section of the balance sheet, any claims against the company have to be broken out between current and long-term obligations. For this book, the dividing line between the two is the one-year mark: All liabilities that are due within one year of the balance sheet date are considered current. All others are considered long-term.

If a company refinances a current liability, that new liability may be treated as long-term. For example, a company may replace an accounts payable balance with a note payable (a formal loan document to pay the balance — possibly owed over several years). See Chapter 2 for details.

Book I, Chapter 1 introduces the fundamental accounting equation, which is:

\[ \text{Assets} = \text{Liabilities} + \text{Owners’ equity} \]

Based on the order of elements in this equation, liabilities show up on the balance sheet after total assets but before equity accounts, with current liabilities first, followed by long-term liabilities. (Current and long-term assets receive similar treatment; see Chapter 3.)

Using the accrual method of accounting (explained in Book I, Chapter 4), all revenue must be matched with expenses incurred during the production of that revenue. So if a company incurs costs but money doesn’t change hands, a liability shows up on the balance sheet to reflect the amount that eventually has to be paid. For example, the company may make a purchase from a vendor without immediately paying for it. That item will appear in accounts payable, which is a current liability.

Figure 4-1 shows a simple liability section of the balance sheet, with all asset and equity accounts consolidated to a single line item each (the two shaded lines). Check out Chapter 3 for a more formal presentation of all sections of the balance sheet. Also note that each account’s chart of account number is included. (See Book I, Chapter 2 for more info about the chart of accounts.) A formal balance sheet usually won’t include chart of account numbers.
Keeping Current Liabilities under Control

This section introduces nearly every type of current liability you’re likely to encounter. It even tosses in some journal entries, so you can see how the transactions get into the accounting records (see Book I, Chapter 3). But before you start, you need to understand the reason why breaking out current from long-term liabilities is so important. GAAP requires the division so the user of the financial statements can easily glean the information necessary to compute several important financial ratios.

Liquidity ratios measure how well a company is prepared to pay short-term liabilities (bills due in less than a year) with assets available in the short term. One important liquidity ratio is working capital, which is current assets minus current liabilities. A variation on working capital is the current ratio, which is current assets divided by current liabilities. These ratios are important to many users of financial reports, who may be investors, banks, or anyone else with an interest in the company’s financial health.

These financial ratios and tools (spelled out in Book V, Chapter 3) give the user specific criteria for deciding how well the company is performing. For example, a bank’s loan officer deciding whether to loan a business money wants to gauge the expectation of being paid back on time. Working capital and the current ratios are very helpful in that arena.
For this reason, netting current assets with current liabilities is rarely okay under GAAP. To do so would eliminate the ability to use any sort of ratio analysis involving current asset or liability accounts. For example, if you purchase inventory on account (on credit), both the inventory and accounts payable accounts increase.

**Accounts payable**

Accounts payable (A/P) includes money a company owes its vendors for services and products it has purchased. Accounts payable is a current liability, because the company anticipates paying the liability in the short term. For example, the company purchases inventory from a manufacturer. The transaction originally goes in the purchases journal, which shows purchases on account, with a debit going to whatever cost or expense account is most applicable and a credit going to accounts payable.

Per GAAP, A/P is always assumed to be a current liability. However, a transaction originally entered as A/P could eventually be reclassified as a long-term debt. This change may happen if the company couldn’t pay the vendor and the vendor agreed to convert the short-term A/P to a long-term note (a formal document showing an amount owed and a mutually acceptable interest rate and payback period spanning more than a year).

Note that the terms *accounts payable* and *trade payables* are often used synonymously. But technically, *trade payables* generally refer to vendors from which a company buys business supplies and *direct materials* — items it uses to manufacture products for sale (see Book VII, Chapter 4). Accounts payable includes all vendors you intend to pay within a year. Some accounting systems may include both categories simply as *accounts payable*.

Many vendors selling on credit give a discount to customers who pay their balances early. For example, the terms of the purchase may call for full payment in 30 days but a discount of 2 percent if the customer pays the bill within 10 days. Accountants refer to this type of arrangement as *2/10 net 30*. If the company got a 1 percent discount for paying in 15 days with the total amount due in 45 days, it looks like this: *1/15 net 45*. The seller is willing to accept a smaller payment (by offering a discount) in order to collect the payment sooner. Collecting payments quickly provides the business more cash to operate. Figure 4-2 illustrates the debiting and crediting for $1,000 of inventory purchased on account with discount terms of *2/10 net 30* and the subsequent payment.
Payroll and taxes

The nature of the beast is that most companies *accrue* payroll and related payroll taxes. With an accrual, the business recognizes a liability that hasn’t yet been paid. At the end of many accounting periods, a company may owe payroll to employees. This concept is easy to understand if you think about the way an employer has paid you in the past.

Most companies have a built-in lag time between when employees earn their wages and when the paychecks are cut. For example, Penway Manufacturing pays its employees on the 1st and 15th of every month with 15 days of wages in arrears. This means that when the employees get their paychecks on July 15, the paychecks compensate work they did from June 16 through June 30.

To match expenses to revenue when preparing financial statements for the one-month period ending June 30, the gross wages earned but not yet paid as of June 30 have to be added to the balance sheet as a current liability. You also have to account for any payroll taxes or benefits that will be deducted from the employees’ paychecks when the checks are finally cut. Book II, Chapters 4 and 5 provide details on these topics.
Unearned revenue

Unearned revenue is a liability that arises when a company receives payment for goods or services rendered before it has actually provided the goods or services. Because the business has an obligation to deliver the product or service, the unearned revenue is a liability until the company completes its end of the transaction. Unearned revenue can be a short-term (a year or less) or a long-term liability.

To record revenue, it has to be earned and realizable. If the customer pays in advance, the revenue is realized. However, the revenue isn’t earned until the product or service is delivered to the client.

Suppose you pay a $1,200 deposit to a cabinet maker to build customized cabinets for your office building. Until the cabinet maker delivers the cabinets to your office, your payment isn’t 100 percent earned revenue for the cabinet maker. The way this works on the cabinet maker’s end is that it debits cash and credits unearned revenue for your payment of $1,200. After delivering the completed cabinets, it records revenue by debiting (reducing) unearned revenue and crediting (increasing) gross sales for $1,200.

Other short-term liabilities

Other short-term liabilities include items such as loan payments that are payable within 12 months. Current debt can originate as short-term bank loans, or it can be the portion of a long-term debt that’s due within the next 12 months. Another type of current liability you’re likely to encounter is estimated warranty, which reflects how much money a company may have to pay to repair or replace products sold to customers.

Here’s more information on short-term bank loans, current maturities of long-term debt, and estimated warranty expense:

✔ Short-term bank loans: When a company takes out a loan, it doesn’t always have to be for an extensive period (such as a 30-year mortgage). Frequently, a company anticipates getting paid for a job it has performed and just needs a brief influx of cash to pay expenses such as payroll.

A good example of this situation is a working capital loan, which a bank makes with the expectation that the loan will be paid back from collection of accounts receivable. As long as the loan is due in full fewer than 12 months after the balance sheet date, you classify borrowed funds as current liabilities.
Short-term debt is important to examine when determining the financial health of a company because it indicates whether a cash flow issue could arise in the future. If the short-term debt is unreasonably high, the company may not have the excess money to make the loan payments.

A company can also have a *revolving line of credit*, which is a loan with a preset limit on how much the company can withdraw at any one time. This type of financing is considered a current liability. This sort of current debt is much more flexible than a loan because the company borrows against it only when necessary.

**Current maturities of long-term debt:** Suppose a company has a 30-year mortgage on its land and building, and it’s in the third year of paying off the loan. To properly reflect this mortgage on the balance sheet, the principal amount the company owes in the next 12 months has to be recorded as a current liability. The rest of the mortgage payable is a long-term liability, a subject covered in the next section.

You can use an *amortization schedule*, which shows how much of each mortgage payment goes to principal versus interest, to figure out the current portion of the long-term debt.

**Estimated warranty liability:** Warranties on products may be included in the purchase price of a product or something the purchaser elects to buy separately — usually at the time of purchase. A great example is the guarantee of performance relating to the purchase of a computer from an electronics retail shop. For example, the computer comes with a six-month warranty from the manufacturer covering numerous performance and repair issues. If the computer breaks down within the six-month warranty period, the purchaser can send it back to be fixed, free of charge. The company has to take two steps in this situation to ensure its financial reports are complete:

- Provide a disclosure about the warranty in a footnote to its financial statements (see Book V, Chapter 4)
- Calculate and book an estimate of how much it costs the company to fulfill the terms of the warranty

A popular way to estimate warranty expense is to use a percentage of sales. This percentage is normally figured historically. If in the past the company has incurred an actual warranty expense of 4 percent, that same percentage should be the current year’s estimate until the facts change.
Here are the steps to estimate and record warranty expense:

1. **Compute the total dollar amount of sales under warranty.**
2. **Calculate the dollar amount of warranty expense.** Use a percentage of total sales based on your experience with warranty expenses in past years.
3. **Post an entry to debit estimated warranty expense and credit accrued warranty liability for the warranty estimate.**
4. **Debit accrued warranty liability and credit cash for actual payments for warranty expenses.**
5. **Compare your estimate of warranty expense with your actual payments for warranty expenses (cash payments).** Consider whether the warranty estimates should be increased or decreased to accurately reflect your warranty expenses going forward.

Ready to see how to journalize these transactions? Figure 4-3 gives you the lowdown on the entry to book the estimate and record actual warranty expense.

<table>
<thead>
<tr>
<th>Warranty Expense</th>
<th>20,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Warranty Liability</td>
<td>20,000.00</td>
</tr>
</tbody>
</table>

**Figure 4-3:**
Recording accrued and actual warranty expense.

<table>
<thead>
<tr>
<th>Estimated Warranty Liability</th>
<th>5,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Expense</td>
<td>2,000.00</td>
</tr>
<tr>
<td>Materials Expense</td>
<td>3,000.00</td>
</tr>
</tbody>
</table>

**To record estimated warranty expense for September**

<table>
<thead>
<tr>
<th>Estimated Warranty Liability</th>
<th>5,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Expense</td>
<td>2,000.00</td>
</tr>
<tr>
<td>Materials Expense</td>
<td>3,000.00</td>
</tr>
</tbody>
</table>

**To record actual warranty cost for September**

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**Planning for Long-Term Obligations**

If you own a car you financed, you’re probably all too familiar with *long-term debt* — loans that won’t be paid off within the next 12 months. Companies have long-term debt, too. Although a company usually uses current liabilities (loans) as a vehicle to meet short-term obligations such as payroll, it may incur long-term debt for the financing of company assets.
Financing asset purchases with debt versus equity

Corporations raise money to purchase assets in one of two ways: debt or equity. *Debt* means the company borrows money with an obligation to pay the borrowed funds back. *Equity* means the company sells shares of its own stock to investors. If you issue debt, you have creditors. If you issue stock, the purchasers of your stock are owners.

What makes equity investing appealing is that the company may not be under any obligation to buy back the shares of stock from the investors. However, it also means that equity investors have some say in the decisions of your business, including voting rights on major corporate decisions. Equity investors also want a return on investment, possibly in the form of a dividend.

Oddly enough, debt can end up making a company money. This situation is called *financial leverage*, and it takes place when the borrowed money is expected to earn a higher return than the cost of interest payable on the debt. Additionally, interest expense on debt is normally a tax deduction while dividends payable to investors are not.

Here’s an example: You borrow funds at 6 percent to purchase a new machine to manufacture a product. The new machine operates more efficiently. You incur less repair and maintenance cost, and you’re able to produce more product each month. As a result, your company earnings increase by 8 percent. Your 8 percent growth in earnings more than offsets your 6 percent borrowing cost. Book VIII, Chapter 4 provides more insight on this concept.

Managing long-term debt

If the company needs to raise cash and decides to do so by accumulating debt, the most common types are mortgages, notes payable, capitalized leases, and bonds. Following is your accounting guide to the first three of these categories of long-term debt. Bonds are a much more complicated subject, covered later in this chapter in the section “Accounting for Bond Issuances.”

Any type of debt instrument between a lender and a borrower specifies *principal* (the amount borrowed), *rate* (how much interest the company pays to borrow the money), and *term* (the duration of the note). A portion of each payment is applied to principal and the other portion to interest.
Mortgages

*Mortgages* are used to finance the purchase of real property assets (building and land, for example). The property *collateralizes* the mortgage, which means that the property is held as security on the mortgage. If the borrower defaults on the mortgage, the lending institution seizes the property and sells it to recoup as much of the borrowed money as possible.

Notes payable

*Notes payable* are formal written documents that spell out how money is being borrowed. The earlier section “Other short-term liabilities” explains that the part of a note payable that’s going to be paid off within the 12 months of the balance sheet date is classified as short-term debt. The remainder of the note is considered a long-term debt.

Capitalized leases

Another type of long-term debt involves *capitalized leases*. A company doesn’t always buy its fixed assets (see Chapter 3); sometimes it leases them. Leasing often makes sense for any fixed asset that’s replaced frequently. For example, leasing computers makes sense for businesses that need to stay current with computer technology.

Capital leases have characteristics of ownership, which means the cost of the leased capital asset goes on the balance sheet as a depreciable asset. This book offers a full discussion of accounting for leases in Book V, Chapter 4.

Anticipating contingent liabilities

A *contingent liability* is a liability that may cause a future loss depending on events that may or may not occur. Here are two examples of common contingent liabilities:

- **Pending litigation**: A company is actively involved in a lawsuit that hasn’t been settled.
- **Guarantee of obligations**: A business agrees to step in and satisfy the debt of another borrower if need be. A company may guarantee the debt of a supplier if the supplier’s product is critical to the company’s production process. Perhaps the supplier can’t operate without a loan, and the lender insists on a co-signer for the loan to be approved.

You typically record contingent liabilities in the footnotes to the financial statements (see Book V, Chapter 4) rather than as a dollar amount in the financial statements. However, if a loss due to a contingent liability meets the
following two criteria, it should be accrued and reported in the company’s financial statements as a dollar amount:

✓ The chance of the loss event happening is **probable** — likely to occur. Consider the guarantee of obligation example: If the debtor business (the supplier) has gone out of business and the owners have disappeared into the night, the lender will probably come after the back-up guarantor to pay off the loan balance.

✓ The amount of the loss can be **reasonably estimated**, which means you can come up with an accurate dollar amount of the loss. Continuing with the guarantee of obligation example, the loss is reasonably estimated because it should be the remaining balance on the loan, interest owed, and any additional charges tacked on by the lender in accordance with the obligatory note.

If the loss contingency meets these two standards for accrual, the journal entry involves a debit to a relevant loss account (an expense) and a credit to a liability account. For example, the company could take the debit to “loss on guaranteed debt” and to some sort of liability account such as “amount due on guaranteed obligation.”

**Accounting for Bond Issuances**

*Bonds* are long-term lending agreements between borrowers and lenders. For example, a municipality (such as a city or village) may issue bonds to finance the building of new roads or a hospital. Corporations generally issue bonds to raise money for capital expenditures, operations, and acquisitions.

The person who purchases a bond receives interest payments at the bond’s stated interest rate during the bond’s term or for as long as he holds the bond. When the bond *matures* (the term of the bond expires), the company pays the bondholder back the bond’s face value, or *principal* amount.

A bond is either a source of financing or an investment, depending on which side of the transaction you’re looking at. The company issuing the bond incurs the long-term liability. The person or company acquiring the bond views it as an investment; for a business, this investment is an asset.

**Mulling over bond basics**

Bonds are normally issued at *face amount* (the principal amount printed on the bond, as explained in the following list). When a bond is *issued*, it’s sold to the public for the first time. After issuance, a bond may be bought and sold between many investors over time, based on the market price for the bond.
The market price of a bond can be expressed in one of three ways:

- **Face amount** (also known as *par value*): The principal amount printed on the bond, typically in denominations of $1,000
- **A discount**: Less than face value
- **A premium**: More than face value

When considering bond prices and rates of return, consider the following:

- **Principal repayment**: The bond issuer is obligated to repay the face amount at maturity regardless of the price the investor paid for the bond. For example, if the bond’s face amount is $1,000, the bond issuer must pay back $1,000.
- **Interest payments**: Most bonds pay interest monthly or semi-annually (twice a year). Bonds issued by corporations typically pay interest semi-annually.
- **Yield to maturity**: An investor has two cash flows that impact his or her total return. One cash flow is the interest payments, which are based on the stated, fixed interest rate. Investors may also have a gain or loss, depending on whether they bought the bonds at a premium or a discount. The interest income plus the gain or loss is the *yield to maturity*. You can view yield to maturity as the total return on the bond investment.

**Examining sample bond transactions**

To get a handle on bond prices and yield to maturity, consider an example of a bond purchased at a discount, and then an example of a bond bought at a premium.

**Buying a bond at a discount**

A $1,000, 6-percent, 10-year face amount bond is originally issued at $1,000. One year later, an investor purchases the bond at $920. Because the purchase price is less than the face amount, the bond is purchased at a discount. That investor has two cash flows:

- Annual interest payments of $60 ($1,000 × 6 percent)
- The principal amount paid at maturity, less the cost of the bond ($1,000 – $920 = $80)

The investor’s yield to maturity (total return) is more than 6 percent. That’s because the investor earns $80 when the bond matures, along with the 6 percent interest rate. When you buy a bond at a discount, you earn more than the stated interest rate of the bond.
Investing in a bond at a premium

Using the same numbers, assume a 6-percent, 10-year face amount bond is originally issued at $1,000. One year later, an investor purchases the bond at $1,050. Because the purchase price is more than the face amount, the bond is purchased at a premium. That investor has two cash flows:

- Annual interest payments of $60 ($1,000 \times 6\%)
- The principal amount paid at maturity, less the cost of the bond ($1,000 – $1,050 = –$50)

The investor's yield to maturity (total return) is less than 6 percent, because the investor loses $50 when the bond matures. When you buy a bond at a premium, you earn less than the stated interest rate of the bond.

Kicking around the logic of paying a premium

Given the fact that paying a premium for a bond reduces the net interest earned, you may wonder why an investor would pay a premium for a bond. Bonds are priced at a premium because the stated interest rate on the bond is higher than the interest rate of bonds currently being issued (for the same maturity and credit quality).

Consider the example in the previous section. Assume 10-year maturity bonds of similar creditworthiness are being issued at a 5-percent interest rate. An investor may pay $1,050 for the 6-percent bond, because current bonds being issued have a stated rate of less than 6 percent. The investor is willing to pay an extra $50 to earn more interest income.

This discussion also explains why bonds are priced at a discount. If a bond’s stated interest rate is less than similar bonds currently being issued, the market price of the bond is less than the face amount. If bonds are being issued at 5 percent, an existing 4-percent interest rate bond sells at a discount.

Journaling bond transactions

When a company issues a bond and when the bond is purchased (at a premium or a discount), the company must make a journal entry to record the activity, as explained in the following sections.

Issuing a bond

As mentioned in a previous section, bonds are most often issued at face amount (par value). If a bond is issued at par value of $1,000, the entry is to debit cash $1,000 and credit bond payable (a liability account) for $1,000.
Issuing a bond means that the company is selling the bond to an investor. As a result, the company receives cash from the buyer. Issuing a bond at a premium or discount doesn’t happen that often, so you don’t need to concern yourself with those scenarios.

**Accounting for a bond purchased at a premium**

Assume a buyer purchases a $1,000 bond for $1,020. Because the buyer pays more the $1,000, the bond was purchased at a premium. The buyer debits bond investment for $1,000 (the face amount). Premium on bond investment is debited for $20, and cash is credited for $1,020. The premium of $20 is amortized, meaning the bond premium is moved into an expense account over time until the bond matures. The premium is an extra cost to the buyer.

**Handling a bond purchased at a discount**

Assume the buyer purchases a $1,000 bond for $980. Because the buyer pays less than the $1,000, the bond is purchased at a discount. The buyer debits bond investment for $1,000 (the face amount). Note that the bond investment is debited for $1,000 — regardless of whether the bond is bought at a premium or discount.

Discount on bond investment is credited for $20, and cash is credited for $980. The discount of $20 is also amortized. In this case, the bond discount is moved into an income account over time until the bond matures. So, the bond discount is extra income to the buyer.

**Considering the bond seller’s entries**

Now consider the seller of the bond and the related entries. When selling a bond at a premium, the seller receives more than the face amount. The premium must be amortized over time into an income account. On the other hand, when selling at a discount, the seller receives less than face amount. That discount must be amortized into an expense account.

What you should notice is that additional expense for the buyer generates income for the seller. The reverse is also true: Additional income for the buyer results in more expense for the seller.

Understanding debt and other liabilities is a critical area for a business owner. Debt is one of the two ways an owner can raise capital to run the business. A manager needs to understand repayment terms and the total liabilities on the balance sheet in order to make well-informed business decisions.
This chapter gets into the nitty-gritty of how the owners’ interest in the business shows up on the balance sheet. **Equity** (also referred to as *net assets*) is the combined total of each owner’s investment in the business. Both terms refer to the difference between assets (resources a company owns) and liabilities (claims against the company).

**Understanding How Owner Equity Varies among Business Entities**

Depending on the type of business entity, the owners’ equity section of the balance sheet can range from bare-boned to quite elaborate, as explained in the following sections. For more about different business entities in general and the pros and cons of each, check out Book VI, Chapter 2.

**Sole proprietorship**

Sole proprietorships (one-owner businesses) have an equity account called owner capital. Cash and other contributions that the owner makes to the business, such as equipment, increase the owner capital account. Business earnings (net income) also increase the owner capital account.
The owner draw account shows money and other assets the owner takes from the business to convert to personal use. Owner draw reduces the owner capital account. Although owner draws are accounted for in a unique account, keep in mind that you need to keep track of owner draw activity to calculate owner capital.

Here’s a formula to calculate an owner’s capital balance:

\[
\text{Owner’s capital balance} = \text{Beginning capital balance} + \text{Owner capital contributions} + \text{Year-to-date net income} - \text{Capital draws}
\]

Figure 5-1 shows the owner’s equity section of the sole proprietorship for Penway Manufacturing owned by Mike Penway.

<table>
<thead>
<tr>
<th>Penway Manufacturing</th>
<th>Statement of Owner’s Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>December 31, 2015</strong></td>
<td></td>
</tr>
<tr>
<td>Mike Penway, capital January 1, 2015</td>
<td>20,000</td>
</tr>
<tr>
<td>Year-to-date net income</td>
<td>15,000</td>
</tr>
<tr>
<td>Mike Penway, draw</td>
<td>(5,000)</td>
</tr>
<tr>
<td>Mike Penway, capital December 31, 2015</td>
<td>30,000</td>
</tr>
</tbody>
</table>

**Partnership**

Partnerships (businesses owned by two or more people) mimic sole proprietorships in that the equity section on the balance sheet has capital and draw accounts. Figure 5-2 shows the partner equity section of the Double-Trouble Partnership, whose partners, Tom and Dottie Double, each own 50 percent of the business.

The amount of draws and income distributions a partner is allowed to take can differ from that person’s partnership interest (ownership interest). So even though you have two equal partners, that doesn’t mean they have to take the same draw amount. Hence the differences in beginning and ending partners’ capital accounts between partners in Figure 5-2.

If one 50-percent owner takes a higher draw each year, his capital account declines faster over time (everything else being equal). That’s why Tom’s capital account balance is lower than Dottie’s ($12,000 versus $17,000).
Corporation

Unlike sole proprietorships and partnerships, corporations are owned by stockholders. The balance sheet section called “stockholders’ equity” represents the claim shareholders of the corporation have to the company’s net assets. Stockholders’ equity is made up of four components: capital stock, paid-in capital, treasury stock, and retained earnings. Capital stock, paid-in capital, and treasury stock involve transactions dealing with the corporate stock issuances and repurchases. Retained earnings contain income and dividend transactions. The sections that follow give each of these components their due, but first you need to know a little something about the differences in capital stock.

Distinguishing between Two Types of Capital Stock

To sell ownership in a corporation, the corporation issues stock that investors can purchase. According to general accepted accounting principles (GAAP), all stock transactions must be reported on the balance sheet. The following sections describe the types of stock covered in this book (common and preferred), and show how to record stock transactions on the balance sheet.

Preferred stock

*Preferred stock* has two advantages over common stock (discussed next). First, preferred stock shareholders receive their dividends before common stock shareholders. If earnings are insufficient to pay both common and preferred dividends, only the preferred dividend is paid. The preferred dividend is a specific amount, stated as a percentage or a dollar amount.
If a corporation sells its assets and closes its doors, preferred shareholders receive their portion of the sales before common shareholders receive theirs. In other words, in the event a company liquidates, preferred shareholders are more likely to recoup all or a portion of their investment in the company.

**Common stock**

*Common stock* shareholders also may earn a dividend. However, the amount of the dividend is at the discretion of the corporation (the dividend amount isn’t stated). The dividend may be higher or lower than last year — or even zero for the year.

In the unfortunate event a corporation is liquidated, a common shareholder’s claim on assets comes after preferred shareholders’ claims are paid. In fact, common stock claims on assets are last in line — after bondholders, creditors, and preferred stockholders.

**Recording stock transactions on the balance sheet**

GAAP dictates that you properly describe stock transactions on the balance sheet. Figure 5-3 shows the proper balance sheet descriptions for common and preferred stock. Note the following terms:

<table>
<thead>
<tr>
<th>Stockholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Stock:</td>
</tr>
<tr>
<td>Preferred stock, 5%, $200 par value, cumulative, 30,000 shares authorized, issued and outstanding,</td>
</tr>
<tr>
<td>Common stock, $5 par value, 500,000 shares authorized, 250,000 shares issued at December 31, 2013</td>
</tr>
</tbody>
</table>
Par value: The value per share that’s posted to the stock account balance. Note the difference in par values for common and preferred stock. Common stock has a par value of $5; preferred stock is $200.

Authorized shares: The maximum number of shares the corporation can issue, according to its articles of incorporation. When a company is formed, the owners determine how many shares they want to authorize.

Issued shares: Authorized shares sold to the public.

Outstanding shares: Authorized and issued shares held by the public. If the corporation repurchases issued shares, they’re considered treasury stock. Treasury stock shares aren’t outstanding. (See “Buying back shares: Treasury stock,” later in this chapter, for details.)

Dividend: As you see in the prior section, the preferred stock dividend is a stated amount: 5 percent in this case. The 5 percent is based on the $200 par value. So the dividend is 5 percent × $200, or $10 per share. The common stock doesn’t have a stated dividend amount.

Defining Paid-In Capital

Paid-in capital represents money invested in the business (contributed capital). Paid-in capital has two components:

Par value of common or preferred stock: The par value of the stock purchased (either common or preferred) multiplied by the number of shares purchased. If you buy 100 shares of $5 par value common stock, you would post $500 (100 × $5) to the common stock line in the balance sheet.

Additional paid-in capital: Additional paid-in capital is the dollar amount you pay for the stock above its par value. “Additional” in this case refers to “more than par value.” Consider the previous example. Assume you spend $700 to buy 100 shares of the $5 par value common stock. $500 is posted to common stock. The remaining $200 ($700 purchase price less $500 par value) is posted to additional paid-in capital.

For additional details about how to issue stock shares, see Book VI, Chapter 1.
Recording Retained Earnings

The retained earnings account lists the sum of all net income earned by the company since inception less all dividends paid to shareholders since the company opened for business. These transactions change the retained earnings balance:

- **Net income**: Net income (profit) for the current year increases retained earnings. A net loss reduces retained earnings.
- **Dividends**: Earnings distributed to shareholders. If a company pays a dividend, the payment reduces retained earnings.

Consider this formula for year-end retained earnings:

\[
\text{Year-end retained earnings} = \text{Beginning retained earnings} + \text{Current year net income} - \text{Current year dividends}
\]

For example, assume your company opens its doors on January 2, 2015. On January 2, retained earnings are 0 because the company didn’t previously exist. From January 2 to December 31, 2015, your company has a net income of $20,000 and pays out $5,000 in dividends.

On January 1, 2016, the retained earnings amount balance is $15,000 ($20,000 – $5,000). To compute retained earnings as of December 31, 2016, you start with $15,000 and add or subtract the amount of income the company made or lost during 2016. You also subtract any dividends paid during the year. Book IV, Chapter 2 discusses how balance sheet accounts (such as retained earnings) are related to the income statement.

Spotting Reductions to Stockholders’ Equity

Three accounting transactions reduce stockholders’ equity: incurring a net loss (as explained in the previous section), paying dividends, and repurchasing treasury stock. (The following sections explain how paying dividends and repurchasing treasury stock result in reductions to stockholders’ equity.)
Dividends are distributions of company earnings to the shareholders in the form of cash (yeah!) or additional stock. For most investors, receiving stock dividends isn’t quite as exciting as getting a check in the mail. However, stock dividends can be quite profitable in the long run, especially if the stock’s price rises, because the investor has more shares to sell.

Companies pay dividends only to shareholders of record — investors who own their shares on a specific date referred to as the record date. In other words, an investor can’t simply purchase stock the day before dividends are paid, collect the dividends the next day, and then sell the stock.

Calculating dividends

Whether your company decides to pay cash dividends or stock dividends, you need to know how to calculate the amount to pay investors of record. Here’s an explanation of both cash and stock dividend calculations:

✓ Cash dividends: Shareholders of record receive cash dividends based upon how many shares of stock they own. For a company to pay cash dividends, two conditions have to be met:

- The company has net income for the current period or retained earnings from prior periods.
- The company has enough ready cash to pay the dividends.

For example, assume an investor owns 1,500 shares of common stock in Penway Manufacturing Corporation. Penway has both a surplus of cash and a retained earnings balance, so the board of directors decides to pay a cash dividend of $12 per share. The investor’s dividend is $18,000 (1,500 shares times $12).

✓ Stock dividends: As the name implies, a stock dividend means that shareholders of record receive additional shares of stock, not cash. The additional shares received are based on the number of shares the investor already owns. This type of dividend is expressed as a percentage rather than a dollar amount. For example, if an investor receives a stock dividend of 5 percent on 1,500 Penway shares, the investor receives an additional 75 shares of stock (1,500 × 0.05).

Posting dividends to the accounting records

Now that you know the amount of cash or number of shares paid as a dividend, you can post journal entries. (Recording the stock dividend is slightly more complex than the cash dividend entry.)
Dividends are not an expense of doing business. They’re a balance sheet transaction only, serving to reduce both cash (in the case of cash dividends) and retained earnings.

The reduction to retained earnings for a cash dividend is straightforward: You reduce (debit) retained earnings by the amount of the dividend and credit cash to reduce that account for the payment.

Posting the stock dividend is more complex:

1. **Determine the fair market value of the stock on the declaration date** — the date on which the board of directors decides to pay a dividend.
2. **Calculate the total number of shares to be paid as a stock dividend.** As explained in the prior section, multiply the stock dividend percentage by the number of shares outstanding.
3. **Multiply the fair market value per share by the number of stock dividend shares.** This total represents the fair market value of the stock dividend in total dollars.
4. **Debit retained earnings for the fair market value in dollars.**
5. **Credit common stock dividends distributable for the par value of the stock dividend shares.**
6. **Credit additional paid-in capital for the fair market value of the stock that is greater than the par value.**

Here’s an example of a stock dividend transaction:

Penway declares a 5 percent stock dividend at a time when it has 30,000 shares of $10 par value common stock outstanding. At the date of declaration of the stock dividend, the fair market value (FMV) of the stock is $15.

The stock dividend totals 1,500 shares (5 percent × 30,000 shares). The net effect is to decrease retained earnings by $22,500 (1,500 × FMV of $15 per share) and increase common stock dividends distributable by $15,000 (par value of $10 × 1,500 shares). Additional paid-in capital increases by the difference between the two: $7,500. This entry reduces retained earnings and shifts the dollar amount ($22,500) to common stock and paid-in capital.

When Penway issues the stock dividend, common stock increases by $15,000 and the common stock dividends distributable is adjusted to zero.
Corporations may issue stock dividends when they’re low in operating cash but still want to throw the investors a bone. The investors stay happy because they feel they’re getting more of a return on their investment.

**Buying back shares: Treasury stock**

*Treasury stock* represents shares of stock that a corporation issued (sold) to investors and then bought back. You record treasury stock on the balance sheet as a contra stockholders’ equity account. *Contra accounts* carry a balance opposite to the normal account balance. Because equity accounts normally have a credit balance, a contra equity account weighs in with a debit balance, because company equity is reduced by treasury stock. For more about contra accounts, see Book IV, Chapter 3.

Your journal entry to record the purchase of treasury stock is to debit treasury stock and credit cash (for payments to the sellers of stock). In accordance with GAAP, don’t record any gain or loss on treasury stock transactions.

One reason a corporation buys back shares of its own stock is to prevent a hostile takeover. The fewer shares trading in the open market, the smaller the chance that another company can purchase controlling interest.

**Exploring Stock Splits**

One other type of stock transaction that doesn’t reduce retained earnings is a stock split, which increases the number of shares outstanding while decreasing the price per share proportionally. A company typically performs a stock split when it believes the share price is too high to attract investors.

For example, Penway Manufacturing Corporation stock is trading for $100, and the company thinks the price is too high to attract the average investor. To get the price of the stock down to $25 per share, the company issues a 4-for-1 split. Every outstanding share now equals four shares, each of which is worth $25. The logic here is that one share worth $100 is equal to four shares worth $25.

The *common stock caption*, which is the descriptive line on the balance sheet, changes to reflect the split on the books. If the caption originally read “Common stock, 1,000 shares at $100 par,” it now reads “Common stock, 4,000 shares at $25 par.” Note that the total dollar value remains the same — $100,000 — no reduction to retained earnings.
Computing Earnings per Share

Earnings per share (EPS) is calculated as net income divided by shares of common stock outstanding. (Although variations exist, this is the basic formula most often used to calculate EPS.) Potential investors like to see the EPS calculation so they can make educated investment decisions; earnings per common share is a frequently used measure of profitability. The following sections explain how to calculate EPS for a simple capital structure and give you basic information on EPS in a complex capital structure.

Simple capital structure

If a company issues only common stock — or common stock with nonconvertible preferred stock outstanding — it has a simple capital structure. The following sections define convertible securities, so you know what nonconvertible stock is, and explain how to calculate the EPS for a corporation that has a simple capital structure.

Understanding convertible securities

A simple capital structure assumes that the company has no convertible securities outstanding. Convertible securities are those that can be converted into common stock; for example, convertible bonds, convertible preferred stock, stock options, warrants, and rights.

Computing EPS for weighted average shares

To calculate EPS for a corporation with a simple capital structure, divide income available to common shareholders by the weighted-average number of common shares outstanding for the period. The weighted-average is figured by multiplying the number of shares outstanding by the fraction of the period in which they’re outstanding. For example, if the company has 10,000 shares of stock outstanding in January, February, and March, its weighted average for the year (12 months) is 2,500 (10,000 × \(\frac{3}{12}\)).

Suppose ABC Manufacturing Corporation has net income of $473,400. During the year, the corporation has 38,000 outstanding shares of $4.50, $70 par value preferred stock, and the weighted-average number of common shares outstanding totals 205,000. The owners of the 38,000 shares of preferred stock get a dividend of $4.50 per share first, which equals $171,000 (38,000 shares × $4.50 per share).

This figure has to be subtracted from net income before figuring the EPS of common stock ($473,400 − $171,000 = $302,400). Dividing $302,400 by the shares of common stock outstanding (205,000) equals $1.48 EPS of common stock.
If net income includes items such as extraordinary gains or losses, a separate EPS is required for each major component of income, as well as for net income. See Chapter 2 for more information on gains and losses.

**Complex capital structure**

If items that could cause a potential dilution to EPS exist, the company’s capital structure is complex. *Dilution* refers to the idea that total earnings are spread out over more shares of stock. Convertible securities mentioned in the prior section are potential sources of dilution. Accountants say *potential source*, because the owner of each security can choose to convert the security to common stock. When the potential for dilution exists, you have to show both basic and diluted EPS.

To figure diluted EPS, use the number of common shares outstanding that would be issued if every potentially dilutive share were converted to common stock.

Presenting the diluted EPS gives the user of the financial statements the worst-case scenario for EPS, relating to any exercise of existing options or the conversion of existing securities. In other words, diluted EPS displays the lowest possible EPS figure.

Check out Figure 5-4 for an abbreviated income statement showing how basic EPS looks, including extraordinary items. Note that the figure includes a line item reflecting diluted EPS.

![Figure 5-4: Showing EPS and diluted EPS on the income statement.](©John Wiley & Sons, Inc.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$100,000</td>
</tr>
<tr>
<td>Basic EPS calculation:</td>
<td></td>
</tr>
<tr>
<td>Income from continuing operations</td>
<td>$ 3.50</td>
</tr>
<tr>
<td>Extraordinary items</td>
<td>(.62)</td>
</tr>
<tr>
<td>Net income available for common stockholders</td>
<td>$ 2.88</td>
</tr>
<tr>
<td>Diluted EPS:</td>
<td></td>
</tr>
<tr>
<td>Income available to common stockholders adjusted</td>
<td>$ 1.45</td>
</tr>
<tr>
<td>For the effects of assumed exercise of options and conversion of bonds</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 6
Coupling the Income Statement and Balance Sheet

In This Chapter
▶ Seeing connections between the income statement and balance sheet
▶ Fitting key pieces into the balance sheet puzzle with operating ratios
▶ Adding assets to the balance sheet
▶ Examining debt versus equity on the balance sheet

Every time you record a sale or expense entry by using double-entry accounting, you see the connections between the income statement and balance sheet (see Book I, Chapter 2 for more about double-entry accounting and the rules for debits and credits). A sale increases an asset or decreases a liability, and an expense decreases an asset or increases a liability. Therefore, one side of every sales and expense entry is in the income statement, and the other side is in the balance sheet. You can’t record a sale or an expense without affecting the balance sheet. The income statement and balance sheet are inseparable, but they aren’t reported that way!

To properly interpret financial statements — the income statement, the balance sheet, and the statement of cash flows — you need to understand the links between the three statements. Unfortunately, the links aren’t obvious. Each financial statement appears on a separate page in the annual financial report, and nothing highlights connections between related items on the different statements. In reading financial reports, non-accountants — and even some accountants — usually overlook these connections.

Chapter 2 presents the income statement, and Chapters 3 to 5 cover the balance sheet. This chapter stitches these two financial statements together and marks the connections between sales revenue and expenses (in the income statement) and their corresponding assets and liabilities (in the balance sheet). Book V, Chapter 2 explains the connections between the amounts reported in the statement of cash flows and the other two financial statements.
Rejoining the Income Statement and Balance Sheet

When reading financial statements, you should “see,” in your mind's eye, lines connecting related amounts on the income statement and balance sheet. Because financial reports don’t offer a clue about these connections, actually drawing the lines, as done in the next section, may help you see the connections.

Seeing connections between accounts

Here’s a quick summary explaining the lines of connection between items on the income statement and balance sheet, as shown in Figure 6-1, starting from the top and working down:

- Making sales (and incurring expenses for making sales) requires a business to maintain a working cash balance.
- Making sales on credit generates accounts receivable.
- Selling products requires the business to carry an inventory (stock) of products. When inventory is sold, the inventory cost is posted to cost of goods sold — an expense account.
- Acquiring inventory items on credit generates accounts payable.
- Prepaying expenses (such as insurance premiums) creates an asset account balance.
- Depreciation expense is recorded for the use of fixed assets (long-term operating resources).
- Depreciation is also recorded in the accumulated depreciation contra account (instead of decreasing the fixed asset account). (For more about contra accounts, see Book IV, Chapter 3.)
- Amortization expense is recorded for limited-life intangible assets.
- Operating expenses is a broad category of costs encompassing selling, general, and administrative expenses:
  - Some of these operating costs are prepaid before the expense is recorded, and until the expense is recorded, the cost stays in the prepaid expenses asset account.
  - Some of these operating costs involve purchases on credit that generate accounts payable.
  - Some of these operating costs are from recording unpaid expenses in the accrued expenses payable liability.
Borrowing money on notes payable generates interest income for the lender and interest expense for the borrower.

Net income results in income tax expense. A portion of income tax expense for the year may be unpaid at year-end. The unpaid balance is recorded in the accrued expenses payable liability.

Earning net income increases retained earnings, which also increases the equity section of the balance sheet.

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**Using transactions to explain the connections**

Figure 6-1 provides a nice visual tool to connect balance sheet and income statement accounts. Keep that tool in mind as you consider some common accounting transactions, as explained in the following sections.

**Estimating a receivable balance at year-end**

Figure 6-1 shows how the sales account (in the income statement) is connected to accounts receivable in the balance sheet. An accountant can use historical trends in these two accounts to project an accounts receivable balance at year-end.
Suppose for the year just ended, a business reports $5,200,000 sales revenue, as shown in Figure 6-2. All sales are made on credit (to other businesses). Historically, the company’s year-end accounts receivable balance equals about five weeks of annual sales revenue; in other words, an amount equal to five weeks of annual sales revenue is not yet collected at the end of the year.

<table>
<thead>
<tr>
<th>Revenue</th>
<th>$5,200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Sold Expense</td>
<td>(3,120,000)</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>$2,080,000</td>
</tr>
<tr>
<td>Selling and General Expenses</td>
<td>(1,430,000)</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td>(160,000)</td>
</tr>
<tr>
<td>Operating Earnings</td>
<td>$490,000</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>(97,500)</td>
</tr>
<tr>
<td>Earnings Before Income Tax</td>
<td>$392,500</td>
</tr>
<tr>
<td>Income Tax Expense</td>
<td>(137,375)</td>
</tr>
<tr>
<td>Net Income</td>
<td>$255,125</td>
</tr>
</tbody>
</table>

Sales are level throughout the year. To determine the amount of accounts receivable to expect in the business’s year-end balance sheet, divide the $5,200,000 by 52 weeks to get $100,000 per week. After that, multiply by 5 weeks to get $500,000 of sales revenue in accounts receivable.

**Projecting ending inventory balance and accounts payable**

If historical trends allow you to project accounts receivable, you may also be able to forecast an ending balance in inventory and a year-end accounts payable figure.

Assume the same business has an annual cost of goods sold expense of $3,120,000 (refer to Figure 6-2), and its ending inventory balance historically equals about 13 weeks of annual sales. You can expect the amount of inventory in its year-end balance sheet to be: $3,120,000 ÷ 52 weeks = $60,000 average cost of goods sold per week × 13 weeks = $780,000.

Historically, the business’s accounts payable for inventory purchases equals about four weeks of annual cost of goods sold. *(Note: The accounts payable balance also includes an amount from purchases of supplies and services on credit, but this example concerns only the amount of accounts payable from inventory purchases.)* Here’s how you calculate the amount of accounts payable for inventory purchases you’d expect to see in its year-end balance sheet: $3,120,000 ÷ 52 weeks = $60,000 average cost of goods sold per week × 4 weeks = $240,000.
Accruing other year-end expenses

A company has other expenses in addition to cost of goods sold. You may be able to estimate the amount of other expenses that are accrued at year-end (see Book I, Chapter 3 for more about accruals).

Assume a business has annual operating expenses of $1,378,000 (which excludes depreciation, amortization, interest, and income tax expenses). Historically, its year-end balance of accrued expenses payable equals about six weeks of its annual operating expenses. Ignoring accrued interest payable and income tax payable, you’d expect the amount of accrued expenses payable in its year-end balance sheet to be: $1,378,000 ÷ 52 weeks = $26,500 average operating expenses per week × 6 weeks = $159,000.

For this same business, the average amount borrowed on notes payable during the year was $1,500,000. The average annual interest rate on these notes was 6.5 percent. To determine the amount of interest expense you’d find in the business’s income statement for the year: $1,500,000 average notes payable × 6.5 percent interest rate = $97,500.

Introducing Operating Ratios

One way to connect a balance sheet account to the income statement is to use a ratio. Accountants use a variety of ratios to measure financial performance. This section explains the use of operating ratios.

An operating ratio expresses the size of an asset or liability on the basis of sales revenue or an expense in the annual income statement. A normative operating ratio refers to how large an asset or liability should be relative to sales revenue or its related expense. You can use operating ratios to judge how a business is performing compared to its own past performance and to the performance of other companies in the same industry.

Comparing expected with actual operating ratios

To manage businesses, managers compare expected performance with actual results. As explained previously, a normative operating ratio is a benchmark. It’s a result that’s expected or planned. Your actual ratio may differ. The process of evaluating the difference between planned and actual results is called variance analysis.
Suppose a business, Company X, makes all its sales on credit and offers its customers one month to pay. Very few customers pay early, and some customers are chronic late-payers. To encourage repeat sales, the business tolerates some late-payers. As a result, its accounts receivable balance equals five weeks of annual sales revenue. Thus, its normative operating ratio of accounts receivable to annual sales revenue is 5 (weeks) divided by 52 weeks, which equals 9.615 percent of sales revenue.

The 5:52 operating ratio is the normative ratio between accounts receivable and annual sales revenue; it’s based on the sales credit policies of the business and how aggressive the business is in collecting receivables when customers don’t pay on time. When you consider actual results, minor deviations from the normative ratios are harmless. However, significant variances deserve serious management attention and follow-up. Check out Book VII, Chapter 4 for more on variances.

Generating balance sheet amounts by using ratios

Figure 6-2 presents the annual income statement of Company X. From the sales revenue and expenses reported in the income statement, you can determine the balances of several asset and liability accounts by using the normative operating ratios for the business.

Presenting ratios used for balance sheet calculations

Operating ratios can be expressed in terms of a number of weeks in a 52-week year or as percentages of annual sales revenue or annual expense. The normative operating ratios for the business whose income statement is presented in Figure 6-2 are as follows (expressed as weeks in a year):

- **Cash**: 7/52 or seven weeks of annual sales revenue
- **Accounts receivable**: 5/52 or five weeks of annual sales revenue
- **Inventory**: 13/52 or 13 weeks of annual cost of goods sold
- **Prepaid expenses**: 4/52 or four weeks of annual selling and general expenses
- **Accounts payable for inventory acquisitions**: 4/52 or four weeks of annual cost of goods sold
Accounts payable for supplies and services bought on credit: 4/52 or four weeks of annual selling and general expenses

Accrued expenses payable for operating expenses: 6/52 or six weeks of annual selling and general expenses

Calculating balance sheet amounts

Using the operating ratios for Company X, whose income statement appears in Figure 6-2, you can determine the balances for the assets and liabilities driven by its sales revenue and expenses. Take the following steps:

1. Determine the revenue or expense account to be used for the operating ratio.
2. Divide the revenue or expense dollar amount by 52 weeks to compute a weekly level of activity.
3. Multiply the fraction you calculated in Step 2 by the total dollar amount of revenue or expense. The result is the dollar amount in the balance sheet account.

Using the operating ratios presented in the earlier section, “Presenting ratios used for balance sheet calculations,” you can calculate dollar amounts for the balance sheet accounts:

**Assets**
- 7/52 × $5,200,000 sales revenue = $700,000 Cash
- 5/52 × $5,200,000 sales revenue = $500,000 Accounts receivable
- 13/52 × $3,120,000 cost of goods sold = $780,000 Inventory
- 4/52 × $1,430,000 selling and general expenses = $110,000 Prepaid expenses

**Liabilities**
- (4/52 × $3,120,000 cost of goods sold) + (4/52 × $1,430,000 selling and general expenses) = $350,000 Accounts payable
- 6/52 × $1,430,000 selling and general expenses = $165,000 Accrued expenses payable

These asset and liability balances are normative, not the actual balances that would be reported in the business’s balance sheet. See the section, “Comparing expected with actual operating ratios” earlier in this chapter for additional guidance.
Tackling other balance sheet issues

You may find the list of ratios to be straightforward. Calculating other amounts in the balance sheet requires more explanation. These balance sheet accounts aren’t typically derived by using an operating ratio. Consider these points:

✓ **Intangible assets**: The business doesn’t own intangible assets and therefore doesn’t have amortization expense. An intangible asset, such as a patent or trademark, isn’t usually derived by using an operating ratio.

✓ **Accrued interest payable**: This year-end liability typically is a relatively small balance compared with the major assets and liabilities of a business. Also, the expense that drives this balance isn’t an operating expense. The year-end balance of accrued interest payable depends on the terms for paying interest on the business’s debt.

✓ **Accrued income tax payable**: Income tax payable is similar to interest payable. This balance is typically smaller than the other amounts in the balance sheet. The expense that drives this balance is the income tax status of the business and its policies regarding making installment payments toward its annual income tax during the year. Income tax expense isn’t considered an operating expense.

✓ **Fixed assets**: The ratio of annual depreciation expense to the original cost of fixed assets can’t be normalized. Different fixed assets are depreciated over different estimated useful life spans. Some fixed assets are depreciated according to the straight-line method and others according to an accelerated depreciation method. (See Book III, Chapter 1 for more about these and other depreciation methods.)

In Figure 6-3, you can see a partial balance sheet that presents only the assets and liabilities determined in the preceding example. Later in the chapter, you fill in the remainder of this balance sheet, including fixed assets, long-term debt, and owners’ equity (see Figure 6-4, which is also a partial balance sheet). A complete balance sheet is displayed in Figure 6-5.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash $700,000</td>
<td>Accounts Payable $350,000</td>
</tr>
<tr>
<td>Accounts Receivable $500,000</td>
<td>Accrued Expenses Payable $165,000</td>
</tr>
<tr>
<td>Inventory $780,000</td>
<td></td>
</tr>
<tr>
<td>Prepaid Expenses $110,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total Current Assets</strong> $2,090,000</td>
<td></td>
</tr>
</tbody>
</table>
Adding Fixed Assets, Depreciation, and Owners’ Equity

One asset is obviously missing in the partial balance sheet shown in Figure 6-3: the fixed assets of the business. Fixed assets are usually physical, tangible assets you use to make money in your business (see Chapter 3). Virtually every business needs these long-lived economic resources to carry on its profit-making activities. This section adds fixed assets, depreciation, and owners’ equity to the balance sheet detail.

Dealing with fixed assets and depreciation

Unfortunately, you can’t use an operating ratio method to determine the balance sheet amount for fixed assets or depreciation expenses for two reasons:

- Different fixed assets are depreciated over different estimated useful life spans, using different depreciation methods (such as straight-line and accelerated), so you can’t simply divide total depreciation expense by the original costs of the fixed assets to compute a consistent ratio for expensing fixed assets.
- Generalizing about the cost of fixed assets relative to annual sales revenue is very difficult. As a ballpark estimate for this ratio, you could say that annual sales revenue of a business is generally between two to four times the total cost of its fixed assets, but this ratio varies widely from industry to industry and even among companies in the same industry.

The cost and accumulated depreciation of a business’s fixed assets depend on these factors:

- The type of depreciation method used
- When the assets were purchased (recently or many years ago)
- Whether the business leases or owns these assets
Fitting in fixed assets and depreciation to the balance sheet

Next, you see where fixed assets and depreciation fit into the balance sheet. Take a look at the partial balance sheet shown in Figure 6-4. Notice the following:

✓ The total current asset number ($2,090,000) is the same number you see in Figure 6-3.
✓ Figure 6-4 adds three numbers to the asset column. Note that these three numbers are below current assets. That means that the added numbers are long-term assets — assets that will be used over several years.
✓ Total assets in Figure 6-4 are $3,855,000. Note that this total doesn’t balance with total liabilities and equity ($350,000 + $165,000). In fact, the right column doesn’t list any equity. That issue is addressed in the “Tacking on owners’ equity” section later in the chapter.
✓ Book I, Chapter 1 explains the fundamental accounting equation, which dictates that Assets = Liabilities + Owners’ equity. Because that isn’t the case in Figure 6-4, this balance sheet is incomplete. You fill in the remaining balance sheet numbers as you move through the chapter.

Calculating depreciation

Now that you see where fixed assets and depreciation show up in the balance sheet, you can go over the calculation of depreciation. Book III, Chapter 1 covers depreciation in detail. This section gives a more general discussion.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities &amp; Owners’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$700,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>$500,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>$780,000</td>
</tr>
<tr>
<td>Prepaid Expenses</td>
<td>$110,000</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>$2,090,000</td>
</tr>
<tr>
<td>Property, Plant, &amp; Equipment</td>
<td>$2,450,000</td>
</tr>
<tr>
<td>Accumulated Depreciation</td>
<td>($685,000)</td>
</tr>
<tr>
<td>Cost Less Depreciation</td>
<td>$1,765,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$3,855,000</td>
</tr>
</tbody>
</table>

($3,855,000 total assets – $515,000 short-term operating liabilities) = $3,340,000 capital provided by debt and equity sources
Here are the accounts related to fixed assets in Figure 6-4:

$2,450,000 property, plant, and equipment – $685,000 accumulated
depreciation = $1,765,000 cost less depreciation

Accumulated depreciation is the total of all depreciation expense since the asset was purchased. Property, plant, and equipment is a common term for fixed assets.

If all the assets were bought on the same day, and no depreciation had been expensed, the total property, plant, and equipment balance would be ($2,450,000 + $685,000 = $3,135,000). As you see in the earlier section “Dealing with fixed assets and depreciation,” there is no single method for calculating depreciation. So, the $685,000 is a combination of different depreciation methods. Some methods recognize depreciation evenly each year; others record more depreciation expense in the early years. For this chapter, assume that the $685,000 accumulated depreciation is a combination of different methods.

**Tacking on owners’ equity**

At this point, you’ve seen all the components that make up the total assets (refer to Figure 6-4). In the right column of the figure, you see two liability numbers — but no data for owners’ equity.

You can use the fundamental accounting equation to calculate total equity. As explained in Book I, Chapter 1, the fundamental accounting equation looks like this:

\[
\text{Assets} = \text{Liabilities} + \text{Owners’ equity}
\]

or

\[
\text{Assets} - \text{Liabilities} = \text{Owners’ equity}
\]

Using the numbers from the balance sheet shown in Figure 6-4, you can calculate owners’ equity.

\[
$3,855,000 \text{ assets} - $515,000 \text{ liabilities} = $3,340,000 \text{ owners’ equity}
\]
Completing the Balance Sheet with Debt

If you own Company X, whose balance sheet is depicted in Figure 6-4, how should you raise the $3,340,000 in capital? You can debate this question until the cows come home, because no answer is right or best. The two basic sources of business capital are interest-bearing debt and equity (more precisely, owners’ equity). Company management decides what percent of capital is raised by using debt, and how much from equity.

Many businesses use debt for part of their capital needs. This practice makes sense as long as the business doesn’t overextend its debt obligations.

Going over the debt section of the balance sheet

Figure 6-5 presents the complete balance sheet for Company X, including its debt and owners’ equity accounts. These are the final pieces of the balance sheet puzzle (if you start at the beginning of this chapter, this is what you’re working toward).

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities &amp; Owners’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Accounts Payable</td>
</tr>
<tr>
<td>$700,000</td>
<td>$350,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>Accrued Expenses Payable</td>
</tr>
<tr>
<td>$500,000</td>
<td>$165,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>Short-term Notes Payable</td>
</tr>
<tr>
<td>$780,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>Prepaid Expenses</td>
<td>Total Current Liabilities</td>
</tr>
<tr>
<td>$110,000</td>
<td>$1,015,000</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td></td>
</tr>
<tr>
<td>$2,090,000</td>
<td></td>
</tr>
<tr>
<td>Property, Plant, &amp; Equipment</td>
<td>Long-term Notes Payable</td>
</tr>
<tr>
<td>$2,450,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Accumulated Depreciation</td>
<td></td>
</tr>
<tr>
<td>($685,000)</td>
<td></td>
</tr>
<tr>
<td>Cost Less Depreciation</td>
<td>Capital Stock (10,000 shares)</td>
</tr>
<tr>
<td>$1,765,000</td>
<td>$750,000</td>
</tr>
<tr>
<td></td>
<td>Retained Earnings</td>
</tr>
<tr>
<td></td>
<td>$1,090,000</td>
</tr>
<tr>
<td></td>
<td>Total Owners’ Equity</td>
</tr>
<tr>
<td></td>
<td>$1,840,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>Total Liabilities &amp; Owners’ Equity</td>
</tr>
<tr>
<td>$3,855,000</td>
<td>$3,855,000</td>
</tr>
</tbody>
</table>
The business has borrowed $500,000 on short-term notes payable (due in one year or less) and $1,000,000 on long-term notes payable (due in more than one year). Interest rates and other relevant details of debt contracts are disclosed in the footnotes to the financial statements. For example, debt covenants (conditions prescribed by the debt contract) may limit the amount of cash dividends the business can pay to its shareowners. (See Book V, Chapter 4 for a discussion of footnotes.)

**Tying in the new equity section**

Note that Figure 6-5 displays a more detailed equity section than the simple equity total presented in Figure 6-4. The following sections describe the sources of these details.

**Bringing up common stock**

The shareowners in Company X invested $750,000, for which they received 10,000 shares of capital stock. Typically, a footnote is necessary to fully explain the ownership structure of a business corporation.

As a general rule, private business corporations don’t have to disclose owners — the owners of their capital stock. In contrast, public business corporations are subject to many disclosure rules regarding the stock ownership, stock options, and other stock-based compensation benefits of their officers and top-level managers. Stroll over to Chapter 5 for more on equity topics.

**Addressing retained earnings**

Retained earnings represent the sum of all net income earned by the company since inception, less all dividends paid to shareholders since the business started. For more, head over to Chapter 2.

Over the years, the business in this scenario retained $1,090,000 of its yearly profits (see retained earnings in Figure 6-5). Two details aren’t explained in the retained earnings line item:

- You can’t determine how much of the cumulative total is from any single year’s net income.
- Retained earnings don’t reveal how much of the company’s $255,125 profit for the year just ended (see Figure 6-2) was distributed as a cash dividend to shareowners during the year.

One purpose of the statement of cash flows (explained in Book V, Chapter 2) is to report the cash dividends paid from net income to shareowners during the year.