# chapter 2

# Consolidation of Financial Information

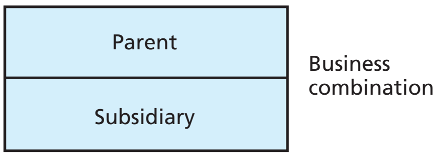
Financial statements published and distributed to owners, creditors, and other interested parties appear to report the operations and financial position of a single company. In reality, these statements frequently represent a number of separate organizations tied together through common control (a *business combination*). When financial statements represent more than one corporation, we refer to them as *consolidated financial statements*.

Consolidated financial statements are typical in today's business world. Most major organizations, and many smaller ones, hold control over an array of organizations. For example, from 2000 through 2011, Cisco Systems, Inc., reported more than 70 business acquisitions that now are consolidated in its financial reports. PepsiCo, Inc., as another example, annually consolidates data from a multitude of companies into a single set of financial statements. By gaining control over these companies (often known as *subsidiaries*)—which include among others Pepsi Beverages Company, Tropicana Products, and Quaker Oats—PepsiCo (the *parent*) forms a single business combination and single reporting entity.

The consolidation of financial information as exemplified by Cisco Systems and PepsiCo is one of the most complex procedures in all of accounting. Comprehending this process completely requires understanding the theoretical logic that underlies the creation of a business combination. Furthermore, a variety of procedural steps must be mastered to ensure that proper accounting is achieved for this single reporting entity. The following coverage introduces both of these aspects of the consolidation process.

The FASB *Accounting Standards Codification* (ASC) contains the current accounting standards for business combinations under the following topics:

- Business Combinations (Topic 805).
- Consolidation (Topic 810).




## Learning Objectives

**After studying this chapter, you should be able to:**

- **LO1** Discuss the motives for business combinations.
- **LO2** Recognize when consolidation of financial information into a single set of statements is necessary.
- **LO3** Define the term *business combination* and differentiate across various forms of business combinations.
- **LO4** Describe the valuation principles of the acquisition method.
- **LO5** Determine the total fair value of the consideration transferred for an acquisition and allocate that fair value to specific subsidiary assets acquired (including goodwill) and liabilities assumed or to a gain on bargain purchase.
- **LO6** Prepare the journal entry to consolidate the accounts of a subsidiary if dissolution takes place.
- **LO7** Prepare a worksheet to consolidate the accounts of two companies that form a business combination if dissolution does not take place.
- **LO8** Describe the two criteria for recognizing intangible assets apart from goodwill in a business combination.
- **LO9** Appendix: Identify the general characteristics of the legacy purchase and pooling of interest methods of accounting for past business combinations. Understand the effects that persist today in financial statements from the use of these legacy methods.

The Business Combinations topic provides guidance on the accounting and reporting for business combinations using the *acquisition method*. The acquisition method embraces a *fair value* measurement attribute. Adoption of this attribute reflects the FASB's increasing emphasis on fair value for measuring and assessing business activity. In the past, financial reporting standards embraced the cost principle to measure and report the financial effects of business combinations. This fundamental change from a cost-based to a fair-value model has transformed the way we account for and report business combinations in our society.

The Consolidation topic provides guidance on circumstances that require a firm to prepare consolidated financial reports and various other related reporting issues. Basically, consolidated financial reports must be prepared whenever one firm has a controlling financial interest in another. Although ownership of a majority voting interest is the usual condition for a controlling financial interest, the power to control may also exist with a lesser percentage of ownership through governance contracts, leases, or agreement with other stockholders.[1]

In this chapter, we first present expansion through corporate takeovers and present an overview of the consolidation process. Then we present the specifics of the acquisition method of accounting for business combinations where the acquirer obtains complete ownership of another firm. Later, beginning in Chapter 4, we introduce coverage of acquisitions with less than complete ownership.

Financial reporting for business combinations has experienced many changes over the past decade. Prior to the acquisition method requirement, accounting standards allowed either the purchase method or the earlier pooling of interests method of accounting for business combinations. Neither of these methods is now permitted for reporting the formation of new business combinations. However, because of the prospective application of the acquisition method beginning in 2009, legacy effects of these methods remain in many of today's financial statements. Therefore, an appendix to this chapter provides a review of the purchase and pooling of interests methods.

# Expansion through Corporate Takeovers

## Reasons for Firms to Combine

**LO1**

Discuss the motives for business combinations.

A frequent economic phenomenon is the combining of two or more businesses into a single entity under common management and control. During recent decades, the United States and the rest of the world have experienced an enormous number of corporate mergers and takeovers, transactions in which one company gains control over another. According to Thomson Reuters, the number of mergers and acquisitions globally in 2010 exceeded 40,000, with a total value of more than $2.4 trillion. Of these deals more than $773 billion involved a U.S. firm. As indicated by Exhibit 2.1, the magnitude of recent combinations continues to be large.

As with any other economic activity, business combinations can be part of an overall managerial strategy to maximize shareholder value. Shareholders—the owners of the firm—hire managers to direct resources so that the firm's value grows over time. In this way, owners receive a return on their investment. Successful firms receive substantial benefits through enhanced share value. Importantly, the managers of successful firms also receive substantial benefits in salaries, especially if their compensation contracts are partly based on stock market performance of the firm's shares.

If the goal of business activity is to maximize the firm's value, in what ways do business combinations help achieve that goal? Clearly, the business community is moving rapidly

[1] We discuss entities controlled through contractual means (known as variable interest entities) in Chapter 6.

**EXHIBIT 2.1**
**Recent Notable Business Combinations**

| Acquirer | Target | Deal Value |
|---|---|---|
| Merck | Schering-Plough | $41.1 billion |
| Comcast | NBC Universal | 24.1 billion |
| Century Link | Qwest Communications | 22.1 billion |
| MetLife | American Life Insurance | 16.0 billion |
| The Coca-Cola Company | Coca-Cola Enterprises | 13.1 billion |
| Intel | McAfee | 7.7 billion |
| Oracle | Sun Microsystems | 7.4 billion |
| United Airlines | Continental Airlines | 7.0 billion |
| Walmart | Massmart | 2.3 billion |
| Nike | Umbro | 565 million |

toward business combinations as a strategy for growth and competitiveness. Size and scale are obviously becoming critical as firms compete in today's markets. If large firms can be more efficient in delivering goods and services, they gain a competitive advantage and become more profitable for the owners. Increases in scale can produce larger profits from enhanced sales volume despite smaller (more competitive) profit margins. For example, if a combination can integrate successive stages of production and distribution of products, coordinating raw material purchases, manufacturing, and delivery can result in substantial savings. As an example, Oracle's acquisition of Sun Microsystems enables Oracle to closely integrate its software product lines with hardware specifications. The acquisition allows Oracle to offer complete systems made of chips, computers, storage devices, and software with an aim toward increased efficiency and quality.[2] Other cost savings resulting from elimination of duplicate efforts, such as data processing and marketing, can make a single entity more profitable than the separate parent and subsidiary had been in the past.

Although no two business combinations are exactly alike, many share one or more of the following characteristics that potentially enhance profitability:

- Vertical integration of one firm's output and another firm's distribution or further processing.
- Cost savings through elimination of duplicate facilities and staff.
- Quick entry for new and existing products into domestic and foreign markets.
- Economies of scale allowing greater efficiency and negotiating power.
- The ability to access financing at more attractive rates. As firm size increases, negotiating power with financial institutions can increase also.
- Diversification of business risk.

Business combinations also occur because many firms seek the continuous expansion of their organizations, often into diversified areas. Acquiring control over a vast network of different businesses has been a strategy utilized by a number of companies (sometimes known as *conglomerates*) for decades. Entry into new industries is immediately available to the parent without having to construct facilities, develop products, train management, or create market recognition. Many corporations have successfully employed this strategy to produce huge, highly profitable organizations. Unfortunately, others discovered that the task of managing a widely diverse group of businesses can be a costly learning experience. Even combinations that are designed to take advantage of operating synergies and cost savings will fail if the integration is not managed carefully.

Overall, the primary motivations for many business combinations can be traced to an increasingly competitive environment. Three recent business combinations provide interesting examples of distinct motivations to combine: United Airlines and Continental Airlines, Merck and Schering-Plough, and Nike and Umbro. Each is discussed briefly in turn.

[2] Ben Worthen, Cari Tuna, and Justin Scheck, "Companies More Prone to Go 'Vertical,'" *The Wall Street Journal,* November 30, 2009.

## United Airlines and Continental Airlines

On September 17, 2010, shareholders approved the business combination of U.S. airline giants United and Continental. The agreement created United Continental Holdings, Inc., which replaced Delta as the world's largest airline. The deal, valued at $7 billion, was completed through an exchange of stock. United shareholders received approximately 55 percent of the equity of the combined company and Continental shareholders received approximately 45 percent. The airline maintained the "United" name while the new logo combined the features of each company's design.[3]

At the time of the merger, United and Continental were the third and fourth largest airlines in the United States, respectively, each servicing over 2,700 daily flights to more than 230 destinations around the world. Despite the vast number of routes and destinations, there was minimal overlap between these two airlines. Domestically, the companies did not share a hub in any city, which made for very few shared routes. Outside the United States, the airlines had no overlap at all. Continental had an extensive network throughout Latin America and Europe, while United was stronger in Asia.[4] The surprising absence of duplicate routes made the two companies a great fit, according to United's CEO.[5]

The merger is expected to generate annual net synergies of $1.0 to $1.2 billion starting in 2013—composed of $800 to $900 million in estimated additional revenue, and $200 to $300 million in cost reductions. The combined network of hubs and destinations is expected to generate revenue from new international routes, while providing improved options for customers on existing routes. The cost savings are expected to come through streamlining of corporate functions and elimination of duplicate jobs and marketing expenses. Additionally, the combined fleet of airplanes should allow the company to operate its routes more efficiently. With a greater number of planes and plane sizes to select from, the new company should be able to better match demand and reduce the number of empty seats on its flights.[6]

The erratic circumstances faced by the airline industry in 2010 also likely served as a motivation for the merger. Both companies had reported significant losses in 2009 and were rebounding from a decade of terrorism fears, volatile oil prices, and the 2008 economic crisis. Faced with uncertain industry conditions, United and Continental determined that they could better handle these challenges as a combined entity.

## Merck and Schering-Plough

On November 3, 2009, U.S. pharmaceutical firm Merck completed its acquisition of rival Schering-Plough in a deal valued at $41.1 billion. For each share held, Schering-Plough shareholders received a combination of cash and 0.5767 shares in the new company, giving them an approximate 32 percent stake. The deal makes Merck the world's second largest pharmaceutical firm (behind Pfizer), with annual sales of $46.9 billion in 140 countries.[7]

The acquisition was part of a general movement toward consolidation in the drug industry. Large pharmaceutical firms that had traditionally centered their businesses on drug development were looking to diversify as heightened FDA regulations, patent expirations, and the ongoing recession all threatened their core earnings.[8] To protect against these risks, larger firms in the industry like Pfizer and Roche turned to acquisitions to expand their portfolios. Pfizer acquired Wyeth for $68 billion in January 2009, and Swiss pharmaceutical giant Roche followed suit by purchasing Genentech for $48.6 billion in March 2009.

Like its rivals Pfizer and Roche, Merck was in a position to benefit significantly from an expanded product portfolio, facing several patent expirations on key drugs such as Singulair and Cozaar. Schering-Plough added nine drugs in the later stages of FDA approval to Merck's portfolio, doubling Merck's current pipeline. Schering-Plough also

[3] United Airlines press release, March 3, 2010.

[4] Surojit Chatterjee, "Continental merger to create synergies, cut costs," *International Business Times,* May 3, 2010.

[5] "UAL-Continental Shareholders Approve Merger," Reuters, September 17, 2010.

[6] Susan Carey, "UAL-Continental Merger Takes Off," *The Wall Street Journal,* September 18, 2010.

[7] Jonathan D. Rockoff, "Merck to Buy Rival for $41 Billion," *The Wall Street Journal,* March 10, 2009.

[8] Natasha Singer, "Merck to Buy Schering-Plough for $41.1 Billion," *The New York Times,* March 10, 2009.

provided Merck with established consumer products like Coppertone and Dr. Scholl's, thus reducing its reliance on drug production.[9] Along with the new sources of revenue from the acquisition, Merck expects significant cost savings. Analysts predicted annual cost synergies of $3.5 billion starting in 2012, resulting primarily from a 15 percent reduction in the combined companies' workforce.[10]

### Nike and Umbro

On March 4, 2008, Nike completed its acquisition of Umbro, an England-based sportswear supplier, for GBP 285 million (approximately $565 million), thus increasing its presence in the international soccer market. Under the terms of the deal, Umbro maintained its brand name and headquarters in England while operating as a wholly owned subsidiary of Nike.[11] Umbro had a strong relationship with Europe's Football Association and supplied soccer equipment to large-market teams throughout Northern Europe. Umbro also had strong international market exposure, with sales in 90 countries.[12]

The deal was attractive from Umbro's standpoint as well. To Umbro, the buyout offered an opportunity to grow its brand by leveraging Nike's unparalleled global resources. Umbro hoped to achieve similar results as U.S. basketball brand Converse had when it was bought out by Nike in 2003. With the help of Nike's brand management strategies, Converse was able to rebound from near bankruptcy to a position of strength, achieving a growth rate of 22 percent by 2007. Given Nike's position atop the sports apparel industry and track record of successfully growing the brands of smaller acquired companies, Umbro gladly accepted the takeover bid.[13]

The timing of the deal proved to be less than ideal for Nike and demonstrates the risks inherent in any business combination, despite the promise, excitement, and optimistic projections surrounding the acquisition. The 2008 financial crisis hit almost immediately after the acquisition and sales in all of Nike's sectors suffered as a result. In its third quarter 2009, Nike reduced its carrying amount of Umbro by over one-third, recognizing a $199.3 million goodwill impairment charge. The impairment recognized the decline in Umbro's fair value in the brief time since the acquisition.

## The Consolidation Process

**LO2**

Recognize when consolidation of financial information into a single set of statements is necessary.

*The consolidation of financial information into a single set of statements becomes necessary when the business combination of two or more companies creates a single economic entity.* As stated in FASB ASC (para. 810-10-10-1): "There is a presumption that consolidated financial statements are more meaningful than separate financial statements and that they are usually necessary for a fair presentation when one of the entities in the consolidated group directly or indirectly has a controlling financial interest in the other entities."

Thus, in producing financial statements for external distribution, the reporting entity transcends the boundaries of incorporation to encompass (i.e., consolidate) all companies for which control is present. Even though the various companies may retain their legal identities as separate corporations, the resulting information is more meaningful to outside parties when consolidated into a single set of financial statements.

To explain the process of preparing consolidated financial statements for a business combination, we address three questions:

- How is a business combination formed?
- What constitutes a controlling financial interest?
- How is the consolidation process carried out?

[9] Shannon Pettypiece, "Merck to Buy Schering-Plough for $41 Billion," *Bloomberg,* March 9, 2009.

[10] Hiedi N. Moore, "Merck & Schering-Plough: Analysts See a Win-Win Deal for Holders," *The Wall Street Journal,* March 9, 2009.

[11] Nike Press Release, December 21, 2007.

[12] Vidya Ram, "Goal! Nike Buys Umbro," *Forbes,* October 23, 2007.

[13] John Hoke, "Converse's All-Star Image," *Bloomberg Businessweek,* April 25, 2008.

LO3

Define the term *business combination* and differentiate across various forms of business combinations.

## Business Combinations—Creating a Single Economic Entity

A business combination refers to a transaction or other event in which an acquirer obtains control over one or more businesses.

Business combinations are formed by a wide variety of transactions or events with various formats. For example, each of the following is identified as a business combination although it differs widely in legal form. In every case, two or more enterprises are being united into a single economic entity so that consolidated financial statements are required.

1. One company obtains the assets, and often the liabilities, of another company in exchange for cash, other assets, liabilities, stock, or a combination of these. The second organization normally dissolves itself as a legal corporation. Thus, only the acquiring company remains in existence, having absorbed the acquired net assets directly into its own operations. Any business combination in which only one of the original companies continues to exist is referred to in legal terms as a *statutory merger*.

2. One company obtains all of the capital stock of another in exchange for cash, other assets, liabilities, stock, or a combination of these. After gaining control, the acquiring company can decide to transfer all assets and liabilities to its own financial records with the second company being dissolved as a separate corporation.[14] The business combination is, once again, a statutory merger because only one of the companies maintains legal existence. This statutory merger, however, is achieved by obtaining equity securities rather than by buying the target company's assets. Because stock is obtained, the acquiring company must gain 100 percent control of all shares before legally dissolving the subsidiary.

3. Two or more companies transfer either their assets or their capital stock to a newly formed corporation. Both original companies are dissolved, leaving only the new organization in existence. A business combination effected in this manner is a *statutory consolidation*. The use here of the term *consolidation* should not be confused with the accounting meaning of that same word. In accounting, *consolidation* refers to the mechanical process of bringing together the financial records of two or more organizations to form a single set of statements. A statutory consolidation denotes a specific type of business combination that has united two or more existing companies under the ownership of a newly created company.

4. One company achieves legal control over another by acquiring a majority of voting stock. *Although control is present, no dissolution takes place; each company remains in existence as an incorporated operation*. NBC Universal, as an example, continues to retain its legal status as a corporation after being acquired by Comcast Corporation. Separate incorporation is frequently preferred to take full advantage of any intangible benefits accruing to the acquired company as a going concern. Better utilization of such factors as licenses, trade names, employee loyalty, and the company's reputation can be possible when the subsidiary maintains its own legal identity. Moreover, maintaining an independent information system for a subsidiary often enhances its market value for an eventual sale or initial public offering as a stand-alone entity.

Because the asset and liability account balances are not physically combined as in statutory mergers and consolidations, each company continues to maintain an independent accounting system. To reflect the combination, the acquiring company enters the takeover transaction into its own records by establishing a single investment asset account. However, the newly acquired subsidiary omits any recording of this event; its stock is simply transferred to the parent from the subsidiary's shareholders. Thus, the subsidiary's financial records are not directly affected by a takeover.

5. A final vehicle for control of another business entity does not involve a majority voting stock interest or direct ownership of assets. Control of a variable interest entity (VIE)

[14] Although the acquired company has been legally dissolved, it frequently continues to operate as a separate division within the surviving company's organization.

**EXHIBIT 2.2**
**Business Combinations**

| Type of Combination | Action of Acquiring Company | Action of Acquired Company |
|---|---|---|
| Statutory merger through asset acquisition. | Acquires assets and often liabilities. | Dissolves and goes out of business. |
| Statutory merger through capital stock acquisition. | Acquires all stock and then transfers assets and liabilities to its own books. | Dissolves as a separate corporation, often remaining as a division of the acquiring company. |
| Statutory consolidation through capital stock or asset acquisition. | Newly created to receive assets or capital stock of original companies. | Original companies may dissolve while remaining as separate divisions of newly created company. |
| Acquisition of more than 50 percent of the voting stock. | Acquires stock that is recorded as an investment; controls decision making of acquired company. | Remains in existence as legal corporation, although now a subsidiary of the acquiring company. |
| Control through ownership of variable interests (see Chapter 6). Risks and rewards often flow to a sponsoring firm rather than the equity holders. | Establishes contractual control over a variable interest entity to engage in a specific activity. | Remains in existence as a separate legal entity—often a trust or partnership. |

by design often does not rest with its equity holders. Instead, control is exercised through contractual arrangements with a sponsoring firm that, although it technically may not own the VIE, becomes its "primary beneficiary" with rights to its residual profits. These contracts can take the form of leases, participation rights, guarantees, or other interests. Past use of VIEs was criticized because these structures provided sponsoring firms with off-balance sheet financing and sometimes questionable profits on sales to their VIEs. Prior to 2004, many sponsoring entities of VIEs did not technically meet the definition of a controlling financial interest (i.e., majority voting stock ownership) and thus did not consolidate their VIEs. Current GAAP, however, expands the notion of control and thus requires consolidation of VIEs by their primary beneficiary.

As you can see, business combinations are created in many distinct forms. Because the specific format is a critical factor in the subsequent consolidation of financial information, Exhibit 2.2 provides an overview of the various combinations.

## Control—An Elusive Quality

The definition of control is central to determining when two or more entities become one economic entity and therefore one reporting entity. Control of one firm by another is most often achieved through the acquisition of voting shares. By exercising majority voting power, one firm can literally dictate the financing and operating activities of another firm. Accordingly, U.S. GAAP traditionally has pointed to a majority voting share ownership as a controlling financial interest that requires consolidation.

The FASB continues its efforts to develop comprehensive guidance on accounting for affiliations between entities, including a definition of control. The following control model has been proposed by the FASB:[15]

> *The Control Model:* A reporting entity has the power to direct the activities of another entity when it has the current ability to direct the activities of the entity that significantly affect the entity's returns.

[15] FASB, Consolidation: Policy and Procedures—Joint Project of the IASB and FASB, March 15, 2011, Project Update.

Note that this proposed definition focuses on the "power to direct" the activities of another entity. The power criterion defines control both operationally through majority voting shares and conceptually through contractual rights. The definition is thus much more expansive, and it explicitly recognizes that voting interests provide but one among several potential vehicles for controlling another firm. As the complexity of arrangements between companies increases, defining when one firm controls another firm remains a continuing challenge for financial reporting standard setters.

Nonetheless, the primary way U.S. firms exercise control remains through the acquisition of a majority of another firm's voting shares. Consequently, in this text, we largely focus on control relationships established through voting interests. In Chapter 6, however, we expand our coverage to include the consolidation of firms where control is exercised through variable interests.

## Consolidation of Financial Information

When one company gains control over another, a business combination is established. Financial data gathered from the individual companies are then brought together to form a single set of consolidated statements. Although this process can be complicated, the objectives of a consolidation are straightforward—to report the financial position, results of operations, and cash flows for the combined entity. As a part of this process, reciprocal accounts and intra-entity transactions must be adjusted or eliminated to ensure that all reported balances truly represent the single entity.

Applicable consolidation procedures vary significantly depending on the legal format employed in creating a business combination. *For a statutory merger or a statutory consolidation, when the acquired company (or companies) is (are) legally dissolved, only one accounting consolidation ever occurs*. On the date of the combination, the surviving company simply records the various account balances from each of the dissolving companies. Because the accounts are brought together permanently in this manner, no further consolidation procedures are necessary. After the balances have been transferred to the survivor, the financial records of the acquired companies are closed out as part of the dissolution.

Conversely, in a combination when all companies retain incorporation, a different set of consolidation procedures is appropriate. Because the companies preserve their legal identities, each continues to maintain its own independent accounting records. *Thus, no permanent consolidation of the account balances is ever made. Rather, the consolidation process must be carried out anew each time the reporting entity prepares financial statements for external reporting purposes*.

When separate record-keeping is maintained, the accountant faces a unique problem: The financial information must be brought together periodically without disturbing the accounting systems of the individual companies. Because these consolidations are produced outside the financial records, worksheets traditionally are used to expedite the process. Worksheets are a part of neither company's accounting records nor the resulting financial statements. Instead, they are an efficient structure for organizing and adjusting the information used to prepare externally reported consolidated statements.

Consequently, the legal characteristics of a business combination have a significant impact on the approach taken to the consolidation process:

**What is to be consolidated?**

- If dissolution takes place, appropriate account balances are physically consolidated in the surviving company's financial records.
- If separate incorporation is maintained, only the financial statement information (not the actual records) is consolidated.

**When does the consolidation take place?**

- If dissolution takes place, a permanent consolidation occurs at the date of the combination.

- If separate incorporation is maintained, the consolidation process is carried out at regular intervals whenever financial statements are to be prepared.

**How are the accounting records affected?**

- If dissolution takes place, the surviving company's accounts are adjusted to include appropriate balances of the dissolved company. The dissolved company's records are closed out.
- If separate incorporation is maintained, each company continues to retain its own records. Using worksheets facilitates the periodic consolidation process without disturbing the individual accounting systems.

# Financial Reporting for Business Combinations

LO4

Describe the valuation principles of the acquisition method.

## The Acquisition Method

Current financial reporting standards require the acquisition method to account for business combinations. Applying the acquisition method typically involves recognizing and measuring

- the consideration transferred for the acquired business and any noncontrolling interest.
- the separately identified assets acquired and liabilities assumed.
- goodwill, or a gain from a bargain purchase.

Fair value is the measurement attribute used to recognize these and other aspects of a business combination. Therefore, prior to examining specific applications of the acquisition method, we present a brief discussion of the fair-value concept as applied to business combinations.

## Consideration Transferred for the Acquired Business

The fair value of the consideration transferred to acquire a business from its former owners is the starting point in valuing and recording a business combination. In describing the acquisition method, the FASB ASC states

> The consideration transferred in a business combination shall be measured at fair value, which shall be calculated as the sum of the acquisition-date fair values of the assets transferred by the acquirer, the liabilities incurred by the acquirer to former owners of the acquiree, and the equity interests issued by the acquirer. (FASB ASC para. 805-30-30-7)

The acquisition method thus embraces the fair value of the consideration transferred in measuring the acquirer's interest in the acquired business.[16] Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Thus, market values are often the best source of evidence of the fair value of consideration transferred in a business combination. Items of consideration transferred can include cash, securities (either stocks or debt), and other property or obligations.

Contingent consideration, when present in a business combination, is an additional element of consideration transferred. Contingent consideration can be useful in negotiations when two parties disagree with each other's estimates of future cash flows for the target firm or when valuation uncertainty is high.[17] Acquisition agreements often contain provisions to pay former owners upon achievement of specified future performance measures. For example, GT Solar International disclosed in its 2011 annual report its

[16] An occasional exception occurs in a bargain purchase in which the fair value of the net assets acquired serves as the valuation basis for the acquired firm. Other exceptions include situations in which control is achieved without a transfer of consideration or determination of the fair value of the consideration transferred is less reliable than other measures of the business fair value.

[17] Cain, Denis, and Denis, 2011. "Earnouts: A study of financial contracting in acquisition agreements," *Journal of Accounting and Economics* 51, 151–170.

acquisition of 100 percent of the outstanding shares of common stock of privately held Crystal Systems. GT Solar International's agreement with the former owners of Crystal Systems provided for

> a potential additional $18.7 million of contingent consideration based on the attainment of certain financial and technical targets through the period ending March 31, 2012. The fair value of the contingent consideration was $12.5 million at the date of acquisition.

GT Solar International included the fair value of the contingent consideration as a component of the fair value of the consideration transferred for Crystal Systems.

The acquisition method treats contingent consideration obligations as a negotiated component of the fair value of the consideration transferred. Determining the fair value of contingent future payments typically involves probability and risk assessments based on circumstances existing on the acquisition date.

In Chapters 2 and 3, we focus exclusively on combinations that result in complete ownership by the acquirer (i.e., no noncontrolling interest in the acquired firm). As described in Chapter 4, in a less-than-100-percent acquisition, the noncontrolling interest also is measured initially at its fair value. Then, the combined fair values of the parent's consideration transferred and the noncontrolling interest comprise the valuation basis for the acquired firm in consolidated financial reports.

## Assets Acquired and Liabilities Assumed

A fundamental principle of the acquisition method is that an acquirer must identify the assets acquired and the liabilities assumed in the business combination. Further, once these have been identified, the acquirer measures the assets acquired and the liabilities assumed at their acquisition-date fair values, with only a few exceptions.[18] As demonstrated in subsequent examples, the principle of recognizing and measuring assets acquired and liabilities assumed at fair value applies across all business combinations.

Fair value, as defined by GAAP, is the price that would be received from selling an asset or paid for transferring a liability in an orderly transaction between market participants at the measurement date. However, determining the acquisition-date fair values of the individual assets acquired and liabilities assumed can prove challenging. To estimate fair values, three sets of valuation techniques are typically employed: the market approach, the income approach, and the cost approach.

***Market Approach*** The market approach recognizes that fair values can be estimated using other market transactions involving similar assets or liabilities. In a business combination, assets acquired such as marketable securities and some tangible assets may have established markets that can provide comparable market values for estimating fair values. Similarly, the fair values of many liabilities assumed can be determined by reference to market trades for similar debt instruments.

***Income Approach*** The income approach relies on multiperiod estimates of future cash flows projected to be generated by an asset. These projected cash flows are then discounted at a required rate of return that reflects the time value of money and the risk associated with realizing the future estimated cash flows. The multiperiod income approach is often useful for obtaining fair-value estimates of intangible assets and acquired in-process research and development.

***Cost Approach*** The cost approach estimates fair values by reference to the current cost of replacing an asset with another of comparable economic utility. Used assets can present a particular valuation challenge if active markets only exist for newer versions of the asset. Thus, the cost to replace a particular asset reflects both its estimated replacement cost and the effects of obsolescence. In this sense obsolescence is meant to capture economic declines in value including both technological obsolescence and physical deterioration. The cost approach is widely used to estimate fair values for many tangible assets acquired in business combinations such as property, plant, and equipment.

[18] Exceptions to the fair-value measurement principle include deferred taxes, certain employee benefits, indemnification assets, reacquired rights, share-based awards, and assets held for sale.

### Goodwill, and Gains on Bargain Purchases

In a business combination, the parent records both the consideration transferred and the individual amounts of the identified assets acquired and liabilities assumed at their acquisition-date fair values. However, in many cases the respective collective amounts of these two values will differ. Current GAAP requires an asymmetrical accounting for the difference—in one situation the acquirer recognizes an asset, in the other a gain.

For combinations resulting in complete ownership by the acquirer, the acquirer recognizes the asset goodwill as the excess of the consideration transferred over the collective fair values of the net identified assets acquired and liabilities assumed. Goodwill is defined as an asset representing the future economic benefits arising in a business combination that are not individually identified and separately recognized. Essentially, goodwill embodies the expected synergies that the acquirer expects to achieve through control of the acquired firm's assets.

Conversely, if the collective fair value of the net identified assets acquired and liabilities assumed exceeds the consideration transferred, the acquirer recognizes a "gain on bargain purchase." In such cases, the fair value of the net assets acquired replaces the consideration transferred as the valuation basis for the acquired firm. Bargain purchases can result from business divestitures forced by regulatory agencies or other types of distress sales. Before recognizing a gain on bargain purchase, however, the acquirer must reassess whether it has correctly identified and measured all of the acquired assets and liabilities. Illustrations and further discussions of goodwill and of bargain purchase gains follow in the next section.

## Procedures for Consolidating Financial Information

Legal as well as accounting distinctions divide business combinations into several separate categories. To facilitate the introduction of consolidation accounting, we present the various procedures utilized in this process according to the following sequence:

1. Acquisition method when dissolution takes place.
2. Acquisition method when separate incorporation is maintained.

As a basis for this coverage, assume that Smallport Company owns computers, telecommunications equipment, and software that allow its customers to implement billing and ordering systems through the Internet. Although the computers and equipment have a book value of $400,000, they have a current fair value of $600,000. The software developed by Smallport has only a $100,000 value on its books; the costs of developing it were primarily expensed as incurred. The software's observable fair value, however, is $1,200,000. Similarly, although not reflected in its financial records, Smallport has several large ongoing customer contracts. BigNet estimates the fair value of the customer contracts at $700,000. Smallport also has a $200,000 note payable incurred to help finance the software development. Because interest rates are currently low, this liability (incurred at a higher rate of interest) has a present value of $250,000.

BigNet Company owns Internet communications equipment and other business software applications that complement those of Smallport. BigNet wants to expand its operations and plans to acquire Smallport on December 31. Exhibit 2.3 lists the accounts reported by both BigNet and Smallport on that date. In addition, the estimated fair values of Smallport's assets and liabilities are included.

Smallport's net assets (assets less liabilities) have a book value of $600,000 but a fair value of $2,550,000. Only the assets and liabilities have been appraised here; the capital stock, retained earnings, dividend, revenue, and expense accounts represent historical measurements rather than any type of future values. Although these equity and income accounts can give some indication of the organization's overall worth, they are not property and thus not transferred in the combination.

**EXHIBIT 2.3** **Basic Consolidation Information**

| | BigNet Company Book Values December 31 | Smallport Company Book Values December 31 | Smallport Company Fair Values December 31 |
|---|---|---|---|
| Current assets | $ 1,100,000 | $ 300,000 | $ 300,000 |
| Computers and equipment (net) | 1,300,000 | 400,000 | 600,000 |
| Capitalized software (net) | 500,000 | 100,000 | 1,200,000 |
| Customer contracts | –0– | –0– | 700,000 |
| Notes payable | (300,000) | (200,000) | (250,000) |
| **Net assets** | **$ 2,600,000** | **$ 600,000** | **$2,550,000** |
| Common stock—$10 par value | $(1,600,000) | | |
| Common stock—$5 par value | | $(100,000) | |
| Additional paid-in capital | (40,000) | (20,000) | |
| Retained earnings, 1/1 | (870,000) | (370,000) | |
| Dividends paid | 110,000 | 10,000 | |
| Revenues | (1,000,000) | (500,000) | |
| Expenses | 800,000 | 380,000 | |
| **Owners' equity 12/31** | **$(2,600,000)** | **$(600,000)** | |
| Retained earnings, 12/31 | (960,000)* | (480,000)* | |

*Retained earnings balance after closing out revenues, expenses, and dividends paid.
Note: Parentheses indicate a credit balance.

**LO5**

Determine the total fair value of the consideration transferred for an acquisition and allocate that fair value to specific subsidiary assets acquired (including goodwill) and liabilities assumed or to a gain on bargain purchase.

**LO6**

Prepare the journal entry to consolidate the accounts of a subsidiary if dissolution takes place.

## Acquisition Method When Dissolution Takes Place

At the date control is obtained with complete ownership, the acquisition method typically records the combination recognizing

- the fair value of the consideration transferred by the acquiring firm to the former owners of the acquiree and
- the identified assets acquired and liabilities assumed at their individual fair values.

However, the entry to record the combination further depends on the relation between the consideration transferred and the net amount of the fair values assigned to the identified assets acquired and liabilities assumed. Therefore, we initially provide three illustrations that demonstrate the procedures to record a business combination, each with different amounts of consideration transferred relative to the acquired asset and liability fair values. Each example assumes a merger takes place and, therefore, the acquired firm is dissolved.

### *Consideration Transferred Equals Net Fair Values of Identified Assets Acquired and Liabilities Assumed*

Assume that after negotiations with the owners of Smallport, BigNet agrees to pay $2,550,000 (cash of $550,000 and 20,000 unissued shares of its $10 par value common stock that is currently selling for $100 per share) for all of Smallport's assets and liabilities. Smallport then dissolves itself as a legal entity. As is typical, the $2,550,000 fair value of the consideration transferred by BigNet represents the fair value of the acquired Smallport business.

The $2,550,000 consideration transferred will serve as the basis for recording the combination in total. BigNet also must record all of Smallport's identified assets and liabilities at their individual fair values. These two valuations present no difficulties because BigNet's consideration transferred exactly equals the $2,550,000 collective net fair values of the individual assets and liabilities acquired.

Because Smallport Company will be dissolved, BigNet (the surviving company) directly records a consolidation entry in its financial records. Under the acquisition method, BigNet records Smallport's assets and liabilities at fair value ignoring original book values. Revenue, expense, dividend, and equity accounts cannot be transferred to a parent and are omitted in recording the business combination.

### *Acquisition Method: Consideration Transferred Equals Net Identified Asset Fair Values—Subsidiary Dissolved*

| **BigNet Company's Financial Records—December 31** | | |
|---|---|---|
| Current Assets | 300,000 | |
| Computers and Equipment | 600,000 | |
| Capitalized Software | 1,200,000 | |
| Customer Contracts | 700,000 | |
| Notes Payable | | 250,000 |
| Cash (paid by BigNet) | | 550,000 |
| Common Stock (20,000 shares issued by BigNet at $10 par value) | | 200,000 |
| Additional Paid-In Capital | | 1,800,000 |
| To record acquisition of Smallport Company. Assets acquired and liabilities assumed are recorded at fair value. | | |

BigNet's financial records now show $1,900,000 in the Computers and Equipment account ($1,300,000 former balance + $600,000 acquired), $1,700,000 in Capitalized Software ($500,000 + $1,200,000), and so forth. Note that the customer contracts, despite being unrecorded on Smallport's books, are nonetheless identified and recognized on BigNet's financial records as part of the assets acquired in the combination. These items have been added into BigNet's balances (see Exhibit 2.3) at their fair values. Conversely, BigNet's revenue balance continues to report the company's own $1,000,000 with expenses remaining at $800,000 and dividends of $110,000. Under the acquisition method, only the subsidiary's revenues, expenses, dividends, and equity transactions that occur subsequent to the takeover affect the business combination.

### *Consideration Transferred Exceeds Net Amount of Fair Values of Identified Assets Acquired and Liabilities Assumed*

In this next illustration BigNet agrees to pay $3,000,000 in exchange for all of Smallport's assets and liabilities. BigNet transfers to the former owners of Smallport consideration of $1,000,000 in cash plus 20,000 shares of common stock with a fair value of $100 per share. The resulting consideration paid is $450,000 more than the $2,550,000 fair value of Smallport's net assets.

Several factors may have affected BigNet's $3,000,000 acquisition offer. First, BigNet may expect its assets to act in concert with those of Smallport, thus creating synergies that will produce profits beyond the total expected for the separate companies. In our earlier examples, Merck, United Airlines, and Nike all clearly anticipated substantial synergies from their acquisitions. Other factors such as Smallport's history of profitability, its reputation, the quality of its personnel, and the economic condition of the industry in which it operates may also enter into acquisition offers. In general, if a target company is projected to generate unusually high profits relative to its asset base, acquirers are frequently willing to pay a premium price.

When the consideration transferred in an acquisition exceeds total net fair value of the identified assets and liabilities, the excess is allocated to an unidentifiable asset known as goodwill.[19] Unlike other assets, we consider goodwill as unidentifiable because we presume it emerges from several other assets acting together to produce an expectation of enhanced profitability. Goodwill essentially captures all sources of profitability beyond what can be expected from simply summing the fair values of the acquired firm's assets and liabilities.

[19] In business combinations, such excess payments are not unusual and can be quite large. When Oracle acquired PeopleSoft, it initially assigned $4.5 billion of its $11 billion purchase price to the fair value of the acquired identified net assets. It assigned the remaining $6.5 billion to goodwill.

### *Acquisition Method: Consideration Transferred Exceeds Net Identified Asset Fair Values—Subsidiary Dissolved*

Returning to BigNet's $3,000,000 consideration, $450,000 is in excess of the fair value of Smallport's net assets. Thus, goodwill of that amount is entered into BigNet's accounting system along with the fair value of each individual asset and liability. BigNet makes the following journal entry at the date of acquisition:

| **BigNet Company's Financial Records—December 31** | | |
|---|---|---|
| Current Assets | 300,000 | |
| Computers and Equipment | 600,000 | |
| Capitalized Software | 1,200,000 | |
| Customer Contracts | 700,000 | |
| Goodwill | 450,000 | |
| Notes Payable | | 250,000 |
| Cash (paid by BigNet) | | 1,000,000 |
| Common Stock (20,000 shares issued by BigNet at $10 par value) | | 200,000 |
| Additional Paid-In Capital | | 1,800,000 |
| To record acquisition of Smallport Company. Assets acquired and liabilities assumed are recorded at individual fair values with excess fair value attributed to goodwill. | | |

Once again, BigNet's financial records now show $1,900,000 in the Computers and Equipment account ($1,300,000 former balance + $600,000 acquired), $1,700,000 in Capitalized Software ($500,000 + $1,200,000), and so forth. As the only change, BigNet records goodwill of $450,000 for the excess consideration paid over the net identified asset fair values.[20]

### *Bargain Purchase—Consideration Transferred Is Less Than Net Amount of Fair Values of Identified Assets Acquired and Liabilities Assumed*

Occasionally, the fair value received in an acquisition will exceed the fair value of the consideration transferred by the acquirer. Such bargain purchases typically are considered anomalous. Businesses generally do not sell assets or businesses at prices below their fair values. Nonetheless, bargain purchases do occur—most often in forced or distressed sales.

For example, Westamerica Bank's acquisition of County Bank (California) from the FDIC resulted in a $48.8 million "bargain purchase" gain. The FDIC sold the failed County Bank to Westamerica for $0 and additional guarantees. As a result, Westamerica recorded the combination at the estimated fair value of the net assets acquired and recognized a gain of $48.8 million. This gain treatment is consistent with the view that the acquiring firm is immediately better off by the amount that the fair value acquired in the business combination exceeds the consideration transferred.

To demonstrate accounting for a bargain purchase, our third illustration begins with BigNet transferring consideration of $2,000,000 to the owners of Smallport in exchange for their business. BigNet conveys no cash and issues 20,000 shares of common stock having a $100 per share fair value.

In accounting for this acquisition, at least two competing fair values are present. First, the $2,000,000 consideration transferred for Smallport represents a negotiated transaction value for the business. Second, the net amount of fair values individually assigned to the identified assets acquired and liabilities assumed produces $2,550,000. Additionally, based on expected synergies with Smallport, BigNet's management may believe that the fair value of the business exceeds the net asset fair value. Nonetheless, because the consideration transferred is less than the net asset fair value, a bargain purchase has occurred.

[20] As discussed in Chapter 3, the assets and liabilities (including goodwill) acquired in a business combination are assigned to reporting units of the combined entity. A reporting unit is simply a line of business (often a segment) in which an acquired asset or liability will be employed. The objective of assigning acquired assets and liabilities to reporting units is to facilitate periodic goodwill impairment testing.

*The acquisition method records the identified assets acquired and liabilities assumed at their individual fair values.* In a bargain purchase situation, this net asset fair value effectively replaces the consideration transferred as the acquired firm's valuation basis for financial reporting. The consideration transferred serves as the acquired firm's valuation basis only if the consideration equals or exceeds the net amount of fair values for the assets acquired and liabilities assumed (as in the first two examples). In this case, however, the $2,000,000 consideration paid is less than the $2,550,000 net asset fair value, indicating a bargain purchase. Thus, the $2,550,000 net asset fair value serves as the valuation basis for the combination. A $550,000 *gain on bargain purchase* results because the $2,550,000 recorded value is accompanied by a payment of only $2,000,000. The acquirer recognizes this gain on its income statement in the period the acquisition takes place.

### *Acquisition Method: Consideration Transferred Is Less Than Net Identified Asset Fair Values, Subsidiary Dissolved*

| **BigNet Company's Financial Records—December 31** | | |
|---|---|---|
| Current Assets | 300,000 | |
| Computers and Equipment | 600,000 | |
| Capitalized Software | 1,200,000 | |
| Customer Contracts | 700,000 | |
| Notes Payable | | 250,000 |
| Common Stock (20,000 shares issued by BigNet at $10 par value) | | 200,000 |
| Additional Paid-In Capital | | 1,800,000 |
| Gain on Bargain Purchase | | 550,000 |
| To record acquisition of Smallport Company. Assets acquired and liabilities assumed are each recorded at fair value. Excess net asset fair value is attributed to a gain on bargain purchase. | | |

A consequence of implementing a fair-value concept to acquisition accounting is the recognition of an unrealized gain on the bargain purchase. A criticism of the gain recognition is that the acquirer recognizes profit from a buying activity that occurs prior to traditional accrual measures of earned income (i.e., selling activity). Nonetheless, an exception to the general rule of recording business acquisitions at fair value of the consideration transferred occurs in the rare circumstance of a bargain purchase. Thus, in a bargain purchase, the fair values of the assets received and all liabilities assumed in a business combination are considered more relevant for asset valuation than the consideration transferred.

## Related Costs of Business Combinations

Three additional categories of costs typically accompany business combinations, regardless of whether dissolution takes place. First, firms often engage attorneys, accountants, investment bankers, and other professionals for combination-related services. The acquisition method does not consider such expenditures as part of the fair value received by the acquirer. Therefore, professional service fees are expensed in the period incurred. The second category concerns an acquiring firm's internal costs. Examples include secretarial and management time allocated to the acquisition activity. Such indirect costs are reported as current year expenses, too. Finally, amounts incurred to register and issue securities in connection with a business combination simply reduce the otherwise determinable fair value of the securities. Exhibit 2.4 summarizes the three categories of related payments that accompany a business combination and their respective accounting treatments.

To illustrate the accounting treatment of these costs that frequently accompany business combinations, assume the following in connection with BigNet's acquisition of Smallport (also see Exhibit 2.3).

- BigNet issues 20,000 shares of its $10 par common stock with a fair value of $2,600,000 in exchange for all of Smallport's assets and liabilities.
- BigNet pays an additional $100,000 in accounting and attorney fees.

**EXHIBIT 2.4**
**Acquisition Method—Accounting for Costs Frequently Associated with Business Combinations**

| Types of Combination Costs | Acquisition Accounting |
|---|---|
| Direct combination costs (e.g., accounting, legal, investment banking, appraisal fees, etc.) | Expense as incurred |
| Indirect combination costs (e.g., internal costs such as allocated secretarial or managerial time) | Expense as incurred |
| Amounts incurred to register and issue securities | Reduce the value assigned to the fair value of the securities issued (typically a debit to additional paid-in capital) |

- Internal secretarial and administrative costs of $75,000 are indirectly attributable to BigNet's combination with Smallport
- Costs to register and issue BigNet's securities issued in the combination total $20,000.

Following the acquisition method, BigNet would record these transactions as follows:

| **BigNet Company's Financial Records** | | |
|---|---|---|
| Current Assets | 300,000 | |
| Computers and Equipment | 600,000 | |
| Capitalized Software | 1,200,000 | |
| Customer Contracts | 700,000 | |
| Goodwill | 50,000 | |
| Notes Payable | | 250,000 |
| Common Stock (20,000 shares issued by BigNet at $10 par value) | | 200,000 |
| Additional Paid-In Capital | | 2,400,000 |
| To record Smallport acquisition for $2,600,000 consideration transferred. | | |
| Professional Services Expense | 100,000 | |
| Cash | | 100,000 |
| To record as expenses of the current period any direct combination costs. | | |
| Salaries and Administrative Expenses | 75,000 | |
| Accounts Payable (or Cash) | | 75,000 |
| To record as expenses of the current period any indirect combination costs. | | |
| Additional Paid-In Capital | 20,000 | |
| Cash | | 20,000 |
| To record costs to register and issue stock in connection with the Smallport acquisition. | | |

### *Summary of the Acquisition Method*

For combinations resulting in complete ownership, the fair value of the consideration transferred by the acquiring firm provides the starting point for recording a business combination at the date of acquisition. With few exceptions, the separately identified assets acquired and liabilities assumed are recorded at their individual fair values. Goodwill is recognized if the fair value of the consideration transferred exceeds the net identified asset fair value. If the net identified asset fair value of the business acquired exceeds the consideration transferred, a gain on a bargain purchase is recognized and reported in current income of the combined entity. Exhibit 2.5 summarizes possible allocations using the acquisition method.

LO7

Prepare a worksheet to consolidate the accounts of two companies that form a business combination if dissolution does not take place.

## The Acquisition Method When Separate Incorporation Is Maintained

When each company retains separate incorporation in a business combination, many aspects of the consolidation process are identical to those demonstrated in the previous section. Fair value, for example, remains the basis for initially consolidating the subsidiary's assets and liabilities.

**EXHIBIT 2.5**
**Consolidation Values—The Acquisition Method**

| Consolidation Values | Acquisition Accounting |
|---|---|
| Consideration transferred equals the fair values of net identified assets acquired. | Identified assets acquired and liabilities assumed are recorded at their fair values. |
| Consideration transferred is greater than the fair values of net identified assets acquired. | Identified assets acquired and liabilities assumed are recorded at their fair values. The excess consideration transferred over the net identified asset fair value is recorded as goodwill. |
| Bargain purchase—consideration transferred is less than the fair values of net identified assets acquired. The total of the individual fair values of the net identified assets acquired effectively becomes the acquired business fair value. | Identified assets acquired and liabilities assumed are recorded at their fair values. The excess amount of net identified asset fair value over the consideration transferred is recorded as a gain on bargain purchase. |

However, several significant differences are evident in combinations in which each company remains a legally incorporated separate entity. Most noticeably, the consolidation of the financial information is only simulated; the acquiring company does not physically record the acquired assets and liabilities. Because dissolution does not occur, each company maintains independent record-keeping. To facilitate the preparation of consolidated financial statements, a worksheet and consolidation entries are employed using data gathered from these separate companies.

A worksheet provides the structure for generating financial reports for the single economic entity. An integral part of this process involves consolidation worksheet entries. *These adjustments and eliminations are entered on the worksheet and represent alterations that would be required if the financial records were physically united.* Because no actual union occurs, neither company ever records consolidation entries in its journals. Instead, they appear solely on the worksheet to derive consolidated balances for financial reporting purposes.

To illustrate using the Exhibit 2.3 information, assume that BigNet acquires Smallport Company on December 31 by issuing 26,000 shares of $10 par value common stock valued at $100 per share (or $2,600,000 in total). BigNet pays fees of $40,000 to a third party for its assistance in arranging the transaction. Then to settle a difference of opinion regarding Smallport's fair value, BigNet promises to pay an additional $83,200 to the former owners if Smallport's earnings exceed $300,000 during the next annual period. BigNet estimates a 25 percent probability that the $83,200 contingent payment will be required. A discount rate of 4 percent (to represent the time value of money) yields an expected present value of $20,000 for the contingent liability ($83,200 × 25% × 0.961538). The fair-value approach of the acquisition method views such contingent payments as part of the consideration transferred. According to this view, contingencies have value to those who receive the consideration and represent measurable obligations of the acquirer. Therefore, the fair value of the consideration transferred in this example consists of the following two elements:

| | |
|---|---|
| Fair value of securities issued by BigNet | $2,600,000 |
| Fair value of contingent performance liability | 20,000 |
| Total fair value of consideration transferred | $2,620,000 |

To facilitate a possible future spinoff, BigNet maintains Smallport as a separate corporation with its independent accounting information system intact. Therefore, whenever financial statements for the combined entity are prepared, BigNet utilizes a worksheet in simulating the consolidation of these two companies. Although the assets and liabilities are not transferred, BigNet must still record the payment made to Smallport's owners. When the subsidiary remains separate, the parent establishes an investment account that initially reflects the acquired firm's acquisition-date fair value. Because Smallport maintains its separate identity, BigNet prepares the following journal entries on its books to record the business combination.

### *Acquisition Method—Subsidiary Is Not Dissolved*

| **BigNet Company's Financial Records—December 31** | | |
|---|---|---|
| Investment in Smallport Company (consideration transferred) . . . . . . . . . . . . | 2,620,000 | |
| Contingent Performance Liability . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | 20,000 |
| Common Stock (26,000 shares issued by BigNet at $10 par value) . . . . . | | 260,000 |
| Additional Paid-In Capital (value of shares in excess of par value) . . . . . . | | 2,340,000 |
| To record acquisition of Smallport Company, which maintains its separate legal identity. | | |
| Professional Services Expense . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 40,000 | |
| Cash (paid for third-party fees) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | 40,000 |
| To record combination costs. | | |

As Exhibit 2.6 demonstrates, a worksheet can be prepared on the date of acquisition to arrive at consolidated totals for this combination. The entire process consists of seven steps.

**EXHIBIT 2.6 Acquisition Method—Date of Acquisition**

| Accounts | BigNet | Smallport | Consolidation Entries: Debits | Consolidation Entries: Credits | Consolidated Totals |
|---|---|---|---|---|---|
| **Income Statement** | | | | | |
| Revenues | (1,000,000) | | | | (1,000,000) |
| Expenses | 840,000* | | | | 840,000 |
| Net income | (160,000) | | | | (160,000) |
| **Statement of Retained Earnings** | | | | | |
| Retained earnings, 1/1 | (870,000) | | | | (870,000) |
| Net income (above) | (160,000)* | | | | (160,000) |
| Dividends paid | 110,000 | | | | 110,000 |
| Retained earnings, 12/31 | (920,000) | | | | (920,000) |
| **Balance Sheet** | | | | | |
| Current assets | 1,060,000* | 300,000 | | | 1,360,000 |
| Investment in Smallport Company | 2,620,000* | –0– | | (S) 600,000<br>(A) 2,020,000 | –0– |
| Computers and equipment | 1,300,000 | 400,000 | (A) 200,000 | | 1,900,000 |
| Capitalized software | 500,000 | 100,000 | (A) 1,100,000 | | 1,700,000 |
| Customer contracts | –0– | –0– | (A) 700,000 | | 700,000 |
| Goodwill | –0– | –0– | (A) 70,000 | | 70,000 |
| Total assets | 5,480,000 | 800,000 | | | 5,730,000 |
| Note payable | (300,000) | (200,000) | | (A) 50,000 | (550,000) |
| Contingent performance liability | (20,000)* | | | | (20,000) |
| Common stock | (1,860,000)* | (100,000) | (S) 100,000 | | (1,860,000) |
| Additional paid-in capital | (2,380,000)* | (20,000) | (S) 20,000 | | (2,380,000) |
| Retained earnings, 12/31 (above) | (920,000) | (480,000) | (S) 480,000 | | (920,000) |
| Total liabilities and equities | (5,480,000) | (800,000) | 2,670,000 | 2,670,000 | (5,730,000) |

Note: Parentheses indicate a credit balance.
*Balances have been adjusted for consideration transferred and payment of direct acquisition costs. Also note follow-through effects to net income and retained earnings from the expensing of the direct acquisition costs.
(S) Elimination of Smallport's stockholders' equity accounts as of December 31 and book value portion of the investment account.
(A) Allocation of BigNet's consideration fair value in excess of book value.

### *Step 1*

Prior to constructing a worksheet, the parent prepares a formal allocation of the acquisition-date fair value similar to the equity method procedures presented in Chapter 1.[21] Thus, the following schedule is appropriate for BigNet's acquisition of Smallport:

**Acquisition-Date Fair Value Allocation Schedule**

| | | |
|---|---|---|
| Fair value of consideration transferred by BigNet. . . . . . . . . . . . . | | $2,620,000 |
| Book value of Smallport (see Exhibit 2.3). . . . . . . . . . . . . . . . . . . | | 600,000 |
| Excess of fair value over book value . . . . . . . . . . . . . . . . . . . . . . | | $2,020,000 |
| Allocations made to specific accounts based on acquisition-date fair and book value differences: | | |
| Computers and equipment ($600,000 − $400,000) . . . . . . . | $ 200,000 | |
| Capitalized software ($1,200,000 − $100,000). . . . . . . . . . . | 1,100,000 | |
| Customer contracts ($700,000 − 0) . . . . . . . . . . . . . . . . . . | 700,000 | |
| Notes payable ($250,000 − $200,000) . . . . . . . . . . . . . . . . | (50,000) | 1,950,000 |
| Excess fair value not identified with specific items—Goodwill . . . . | | $ 70,000 |

Note that this schedule initially subtracts Smallport's acquisition-date book value. The resulting $2,020,000 difference represents the total amount needed on the Exhibit 2.6 worksheet to adjust Smallport's individual assets and liabilities from book value to fair value (and to recognize goodwill). Next, the schedule shows how this $2,020,000 total is allocated to adjust each individual item to fair value. The fair-value allocation schedule thus effectively serves as a convenient supporting schedule for the Exhibit 2.6 worksheet and is routinely prepared for every consolidation.

No part of the $2,020,000 excess fair value is attributed to the current assets because their book values equal their fair values. The Notes Payable account shows a negative allocation because the debt's present value exceeds its book value. An increase in debt decreases the fair value of the company's net assets.

### *Step 2*

The first two columns of the worksheet (see Exhibit 2.6) show the separate companies' acquisition-date financial figures (see Exhibit 2.3). BigNet's accounts have been adjusted for the investment entry recorded earlier. As another preliminary step, Smallport's revenue, expense, and dividend accounts have been closed into its Retained Earnings account. The subsidiary's operations prior to the December 31 takeover have no direct bearing on the operating results of the business combination. These activities occurred before Smallport was acquired; thus, the new owner should not include any precombination subsidiary revenues or expenses in the consolidated statements.

### *Step 3*

Consolidation Entry S eliminates Smallport's stockholders' equity accounts (S is a reference to beginning subsidiary stockholders' equity). These balances (Common Stock, Additional Paid-In Capital, and Retained Earnings) represent ownership accounts held by the parent in their entirety and thus no longer are outstanding. By removing these accounts, only Smallport's assets and liabilities remain to be combined with the parent company figures.

### *Step 4*

Consolidation Entry S also removes the $600,000 component of the Investment in Smallport Company account that equates to the book value of the subsidiary's net assets. For external reporting purposes, BigNet should include each of Smallport's assets and liabilities rather than a single investment balance. In effect, this portion of the Investment in

[21] This allocation procedure is helpful but not critical if dissolution occurs. The asset and liability accounts are simply added directly into the parent's books at their acquisition-date fair value with any excess assigned to goodwill as shown in the previous sections of this chapter.

Smallport Company account is deleted and replaced by the specific assets and liabilities that it represents.

### *Step 5*

Entry A removes the $2,020,000 excess payment in the Investment in Smallport Company and assigns it to the specific accounts indicated by the fair-value allocation schedule. Consequently, Computers and Equipment is increased by $200,000 to agree with Smallport's fair value: $1,100,000 is attributed to Capitalized Software, $700,000 to Customer Contracts, and $50,000 to Notes Payable. The unidentified excess of $70,000 is allocated to Goodwill. This entry is labeled Entry A to indicate that it represents the Allocations made in connection with Smallport's acquisition-date fair value. It also completes the Investment in Smallport Company account balance elimination.

### *Step 6*

All accounts are extended into the Consolidated Totals column. For accounts such as Current Assets, this process simply adds Smallport and BigNet book values. However, when applicable, this extension also includes any allocations to establish the acquisition-date fair values of Smallport's assets and liabilities. Computers and Equipment, for example, is increased by $200,000. By increasing the subsidiary's book value to fair value, the reported balances are the same as in the previous examples when dissolution occurred. The use of a worksheet does not alter the consolidated figures but only the method of deriving those numbers.

### *Step 7*

We subtract consolidated expenses from revenues to arrive at a $160,000 net income. Note that because this is an acquisition-date worksheet, we consolidate no amounts for Smallport's revenues and expenses. Having just been acquired, Smallport has not yet earned any income for BigNet owners. Consolidated revenues, expenses, and net income are identical to BigNet's balances. Subsequent to acquisition, of course, Smallport's income accounts will be consolidated with BigNet's (coverage of this topic begins in Chapter 3).

### *Worksheet Mechanics*

In general, totals (such as Net Income and ending Retained Earnings) are not directly consolidated across on the worksheet. Rather, the components (such as revenues and expenses) are extended across and then combined vertically to derive the appropriate figure. Net income is then carried down on the worksheet to the statement of retained earnings and used (along with beginning retained earnings and dividends paid) to compute the December 31 Retained Earnings balance. In the same manner, ending Retained Earnings of $920,000 is entered into the balance sheet to arrive at total liabilities and equities of $5,730,000, a number that reconciles with the total of consolidated assets.

The balances in the final column of Exhibit 2.6 are used to prepare consolidated financial statements for the business combination of BigNet Company and Smallport Company. The worksheet entries serve as a catalyst to bring together the two independent sets of financial information. The actual accounting records of both BigNet and Smallport remain unaltered by this consolidation process.

## Acquisition-Date Fair-Value Allocations—Additional Issues

### Intangibles

**LO8**

Describe the two criteria for recognizing intangible assets apart from goodwill in a business combination.

An important element of acquisition accounting is the acquirer's recognition and measurement of the assets acquired and liabilities assumed in the combination. In particular, the advent of the information age brings new measurement challenges for a host of intangible assets that provide value in generating future cash flows. Intangible assets often comprise the largest proportion of an acquired firm. For example, when AT&T acquired AT&T Broadband, it allocated approximately $19 billion of the $52 billion purchase price to franchise costs. These franchise costs form an intangible asset representing the value attributed to agreements with local authorities that allow access to homes.

Intangible assets include both current and noncurrent assets (not including financial instruments) that lack physical substance. In determining whether to recognize an intangible asset in a business combination, two specific criteria are essential.

1. Does the intangible asset arise from contractual or other legal rights?
2. Is the intangible asset capable of being sold or otherwise separated from the acquired enterprise?

Intangibles arising from contractual or legal rights are commonplace in business combinations. Often identified among the assets acquired are trademarks, patents, copyrights, franchise agreements, and a number of other intangibles that derive their value from governmental protection (or other contractual agreements) that allow a firm exclusive use of the asset. Most intangible assets recognized in business combinations meet the contractual-legal criterion.

Also seen in business combinations are intangible assets meeting the separability criterion. An acquired intangible asset is recognized if it is capable of being separated or divided from the acquiree and sold, transferred, licensed, rented, or exchanged individually or together with a related contract, identifiable asset, or liability. The acquirer is not required to have the intention to sell, license, or otherwise exchange the intangible in order to meet the separability criterion. For example, an acquiree may have developed internally a valuable customer list or other noncontractual customer relationships. Although the value of these items may not have arisen from a specific legal right, they nonetheless convey benefits to the acquirer that may be separable through sale, license, or exchange.

Exhibit 2.7 provides an extensive listing of intangible assets with indications of whether they typically meet the legal/contractual or separability criteria.

The FASB (Exposure Draft, *Business Combinations and Intangible Assets,* para. 271) recognized the inherent difficulties in estimating the separate fair values of many intangibles and stated that

> Difficulties may arise in assigning the acquisition cost to individual intangible assets acquired in a basket purchase such as a business combination. Measuring some of those assets is less difficult than measuring other assets, particularly if they are exchangeable and traded regularly in the marketplace. . . . Nonetheless, even those assets that cannot be measured on that basis may have more cash flow streams directly or indirectly associated with them than can be used as the basis for measuring them. While the resulting measures may lack the precision of other measures, they provide information that is more representationally faithful than would be the case if those assets were simply subsumed into goodwill on the grounds of measurement difficulties.

Undoubtedly, as our knowledge economy continues its rapid growth, asset allocations to items such as those identified in Exhibit 2.7 are expected to be frequent.

## Preexisting Goodwill on Subsidiary's Books

In our examples of business combinations so far, the assets acquired and liabilities assumed have all been specifically identifiable (e.g., current assets, capitalized software, computers and equipment, customer contracts, and notes payable). However, in many cases, an acquired firm has an unidentifiable asset (i.e., goodwill recorded on its books in connection with a previous business combination of its own). A question arises as to the parent's treatment of this preexisting goodwill on the newly acquired subsidiary's books.

By its very nature, such preexisting goodwill is not considered identifiable by the parent. Therefore, the new owner simply ignores it in allocating the acquisition-date fair value. The logic is that the total business fair value is first allocated to the identified

**EXHIBIT 2.7 Illustrative Examples of Intangible Assets That Meet the Criteria for Recognition Separately from Goodwill (FASB ASC paragraphs 805-20-55-11 through 45)**

The following are examples of intangible assets that meet the criteria for recognition as an asset apart from goodwill. The following illustrative list is not intended to be all-inclusive; thus, an acquired intangible asset could meet the recognition criteria of this statement but not be included on that list. Assets designated by the symbol (c) are those that would generally be recognized separately from goodwill because they meet the contractual-legal criterion. Assets designated by the symbol (s) do not arise from contractual or other legal rights but should nonetheless be recognized separately from goodwill because they meet the separability criterion. The determination of whether a specific acquired intangible asset meets the criteria in this statement for recognition apart from goodwill should be based on the facts and circumstances of each individual business combination.*

**Marketing-Related Intangible Assets**

1. Trademarks, trade names.[c]
2. Service marks, collective marks, certification marks.[c]
3. Trade dress (unique color, shape, or package design).[c]
4. Newspaper mastheads.[c]
5. Internet domain names.[c]
6. Noncompetition agreements.[c]

**Customer-Related Intangible Assets**

1. Customer lists.[s]
2. Order or production backlog.[c]
3. Customer contracts and related customer relationships.[c]
4. Noncontractual customer relationships.[s]

**Artistic-Related Intangible Assets**

1. Plays, operas, and ballets.[c]
2. Books, magazines, newspapers, and other literary works.[c]
3. Musical works such as compositions, song lyrics, and advertising jingles.[c]
4. Pictures and photographs.[c]
5. Video and audiovisual material, including motion pictures, music videos, and television programs.[c]

**Contract-Based Intangible Assets**

1. Licensing, royalty, standstill agreements.[c]
2. Advertising, construction, management, service, or supply contracts.[c]
3. Lease agreements.[c]
4. Construction permits.[c]
5. Franchise agreements.[c]
6. Operating and broadcast rights.[c]
7. Use rights such as landing, drilling, water, air, mineral, timber cutting, and route authorities.[c]
8. Servicing contracts such as mortgage servicing contracts.[c]
9. Employment contracts.[c]

**Technology-Based Intangible Assets**

1. Patented technology.[c]
2. Computer software and mask works.[c]
3. Unpatented technology.[s]
4. Databases, including title plants.[s]
5. Trade secrets, including secret formulas, processes, and recipes.[c]

*The intangible assets designated by the symbol (c) also could meet the separability criterion. However, separability is not a necessary condition for an asset to meet the contractual-legal criterion.

assets and liabilities. Only if an excess amount remains after recognizing the fair values of the net identified assets is any goodwill recognized. Thus, in all business combinations, only goodwill reflected in the current acquisition is brought forward in the consolidated entity's financial reports.

## Acquired In-Process Research and Development

The accounting for a business combination begins with the identification of the tangible and intangible assets acquired and liabilities assumed by the acquirer. The fair values of the individual assets and liabilities then provide the basis for financial statement valuations. Many firms—especially those in pharmaceutical and high-tech industries—have allocated significant portions of acquired businesses to in-process research and development (IPR&D).

In a marked departure from past practice, current standards now require that acquired IPR&D be measured at acquisition-date fair value and recognized in consolidated financial statements as an asset. In commenting on the nature of IPR&D as an asset, Pfizer in an October 28, 2005, comment letter to the FASB observed that

> Board members know that companies frame business strategies around IPR&D, negotiate for it, pay for it, fair value it, and nurture it and they view those seemingly rational actions as inconsistent with the notion that IPR&D has no probable future economic benefit.

For example, when ARCA Biopharma acquired a significant in-process research and development asset through a merger with Nuvelo, Inc., it disclosed in its financial statements:

> A valuation firm was engaged to assist ARCA in determining the estimated fair values of these (IPR&D) assets as of the acquisition date. Discounted cash flow models are typically used in these valuations, and the models require the use of significant estimates and assumptions including but not limited to:
>
> - Projecting regulatory approvals.
> - Estimating future cash flows from product sales resulting from completed products and in-process projects.
> - Developing appropriate discount rates and probability rates by project.

The IPR&D asset is initially considered an indefinite-lived intangible asset and is not subject to amortization. IPR&D is then tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired.

Recognizing acquired IPR&D as an asset is clearly consistent with the FASB's fair-value approach to acquisition accounting. Similar to costs that result in goodwill and other internally generated intangibles (e.g., customer lists, trade names, etc.), IPR&D costs are expensed as incurred in ongoing business activities. However, a business combination is considered a significant recognition event for which all fair values transferred in the transaction should be fully accounted for, including any values assigned to IPR&D. Moreover, because the acquirer paid for the IPR&D, an expectation of future economic benefit is assumed and, therefore, the amount is recognized as an asset.

To illustrate further, assume that ClearTone Company pays $2,300,000 in cash for all assets and liabilities of Newave, Inc., in a merger transaction. ClearTone manufactures components for cell phones. The primary motivation for the acquisition is a particularly attractive research and development project under way at Newave that will extend a cell phone's battery life by up to 50 percent. ClearTone hopes to combine the new technology with its manufacturing process and projects a resulting substantial revenue increase. ClearTone is optimistic that Newave will finish the project in the next two years. At the acquisition date, ClearTone prepares the following schedule that recognizes the items of value it expects to receive from the Newave acquisition:

| | | |
|---|---|---|
| Consideration transferred | | $2,300,000 |
| Receivables | $ 55,000 | |
| Patents | 220,000 | |
| In-process research and development | 1,900,000 | |
| Accounts payable | (175,000) | |
| Fair value of identified net assets acquired | | 2,000,000 |
| Goodwill | | $ 300,000 |

ClearTone records the transaction as follows:

| | | |
|---|---|---|
| Receivables | 55,000 | |
| Patents | 220,000 | |
| Research and Development Asset | 1,900,000 | |
| Goodwill | 300,000 | |
| Accounts Payable | | 175,000 |
| Cash | | 2,300,000 |

Research and development expenditures incurred subsequent to the date of acquisition will continue to be expensed. Acquired IPR&D assets initially should be considered indefinite-lived until the project is completed or abandoned. As with other indefinite-lived intangible assets, an acquired IPR&D asset is tested for impairment and is not amortized until its useful life is determined to be no longer indefinite.

## Convergence between U.S. and International Accounting Standards

The FASB ASC Topics on Business Combinations (805) and Consolidation (810) represent outcomes of a joint project between the FASB and the International Accounting Standards Board (IASB). The primary objective of the project was stated as follows:

> to develop a single high-quality standard for business combinations that can be used for both domestic and cross-border financial reporting. The goal is to develop a standard that includes a common set of principles and related guidance that produces decision-useful information and minimizes exceptions to those principles. The standard should improve the completeness, relevance, and comparability of financial information about business combinations . . . (FASB Project Updates: *Business Combinations: Applying the Acquisition Method—Joint Project of the IASB and FASB:* October 25, 2007)

The IASB subsequently issued International Financial Reporting Standard 3 (*IFRS 3*) Revised (effective July 2009), which along with FASB ASC Topics 805, Business Combinations, and 810, Consolidation, effectively converged the accounting for business combinations internationally. The two standards are identical in most important aspects of accounting for business combinations although differences can result in noncontrolling interest valuation and some other limited applications.[22] The joint project on business combinations represents one of the first successful implementations of the agreement between the two standard-setting groups to coordinate efforts on future work with the goal of developing high-quality comparable standards for both domestic and cross-border financial accounting.

In 2011 the IASB issued two new standards that deal with consolidated statements and accompanying disclosures—*IFRS 10*, "Consolidated Financial Statements" and *IFRS 12,* "Disclosure of Interests in Other Entities." The new requirements will be effective beginning in 2013. The standards employ a new singular definition of control that focuses on the power to direct the activities of an entity, exposure to variable returns, and a linkage between power and returns. Unlike the FASB, which currently has separate control models for voting interest versus variable interest entities, the IASB definition is intended to govern any control situation, regardless of whether it derives from voting or other rights.[23]

## Summary

1. Consolidation of financial information is required for external reporting purposes when one organization gains control of another, thus forming a single economic entity. In many combinations, all but one of the companies is dissolved as a separate legal corporation. Therefore, the consolidation process is carried out fully at the date of acquisition to bring together all accounts into a single set of financial records. In other combinations, the companies retain their identities as separate enterprises and continue to maintain their own separate accounting

[22] Chapter 4 of this text provides further discussion of noncontrolling interest accounting differences across U.S. GAAP and IFRS. Other differences are presented in chapters where the applicable topics are covered.

[23] See KPMG, *In The Headlines,* "Consolidation: a new single control model," May 2011. Also see Patrick Finnegan, IFRS May 2011 perspectives, "At long last—a single model for consolidation." Evaluation of the existence of control is a complex and evolving issue. This textbook emphasizes financial reporting for combined firms under the assumption that one company controls one or more other companies.

systems. For these cases, consolidation is a periodic process necessary whenever the parent produces external financial statements. This periodic procedure is frequently accomplished through the use of a worksheet and consolidation entries.

2. Current financial reporting standards require the acquisition method in accounting for business combinations. Under the acquisition method, the fair value of the consideration transferred provides the starting point for valuing the acquired firm. The fair value of the consideration transferred by the acquirer includes the fair value of any contingent consideration. The acquired company assets and liabilities are consolidated at their individual acquisition-date fair values. Direct combination costs are expensed as incurred because they are not part of the acquired business fair value. Also, the fair value of all acquired in-process research and development is recognized as an asset in business combinations and is subject to subsequent impairment reviews.
3. If the consideration transferred for an acquired firm exceeds the total fair value of the acquired firm's net assets, the residual amount is recognized in the consolidated financial statements as goodwill, an intangible asset. When a bargain purchase occurs, individual assets and liabilities acquired continue to be recorded at their fair values and a gain on bargain purchase is recognized.
4. Particular attention should be paid to the recognition of intangible assets in business combinations. An intangible asset must be recognized in an acquiring firm's financial statements if the asset arises from a legal or contractual right (e.g., trademarks, copyrights, artistic materials, royalty agreements). If the intangible asset does not represent a legal or contractual right, the intangible will still be recognized if it is capable of being separated from the firm (e.g., customer lists, noncontractual customer relationships, unpatented technology).

## Comprehensive Illustration

(*Estimated Time: 45 to 65 Minutes*) Following are the account balances of Miller Company and Richmond Company as of December 31. The fair values of Richmond Company's assets and liabilities are also listed.

### Problem

| | Miller Company Book Values 12/31 | Richmond Company Book Values 12/31 | Richmond Company Fair Values 12/31 |
|---|---|---|---|
| Cash | $ 600,000 | $ 200,000 | $ 200,000 |
| Receivables | 900,000 | 300,000 | 290,000 |
| Inventory | 1,100,000 | 600,000 | 820,000 |
| Buildings and equipment (net) | 9,000,000 | 800,000 | 900,000 |
| Unpatented technology | –0– | –0– | 500,000 |
| In-process research and development | –0– | –0– | 100,000 |
| Accounts payable | (400,000) | (200,000) | (200,000) |
| Notes payable | (3,400,000) | (1,100,000) | (1,100,000) |
| Totals | $ 7,800,000 | $ 600,000 | $ 1,510,000 |
| Common stock—$20 par value | $(2,000,000) | | |
| Common stock—$5 par value | | $ (220,000) | |
| Additional paid-in capital | (900,000) | (100,000) | |
| Retained earnings, 1/1 | (2,300,000) | (130,000) | |
| Revenues | (6,000,000) | (900,000) | |
| Expenses | 3,400,000 | 750,000 | |
| Totals | $(7,800,000) | $ (600,000) | |

Note: Parentheses indicate a credit balance.

### Additional Information (not reflected in the preceding figures)

- On December 31, Miller issues 50,000 shares of its $20 par value common stock for all of the outstanding shares of Richmond Company.
- As part of the acquisition agreement, Miller agrees to pay the former owners of Richmond $250,000 if certain profit projections are realized over the next three years. Miller calculates the acquisition-date fair value of this contingency at $100,000.
- In creating this combination, Miller pays $10,000 in stock issue costs and $20,000 in accounting and legal fees.

### Required

*a.* Miller's stock has a fair value of $32.00 per share. Using the acquisition method:

1. Prepare the necessary journal entries if Miller dissolves Richmond so it is no longer a separate legal entity.
2. Assume instead that Richmond will retain separate legal incorporation and maintain its own accounting systems. Prepare a worksheet to consolidate the accounts of the two companies.

*b.* If Miller's stock has a fair value of $26.00 per share, describe how the consolidated balances would differ from the results in requirement (*a*).

## Solution

*a.* 1. In a business combination, the accountant first determines the total fair value of the consideration transferred. Because Miller's stock is valued at $32 per share, the 50,000 issued shares are worth $1,600,000 in total. Included in the consideration transferred is the $100,000 acquisition-date fair value of the contingent performance obligation.

This $1,700,000 total fair value is compared to the $1,510,000 fair value of Richmond's assets and liabilities (including the value of IPR&D). The $190,000 excess fair value ($1,700,000 − $1,510,000) is recognized as goodwill. Because dissolution will occur, Richmond's asset and liability accounts are transferred to Miller and entered at fair value with the excess recorded as goodwill.

The $10,000 stock issue cost reduces Additional Paid-In Capital. The $20,000 direct combination costs (accounting and legal fees) are expensed when incurred.

**Miller Company's Financial Records—December 31**

| | | |
|---|---|---|
| Cash | 200,000 | |
| Receivables | 290,000 | |
| Inventory | 820,000 | |
| Buildings and Equipment | 900,000 | |
| Unpatented Technology | 500,000 | |
| Research and Development Asset | 100,000 | |
| Goodwill | 190,000 | |
| Accounts Payable | | 200,000 |
| Notes Payable | | 1,100,000 |
| Contingent Performance Obligation | | 100,000 |
| Common Stock (Miller) (par value) | | 1,000,000 |
| Additional Paid-In Capital (fair value in excess of par value) | | 600,000 |
| To record acquisition of Richmond Company. | | |
| Professional Services Expense | 20,000 | |
| Cash (paid for combination costs) | | 20,000 |
| To record legal and accounting fees related to the combination. | | |
| Additional Paid-In Capital | 10,000 | |
| Cash (stock issuance costs) | | 10,000 |
| To record payment of stock issuance costs. | | |

2. Under this scenario, the acquisition fair value is equal to that computed in part (*a*1).

| | |
|---|---|
| 50,000 shares of stock at $32.00 each | $1,600,000 |
| Contingent performance obligation | 100,000 |
| Acquisition-date fair value of consideration transferred | $1,700,000 |

Because the subsidiary is maintaining separate incorporation, Miller establishes an investment account to reflect the $1,700,000 acquisition consideration:

**Miller's Financial Records—December 31**

| | | |
|---|---|---|
| Investment in Richmond Company | 1,700,000 | |
| Contingent Performance Obligation | | 100,000 |
| Common Stock (Miller) (par value) | | 1,000,000 |
| Additional Paid-In Capital (fair value in excess of par value) | | 600,000 |
| To record investment in Richmond Company. | | |
| Professional Services Expense | 20,000 | |
| Cash (paid for combination costs) | | 20,000 |
| To record legal and accounting fees related to the combination. | | |
| Additional Paid-In Capital | 10,000 | |
| Cash (stock issuance costs) | | 10,000 |
| To record payment of stock issuance costs. | | |

Because Richmond maintains separate incorporation and its own accounting system, Miller prepares a worksheet for consolidation. To prepare the worksheet, Miller first allocates Richmond's fair value to assets acquired and liabilities assumed based on their individual fair values:

| | |
|---|---|
| Fair value of consideration transferred by Miller | $1,700,000 |
| Book value of Richmond | 600,000 |
| Excess fair value over book value | $1,100,000 |

Allocations are made to specific accounts based on differences in fair values and book values:

| | | |
|---|---|---|
| Receivables ($290,000 − $300,000) | $ (10,000) | |
| Inventory ($820,000 − $600,000) | 220,000 | |
| Buildings and equipment ($900,000 − $800,000) | 100,000 | |
| Unpatented technology ($500,000 − 0) | 500,000 | |
| In-process research and development | 100,000 | 910,000 |
| Goodwill | | $ 190,000 |

The following steps produce the consolidated financial statements total in Exhibit 2.8:

- Miller's balances have been updated on this worksheet to include the effects of both the newly issued shares of stock, the recognition of the contingent performance liability, and the combination expenses.
- Richmond's revenue and expense accounts have been closed to Retained Earnings. The acquisition method consolidates only postacquisition revenues and expenses.
- Worksheet Entry S eliminates the $600,000 book value component of the Investment in Richmond Company account along with the subsidiary's stockholders' equity accounts.

Entry A adjusts all of Richmond's assets and liabilities to fair value based on the allocations determined earlier.

*b.* If the fair value of Miller's stock is $26.00 per share, then the fair value of the consideration transferred in the Richmond acquisition is recomputed as follows:

| | |
|---|---|
| Fair value of shares issued ($26 × 50,000 shares) | $1,300,000 |
| Fair value of contingent consideration | 100,000 |
| Total consideration transferred at fair value | $1,400,000 |

Because the consideration transferred is $110,000 less than the $1,510,000 fair value of the net assets received in the acquisition, a bargain purchase has occurred. In this situation, Miller

**EXHIBIT 2.8 Comprehensive Illustration—Solution—Acquisition Method**

**MILLER COMPANY AND RICHMOND COMPANY**
**Consolidation Worksheet**
**For Period Ending December 31**

| Accounts | Miller Company | Richmond Company | Consolidation Entries Debit | Consolidation Entries Credit | Consolidated Totals |
|---|---|---|---|---|---|
| **Income Statement** | | | | | |
| Revenues | (6,000,000) | | | | (6,000,000) |
| Expenses | 3,420,000* | | | | 3,420,000* |
| Net income | (2,580,000) | | | | (2,580,000) |
| **Statement of Retained Earnings** | | | | | |
| Retained earnings, 1/1 | (2,300,000) | | | | (2,300,000) |
| Net income (above) | (2,580,000) | | | | (2,580,000) |
| Retained earnings, 12/31 | (4,880,000) | | | | (4,880,000) |
| **Balance Sheet** | | | | | |
| Cash | 570,000* | 200,000 | | | 770,000 |
| Receivables | 900,000 | 300,000 | | (A) 10,000 | 1,190,000 |
| Inventory | 1,100,000 | 600,000 | (A) 220,000 | | 1,920,000 |
| Investment in Richmond Company | 1,700,000* | –0– | | (A) 1,100,000<br>(S) 600,000 | –0– |
| Buildings and equipment (net) | 9,000,000 | 800,000 | (A) 100,000 | | 9,900,000 |
| Goodwill | –0– | –0– | (A) 190,000 | | 190,000 |
| Unpatented technology | –0– | –0– | (A) 500,000 | | 500,000 |
| Research and development asset | –0– | –0– | (A) 100,000 | | 100,000 |
| Total assets | 13,270,000 | 1,900,000 | | | 14,570,000 |
| Accounts payable | (400,000) | (200,000) | | | (600,000) |
| Notes payable | (3,400,000) | (1,100,000) | | | (4,500,000) |
| Contingent performance obligation | (100,000)* | –0– | | | (100,000) |
| Common stock | (3,000,000)* | (220,000) | (S) 220,000 | | (3,000,000) |
| Additional paid-in capital | (1,490,000)* | (100,000) | (S) 100,000 | | (1,490,000) |
| Retained earnings, 12/31 (above) | (4,880,000)* | (280,000)† | (S) 280,000 | | (4,880,000) |
| Total liabilities and equities | (13,270,000) | (1,900,000) | 1,710,000 | 1,710,000 | (14,570,000) |

Note: Parentheses indicate a credit balance.
*Balances have been adjusted for issuance of stock, payment of combination expenses, and recognition of contingent performance obligation.
†Beginning retained earnings plus revenues minus expenses.

continues to recognize each of the separately identified assets acquired and liabilities assumed at their fair values. Resulting differences in the consolidated balances relative to the requirement (*a*) solution are as follows:

- The $110,000 excess fair value recognized over the consideration transferred is recognized as a "gain on bargain purchase."
- Consolidated net income increases by the $110,000 gain to $2,690,000.
- No goodwill is recognized.
- Miller's additional paid-in capital decreases by $300,000 to $1,190,000.
- Consolidated retained earnings increase by the $110,000 gain to $4,990,000.

Also, because of the bargain purchase, the "Investment in Richmond Company" account balance on Miller's separate financial statements shows the $1,510,000 fair value of the net identified assets received. This valuation measure is an exception to the general rule of using the consideration transferred to provide the valuation basis for the acquired firm.

# Appendix

LO9

Identify the general characteristics of the legacy purchase and pooling of interest methods of accounting for past business combinations. Understand the effects that persist today in financial statements from the use of these legacy methods.

## Legacy Methods of Accounting For Business Combinations

The acquisition method provides the accounting for business combinations occurring in 2009 and thereafter. However, for decades, business combinations were accounted for using either the **purchase** or **pooling of interests** method. From 2002 through 2008, the purchase method was used exclusively for business combinations. Prior to 2002, financial reporting standards allowed two alternatives: the purchase method and the pooling of interests method. Because the FASB required prospective application of the acquisition method for 2009 and beyond, the purchase and pooling of interests methods continue to provide the basis for financial reporting for pre-2009 business combinations and thus will remain relevant for many years. Literally tens of thousands of past business combinations will continue to be reported in future statements under one of these legacy methods.

### The Purchase Method: An Application of the Cost Principle

A basic principle of the purchase method was to record a business combination at the cost to the new owners. For example, several years ago MGM Grand, Inc., acquired Mirage Resorts, Inc., for approximately $6.4 billion. This purchase price continued to serve as the valuation basis for Mirage Resorts's assets and liabilities in the preparation of MGM Grand's consolidated financial statements.

Several elements of the purchase method reflect a strict application of the cost principle. The following items represent examples of how the cost-based purchase method differs from the fair-value-based acquisition method.

- Acquisition date allocations (including bargain purchases).
- Direct combination costs.
- Contingent consideration.
- In-process research and development.

We next briefly discuss the accounting treatment for these items across the current and previous financial reporting regimes.

#### *Purchase-Date Cost Allocations (Including Bargain Purchases)*

In pre-2009 business combinations the application of the cost principle often was complicated because literally hundreds of separate assets and liabilities were acquired. Accordingly, for asset valuation and future income determination, firms needed a basis to allocate the total cost among the various assets and liabilities received in the bargained exchange. Similar to the acquisition method, the purchase method based its cost allocations on the combination-date fair values of the acquired assets and liabilities. Also closely related to the acquisition method procedures, any excess of cost over the sum of the net identified asset fair values was attributed to goodwill.

But the purchase method stands in marked contrast to the acquisition method in bargain purchase situations. Under the purchase method, a bargain purchase occurred when the sum of the individual fair values of the acquired net assets exceeded the purchase cost. To record a bargain purchase at cost, however, the purchase method required that certain long-term assets be recorded at amounts below their assessed fair values.

For example, assume Adams Co. paid $520,000 for Brook Co. in 2008. Brook has the following assets with appraised fair values:

| | |
|---|---|
| Accounts receivable | $ 15,000 |
| Land | 200,000 |
| Building | 400,000 |
| Accounts payable | (5,000) |
| Total net fair value | $610,000 |

However, to record the combination at its $520,000 cost, Adams cannot use all of the above fair values. The purchase method solution was to require that Adams reduce the valuation assigned to the acquired long-term assets (land and building) proportionately by $90,000 ($610,000 − $520,000).

The total fair value of the long-term assets, in this case $600,000, provided the basis for allocating the reduction. Thus, Adams would reduce the acquired land by ($2/6 \times \$90,000$) = $30,000 and the building by ($4/6 \times \$90,000$) = $60,000. Adams's journal entry to record the combination using the purchase method would then be as follows:

| | | |
|---|---|---|
| Accounts Receivable | 15,000 | |
| Land ($200,000 − $30,000) | 170,000 | |
| Building ($400,000 − $60,000) | 340,000 | |
| Accounts Payable | | 5,000 |
| Cash | | 520,000 |

Note that current assets and liabilities did not share in the proportionate reduction to cost. Long-term assets were subject to the reduction because their fair-value estimates were considered less reliable than current items and liabilities. Finally, in rare situations firms recognized an extraordinary gain on a purchase, but only in the very unusual case that the long-term assets were reduced to a zero valuation.

In contrast, the acquisition method embraces the fair-value concept and discards the consideration transferred as a valuation basis for the business acquired in a bargain purchase. Instead, the acquirer measures and recognizes the fair values of each of the assets acquired and liabilities assumed at the date of combination, regardless of the consideration transferred in the transaction. As a result, (1) no assets are recorded at amounts below their assessed fair values, as is the case with bargain purchases accounted for by the purchase method, and (2) a gain on bargain purchase is recognized at the acquisition date.

### *Direct Combination Costs*

Almost all business combinations employ professional services to assist in various phases of the transaction. Examples include target identification, due diligence regarding the value of an acquisition, financing, tax planning, and preparation of formal legal documents. Prior to 2009, under the purchase method, the investment cost basis included direct combination costs. In contrast, the acquisition method considers these costs as payments for services received, not part of the fair value exchanged for the business. Thus, under the acquisition method, direct combination costs are expensed as incurred.

### *Contingent Consideration*

Often business combination negotiations result in agreements to provide additional payments to former owners if they meet specified future performance measures. The purchase method accounted for such contingent consideration obligations as post-combination adjustments to the purchase cost (or stockholders' equity if the contingency involved the parent's equity share value) upon resolution of the contingency. The acquisition method treats contingent consideration obligations as a negotiated component of the fair value of the consideration transferred, consistent with the fair value measurement attribute.

### *In-Process Research and Development (IPR&D)*

Prior to 2009, financial reporting standards required the immediate expensing of acquired IPR&D if the project had not yet reached technological feasibility and the assets had no future alternative uses. Expensing acquired IPR&D was consistent with the accounting treatment for a firm's ongoing research and development costs. The acquisition method, however, requires tangible and intangible assets acquired in a business combination to be used in a particular research and development activity, including those that may have no alternative future use, to be recognized and measured at fair value at the acquisition date. These capitalized research and development costs are reported as intangible assets with indefinite lives subject to periodic impairment reviews. Moreover, because the acquirer identified and paid for the IPR&D, the acquisition method assumes an expectation of future economic benefit and therefore recognizes an asset.

## The Pooling of Interests Method: Continuity of Previous Ownership

Historically, former owners of separate firms would agree to combine for their mutual benefit and continue as owners of a combined firm. It was asserted that the assets and liabilities of the former firms were never really bought or sold; former owners merely exchanged ownership shares to become joint owners of the combined firm. Combinations characterized by exchange of voting shares and continuation of previous ownership became known as pooling of interests. Rather than an exchange transaction with one ownership group replacing another, a pooling of interests was characterized by a continuity of ownership interests before and after the business combination. Prior to its elimination, this method was applied to a significant number of business combinations.[24] To reflect the continuity of ownership, two important steps characterized the pooling of interests method:

1. The book values of the assets and liabilities of both companies became the book values reported by the combined entity.
2. The revenue and expense accounts were combined retrospectively as well as prospectively. The idea of continuity of ownership gave support for the recognition of income accruing to the owners both before and after the combination.

Therefore, in a pooling, reported income was typically higher than under the contemporaneous purchase accounting. Under pooling, not only did the firms retrospectively combine incomes, but also the smaller asset bases resulted in smaller depreciation and amortization expenses. Because net income reported in financial statements often is used in a variety of contracts, including managerial compensation, managers considered the pooling method an attractive alternative to purchase accounting.

Prior to 2002, accounting and reporting standards allowed both the purchase and pooling of interest methods for business combinations. However, standard setters established strict criteria for use of the pooling method. The criteria were designed to prevent managers from engaging in purchase transactions and then reporting them as poolings of interests. Business combinations that failed to meet the pooling criteria had to be accounted for by the purchase method.

These criteria had two overriding objectives. First, to ensure the complete fusion of the two organizations, one company had to obtain substantially all (90 percent or more) of the voting stock of the other. The second general objective of these criteria was to prevent purchase combinations from being disguised as poolings. Past experience had shown that combination transactions were frequently manipulated so that they would qualify for pooling of interests treatment (usually to increase reported earnings). However, subsequent events, often involving cash being paid or received by the parties, revealed the true nature of the combination: One company was purchasing the other in a bargained exchange. A number of qualifying criteria for pooling of interests treatment were designed to stop this practice.

## Comparisons across the Pooling of Interests, Purchase, and Acquisition Methods

To illustrate some of the differences across the purchase, pooling of interests, and acquisition methods, assume that on January 1, Archer Inc. acquired Baker Company in exchange for 10,000 shares of its $1.00 par common stock having a fair value of $1,200,000 in a transaction structured as a merger. In connection with the acquisition, Archer paid $25,000 in legal and accounting fees. Also, Archer agreed to pay the former owners additional cash consideration contingent upon the completion of Baker's existing contracts at specified profit margins. The current fair value of the contingent obligation was estimated to be $150,000. Exhibit 2.9 provides Baker's combination-date book values and fair values.

**EXHIBIT 2.9**
**Precombination Information for Baker Company**

| January 1 | Book Values | Fair Values |
|---|---|---|
| Current assets | $ 30,000 | $ 30,000 |
| Internet domain name | 160,000 | 300,000 |
| Licensing agreements | 0 | 500,000 |
| In-process research and development | 0 | 200,000 |
| Notes payable | (25,000) | (25,000) |
| Total net assets | $165,000 | $1,005,000 |

[24] Past prominent business combinations accounted for by the pooling of interests method include ExxonMobil, Pfizer-Warner Lambert, Yahoo!-Broadcast.com, and Pepsi-Quaker Oats, among thousands of others.

### *Purchase Method Applied*

Archer's valuation basis for its purchase of Baker is computed and allocated as follows:

| | | |
|---|---|---|
| Fair value of shares issued | | $1,200,000 |
| Direct combination costs (legal and accounting fees) | | 25,000 |
| Cost of the Baker purchase | | $1,225,000 |
| Cost allocation: | | |
| Current assets | $ 30,000 | |
| Internet domain name | 300,000 | |
| Licensing agreements | 500,000 | |
| Research and development expense | 200,000 | |
| Notes payable | (25,000) | |
| Total net fair value of items acquired | | 1,005,000 |
| Goodwill | | $ 220,000 |

Note the following characteristics of the purchase method from the above schedule.

- The valuation basis is cost and includes direct combination costs, but excludes the contingent consideration.
- The cost is allocated to the assets acquired and liabilities assumed based on their individual fair values (unless a bargain purchase occurs and then the long-term items may be recorded as amounts less than their fair values).
- Goodwill is the excess of cost over the fair values of the net assets purchased.
- Acquired in-process research and development is expensed immediately at the purchase date.

### *Pooling of Interests Method Applied*

Because a purchase–sale was deemed not to occur, the pooling method relied on previously recorded values reflecting a continuation of previous ownership. Thus, the following asset would be recorded by Archer in a business combination accounted for as a pooling of interests.

| | Values Assigned |
|---|---|
| Current assets | $ 30,000 |
| Internet domain name | 160,000 |
| Licensing agreements | –0– |
| In-process research and development | –0– |
| Notes payable | (25,000) |
| Total value assigned within the combination | $165,000 |

Note the following characteristics of the pooling of interests method from the above schedule.

- Because a pooling of interests was predicated on a continuity of ownership, the accounting incorporated a continuation of previous book values and ignored fair values exchanged in a business combination.
- Previously unrecognized (typically internally developed) intangibles continue to be reported at a zero value post-combination.
- Because the pooling of interests method values an acquired firm at its previously recorded book value, no new amount for goodwill was ever recorded in a pooling.

### *Acquisition Method Applied*

According to the acquisition method, Archer's valuation basis for its acquisition of Baker is computed as follows:

| | | |
|---|---|---|
| Fair value of shares issued | | $1,200,000 |
| Fair value of contingent performance obligation | | 150,000 |
| Total consideration transferred for the Baker acquisition | | $1,350,000 |
| Cost allocation: | | |
| Current assets | $ 30,000 | |
| Internet domain name | 300,000 | |

| | | |
|---|---|---|
| Licensing agreements | 500,000 | |
| Research and development asset | 200,000 | |
| Notes payable | (25,000) | |
| Total net fair value of items acquired | | 1,005,000 |
| Goodwill | | $ 345,000 |

Note the following characteristics of the acquisition method from the above entry.

- The valuation basis is fair value of consideration transferred and includes the contingent consideration, but excludes direct combination costs.
- The assets acquired and liabilities assumed are recorded at their individual fair values.
- Goodwill is the excess of the consideration transferred over the fair values of the net assets acquired.
- Acquired in-process research and development is recognized as an asset.
- Professional service fees to help accomplish the acquisition are expensed.

The following table compares the amounts from Baker that Archer would include in its combination-date consolidated financial statements under the pooling of interests method, the purchase method, and the acquisition method.

**Values Incorporated in Archer's Consolidated Balance Sheet Resulting from the Baker Transaction**

| | Pooling of Interests Method | Purchase Method | Acquisition Method |
|---|---|---|---|
| Current assets | $ 30,000 | $ 30,000 | $ 30,000 |
| Internet domain name | 160,000 | 300,000 | 300,000 |
| Licensing agreements | –0– | 500,000 | 500,000 |
| In-process research and development asset* | –0– | –0– | 200,000 |
| Goodwill | –0– | 220,000 | 345,000 |
| Notes payable | (25,000) | (25,000) | (25,000) |
| Contingent performance obligation | –0– | –0– | (150,000) |
| Total net assets recognized by Archer | $165,000 | $1,025,000 | $1,200,000 |

*Acquired in-process research and development was expensed under the purchase method and not recognized at all under the pooling of interests method.

Several comparisons should be noted across these methods of accounting for business combinations:

- In consolidating Baker's assets and liabilities, the purchase and acquisition methods record fair values. In contrast, the pooling method uses previous book values and ignores fair values. Consequently, although a fair value of $1,350,000 is exchanged, only a net value of $165,000 (assets less liabilities) is reported in the pooling.
- The pooling method, as reflected in the preceding example, typically shows smaller asset values and consequently lowers future depreciation and amortization expenses. Thus, higher future net income was usually reported under the pooling method compared to similar situations that employed the purchase method.
- Under pooling, financial ratios such as Net Income/Total Assets were dramatically inflated. Not only was this ratio's denominator understated through failure to recognize internally developed assets acquired (and fair values in general), but the numerator was overstated through smaller depreciation and amortization expenses.
- Although not shown, the pooling method retrospectively combined the acquired firm's revenues, expenses, dividends, and retained earnings. The purchase and acquisition methods incorporate only post-combination values for these operational items. Also all costs of the combination (direct and indirect acquisition costs and stock issue costs) were expensed in the period of combination under the pooling of interests method.

- Finally, with adoption of the acquisition method, the FASB has moved clearly in the direction of increased management accountability for the fair values of all assets acquired and liabilities assumed in a business combination.

## Questions

1. What is a business combination?
2. Describe the different types of legal arrangements that can take place to create a business combination.
3. What does the term *consolidated financial statements* mean?
4. Within the consolidation process, what is the purpose of a worksheet?
5. Jones Company obtains all of the common stock of Hudson, Inc., by issuing 50,000 shares of its own stock. Under these circumstances, why might the determination of a fair value for the consideration transferred be difficult?
6. What is the accounting valuation basis for consolidating assets and liabilities in a business combination?
7. How should a parent consolidate its subsidiary's revenues and expenses?
8. Morgan Company acquires all of the outstanding shares of Jennings, Inc., for cash. Morgan transfers consideration more than the fair value of the company's net assets. How should the payment in excess of fair value be accounted for in the consolidation process?
9. Catron Corporation is having liquidity problems, and as a result, it sells all of its outstanding stock to Lambert, Inc., for cash. Because of Catron's problems, Lambert is able to acquire this stock at less than the fair value of the company's net assets. How is this reduction in price accounted for within the consolidation process?
10. Sloane, Inc., issues 25,000 shares of its own common stock in exchange for all of the outstanding shares of Benjamin Company. Benjamin will remain a separately incorporated operation. How does Sloane record the issuance of these shares?
11. To obtain all of the stock of Molly, Inc., Harrison Corporation issued its own common stock. Harrison had to pay $98,000 to lawyers, accountants, and a stock brokerage firm in connection with services rendered during the creation of this business combination. In addition, Harrison paid $56,000 in costs associated with the stock issuance. How will these two costs be recorded?

## Problems

LO1

1. Which of the following does not represent a primary motivation for business combinations?
   *a.* Combinations as a vehicle for achieving rapid growth and competitiveness.
   *b.* Cost savings through elimination of duplicate facilities and staff.
   *c.* Quick entry for new and existing products into markets.
   *d.* Larger firms being less likely to fail.

LO2

2. Which of the following is the best theoretical justification for consolidated financial statements?
   *a.* In form the companies are one entity; in substance they are separate.
   *b.* In form the companies are separate; in substance they are one entity.
   *c.* In form and substance the companies are one entity.
   *d.* In form and substance the companies are separate.
   (AICPA)

LO3

3. What is a statutory merger?
   *a.* A merger approved by the Securities and Exchange Commission.
   *b.* An acquisition involving the purchase of both stock and assets.
   *c.* A takeover completed within one year of the initial tender offer.
   *d.* A business combination in which only one company continues to exist as a legal entity.

LO4

4. FASB ASC 805, *Business Combinations,* provides principles for allocating the fair value of an acquired business. When the collective fair values of the separately identified assets acquired and liabilities assumed exceed the fair value of the consideration transferred, the difference should be:
   *a.* Recognized as an ordinary gain from a bargain purchase.
   *b.* Treated as negative goodwill to be amortized over the period benefited, not to exceed 40 years.

*c.* Treated as goodwill and tested for impairment on an annual basis.

*d.* Applied pro rata to reduce, but not below zero, the amounts initially assigned to specific noncurrent assets of the acquired firm.

LO8

5. What is the appropriate accounting treatment for the value assigned to in-process research and development acquired in a business combination?

*a.* Expense upon acquisition.

*b.* Capitalize as an asset.

*c.* Expense if there is no alternative use for the assets used in the research and development and technological feasibility has yet to be reached.

*d.* Expense until future economic benefits become certain and then capitalize as an asset.

LO8

6. An acquired entity has a long-term operating lease for an office building used for central management. The terms of the lease are very favorable relative to current market rates. However, the lease prohibits subleasing or any other transfer of rights. In its financial statements, the acquiring firm should report the value assigned to the lease contract as

*a.* An intangible asset under the contractual-legal criterion.

*b.* A part of goodwill.

*c.* An intangible asset under the separability criterion.

*d.* A building.

LO4

7. When does gain recognition accompany a business combination?

*a.* When a bargain purchase occurs.

*b.* In a combination created in the middle of a fiscal year.

*c.* In an acquisition when the value of all assets and liabilities cannot be determined.

*d.* When the amount of a bargain purchase exceeds the value of the applicable noncurrent assets (other than certain exceptions) held by the acquired company.

LO4

8. According to the acquisition method of accounting for business combinations, costs paid to attorneys and accountants for services in arranging a merger should be

*a.* Capitalized as part of the overall fair value acquired in the merger.

*b.* Recorded as an expense in the period the merger takes place.

*c.* Included in recognized goodwill.

*d.* Written off over a five-year maximum useful life.

LO4

9. When negotiating a business acquisition, buyers sometimes agree to pay extra amounts to sellers in the future if performance metrics are achieved over specified time horizons. How should buyers account for such contingent consideration in recording an acquisition?

*a.* The amount ultimately paid under the contingent consideration agreement is added to goodwill when and if the performance metrics are met.

*b.* The fair value of the contingent consideration is expensed immediately at acquisition date.

*c.* The fair value of the contingent consideration is included in the overall fair value of the consideration transferred, and a liability or additional owners' equity is recognized.

*d.* The fair value of the contingent consideration is recorded as a reduction of the otherwise determinable fair value of the acquired firm.

LO5

10. On June 1, Cline Co. paid $800,000 cash for all of the issued and outstanding common stock of Renn Corp. The carrying values for Renn's assets and liabilities on June 1 follow:

| | |
|---|---|
| Cash | $150,000 |
| Accounts receivable | 180,000 |
| Capitalized software costs | 320,000 |
| Goodwill | 100,000 |
| Liabilities | (130,000) |
| Net assets | $620,000 |

On June 1, Renn's accounts receivable had a fair value of $140,000. Additionally, Renn's in-process research and development was estimated to have a fair value of $200,000. All other items were stated at their fair values. On Cline's June 1 consolidated balance sheet, how much is reported for goodwill?

*a.* $320,000.

*b.* $120,000.

*c.* $80,000.

*d.* $20,000.

Problems 11 and 12 relate to the following:

On May 1, Donovan Company reported the following account balances:

| | |
|---|---|
| Current assets | $ 90,000 |
| Buildings & equipment (net) | 220,000 |
| Total assets | $310,000 |
| Liabilities | $ 60,000 |
| Common stock | 150,000 |
| Retained earnings | 100,000 |
| Total liabilities and equities | $310,000 |

On May 1, Beasley paid $400,000 in stock (fair value) for all of the assets and liabilities of Donovan, which will cease to exist as a separate entity. In connection with the merger, Beasley incurred $15,000 in accounts payable for legal and accounting fees.

Beasley also agreed to pay $75,000 to the former owners of Donovan contingent on meeting certain revenue goals during the following year. Beasley estimated the present value of its probability adjusted expected payment for the contingency at $20,000. In determining its offer, Beasley noted the following:

- Donovan holds a building with a fair value $30,000 more than its book value.
- Donovan has developed unpatented technology appraised at $25,000, although is it not recorded in its financial records.
- Donovan has a research and development activity in process with an appraised fair value of $45,000. The project has not yet reached technological feasibility.
- Book values for Donovan's current assets and liabilities approximate fair values.

LO4, LO5

11. What should Beasley record as total liabilities incurred or assumed in connection with the Donovan merger?

*a.* $15,000

*b.* $75,000

*c.* $95,000

*d.* $150,000

LO5, LO8

12. How much should Beasley record as total assets acquired in the Donovan merger?

*a.* $400,000

*b.* $420,000

*c.* $410,000

*d.* $480,000

LO5

13. Prior to being united in a business combination, Atkins, Inc., and Waterson Corporation had the following stockholders' equity figures:

| | **Atkins** | **Waterson** |
|---|---|---|
| Common stock ($1 par value) | $180,000 | $ 45,000 |
| Additional paid-in capital | 90,000 | 20,000 |
| Retained earnings | 300,000 | 110,000 |

Atkins issues 51,000 new shares of its common stock valued at $3 per share for all of the outstanding stock of Waterson. Immediately afterward, what are consolidated Additional Paid-In Capital and Retained Earnings, respectively?

*a.* $104,000 and $300,000.

*b.* $110,000 and $410,000.

*c.* $192,000 and $300,000.

*d.* $212,000 and $410,000.

Problems 14 and 15 are based on the following information:
Hill, Inc., obtains control over Loring, Inc., on July 1. The book value and fair value of Loring's accounts on that date (prior to creating the combination) follow, along with the book value of Hill's accounts:

| | Hill Book Values | Loring Book Values | Loring Fair Values |
|---|---|---|---|
| Revenues | $(250,000) | $(130,000) | |
| Expenses | 170,000 | 80,000 | |
| Retained earnings, 1/1 | (130,000) | (150,000) | |
| Cash and receivables | 140,000 | 60,000 | $ 60,000 |
| Inventory | 190,000 | 145,000 | 175,000 |
| Patented technology (net) | 230,000 | 180,000 | 200,000 |
| Land | 400,000 | 200,000 | 225,000 |
| Buildings and equipment (net) | 100,000 | 75,000 | 75,000 |
| Liabilities | (540,000) | (360,000) | (350,000) |
| Common stock | (300,000) | (70,000) | |
| Additional paid-in capital | (10,000) | (30,000) | |

LO5

14. Assume that Hill issues 10,000 shares of common stock with a $5 par value and a $40 fair value to obtain all of Loring's outstanding stock. How much goodwill should be recognized?
    *a.* −0−.
    *b.* $15,000.
    *c.* $35,000.
    *d.* $100,000.

LO5

15. On its acquisition-date consolidated balance sheet, what amount should Hill report as patented technology (net)?
    *a.* $200,000
    *b.* $230,000
    *c.* $410,000
    *d.* $430,000

LO8

16. Prycal Co. merges with InterBuy, Inc., and acquires several different categories of intangible assets including trademarks, a customer list, copyrights on artistic materials, agreements to receive royalties on leased intellectual property, and unpatented technology.
    *a.* Describe the criteria for determining whether an intangible asset acquired in a business combination should be separately recognized apart from goodwill.
    *b.* For each of the acquired intangibles listed, identify which recognition criteria (separability and legal/contractual) may or may not apply in recognizing the intangible on the acquiring firm's financial statements.

LO6

17. The following book and fair values were available for Westmont Company as of March 1.

| | Book Value | Fair Value |
|---|---|---|
| Inventory | $ 630,000 | $ 600,000 |
| Land | 750,000 | 990,000 |
| Buildings | 1,700,000 | 2,000,000 |
| Customer relationships | –0– | 800,000 |
| Accounts payable | (80,000) | (80,000) |
| Common stock | (2,000,000) | |
| Additional paid-in capital | (500,000) | |
| Retained earnings 1/1 | (360,000) | |
| Revenues | (420,000) | |
| Expenses | 280,000 | |

Arturo Company pays $4,000,000 cash and issues 20,000 shares of its $2 par value common stock (fair value of $50 per share) for all of Westmont's common stock in a merger, after which Westmont will cease to exist as a separate entity. Stock issue costs amount to $25,000 and Arturo pays $42,000 for legal fees to complete the transaction. Prepare Arturo's journal entry to record its acquisition of Westmont.

LO6

18. Use the same facts as in problem (17), but assume instead that Arturo pays cash of $4,200,000 to acquire Westmont. No stock is issued. Prepare Arturo's journal entry to record its acquisition of Westmont.

LO4, LO5, LO6, LO7

19. Following are preacquisition financial balances for Padre Company and Sol Company as of December 31. Also included are fair values for Sol Company accounts.

| | Padre Company Book Values 12/31 | Sol Company Book Values 12/31 | Sol Company Fair Values 12/31 |
|---|---|---|---|
| Cash | $ 400,000 | $ 120,000 | $ 120,000 |
| Receivables | 220,000 | 300,000 | 300,000 |
| Inventory | 410,000 | 210,000 | 260,000 |
| Land | 600,000 | 130,000 | 110,000 |
| Building and equipment (net) | 600,000 | 270,000 | 330,000 |
| Franchise agreements | 220,000 | 190,000 | 220,000 |
| Accounts payable | (300,000) | (120,000) | (120,000) |
| Accrued expenses | (90,000) | (30,000) | (30,000) |
| Long-term liabilities | (900,000) | (510,000) | (510,000) |
| Common stock—$20 par value | (660,000) | | |
| Common stock—$5 par value | | (210,000) | |
| Additional paid-in capital | (70,000) | (90,000) | |
| Retained earnings, 1/1 | (390,000) | (240,000) | |
| Revenues | (960,000) | (330,000) | |
| Expenses | 920,000 | 310,000 | |

Note: Parentheses indicate a credit balance.

On December 31, Padre acquires Sol's outstanding stock by paying $360,000 in cash and issuing 10,000 shares of its own common stock with a fair value of $40 per share. Padre paid legal and accounting fees of $20,000 as well as $5,000 in stock issuance costs.

Determine the value that would be shown in Padre and Sol's consolidated financial statements for each of the accounts listed.

**Accounts**

| | |
|---|---|
| Inventory | Revenues |
| Land | Additional paid-in capital |
| Buildings and equipment | Expenses |
| Franchise agreements | Retained earnings, 1/1 |
| Goodwill | |

LO5, LO6

20. On May 1, Soriano Co. reported the following account balances along with their estimated fair values:

| | Carrying Value | Fair Value |
|---|---|---|
| Receivables | $ 90,000 | $ 90,000 |
| Inventory | 75,000 | 75,000 |
| Copyrights | 125,000 | 480,000 |
| Patented technology | 825,000 | 700,000 |
| Total assets | $1,115,000 | $1,345,000 |
| Current liabilities | $ 160,000 | $ 160,000 |
| Long-term liabilities | 645,000 | 635,000 |
| Common stock | 100,000 | |
| Retained earnings | 210,000 | |
| Total liabilities and equities | $1,115,000 | |

On that day, Zambrano paid cash to acquire all of the assets and liabilities of Soriano, which will cease to exist as a separate entity. To facilitate the merger, Zambrano also paid $100,000 to an investment banking firm.

The following information was also available:

- Zambrano further agreed to pay an extra $70,000 to the former owners of Soriano only if they meet certain revenue goals during the next two years. Zambrano estimated the present value of its probability adjusted expected payment for this contingency at $35,000.
- Soriano has a research and development project in process with an appraised value of $200,000. However, the project has not yet reached technological feasibility and the project's assets have no alternative future use.

Prepare Zambrano's journal entries to record the Soriano acquisition assuming its initial cash payment to the former owners was

*a.* $700,000.

*b.* $800,000.

LO4, LO5, LO6, LO7

21. On June 30, 2013, Wisconsin, Inc., issued $300,000 in debt and 15,000 new shares of its $10 par value stock to Badger Company owners in exchange for all of the outstanding shares of that company. Wisconsin shares had a fair value of $40 per share. Prior to the combination, the financial statements for Wisconsin and Badger for the six-month period ending June 30, 2013, were as follows:

| | Wisconsin | Badger |
|---|---|---|
| Revenues | $ (900,000) | $ (300,000) |
| Expenses | 660,000 | 200,000 |
| Net income | $ (240,000) | $ (100,000) |
| Retained earnings, 1/1 | $ (800,000) | $ (200,000) |
| Net income | (240,000) | (100,000) |
| Dividends paid | 90,000 | –0– |
| Retained earnings, 6/30 | $ (950,000) | $ (300,000) |
| Cash | $ 80,000 | $ 110,000 |
| Receivables and inventory | 400,000 | 170,000 |
| Patented technology (net) | 900,000 | 300,000 |
| Equipment (net) | 700,000 | 600,000 |
| Total assets | $ 2,080,000 | $ 1,180,000 |
| Liabilities | $ (500,000) | $ (410,000) |
| Common stock | (360,000) | (200,000) |
| Additional paid-in capital | (270,000) | (270,000) |
| Retained earnings | (950,000) | (300,000) |
| Total liabilities and equities | $(2,080,000) | $(1,180,000) |

Wisconsin also paid $30,000 to a broker for arranging the transaction. In addition, Wisconsin paid $40,000 in stock issuance costs. Badger's equipment was actually worth $700,000, but its patented technology was valued at only $280,000.

What are the consolidated balances for the following accounts?

*a.* Net income.

*b.* Retained earnings, 1/1/13.

*c.* Patented technology.

*d.* Goodwill.

*e.* Liabilities.

*f.* Common stock.

*g.* Additional paid-in capital.

LO4, LO7

22. On January 1, 2013, Pinnacle Corporation exchanged $3,200,000 cash for 100 percent of the outstanding voting stock of Strata Corporation. Pinnacle plans to maintain Strata as a wholly owned subsidiary with separate legal status and accounting information systems.

At the acquisition date, Pinnacle prepared the following fair-value allocation schedule:

| | | |
|---|---|---|
| Fair value of Strata (consideration transferred) | | $3,200,000 |
| Carrying amount acquired | | 2,600,000 |
| Excess fair value | | $ 600,000 |
| to buildings (undervalued) | $ 300,000 | |
| to licensing agreements (overvalued) | (100,000) | 200,000 |
| to goodwill (indefinite life) | | $ 400,000 |

Immediately after closing the transaction, Pinnacle and Strata prepared the following post-acquisition balance sheets from their separate financial records.

| | Pinnacle | Strata |
|---|---|---|
| Cash | $ 433,000 | $ 122,000 |
| Accounts receivable | 1,210,000 | 283,000 |
| Inventory | 1,235,000 | 350,000 |
| Investment in Strata | 3,200,000 | –0– |
| Buildings (net) | 5,572,000 | 1,845,000 |
| Licensing agreements | –0– | 3,000,000 |
| Goodwill | 350,000 | –0– |
| Total assets | $ 12,000,000 | $ 5,600,000 |
| Accounts payable | (300,000) | (375,000) |
| Long-term debt | (2,700,000) | (2,625,000) |
| Common stock | (3,000,000) | (1,000,000) |
| Additional paid-in capital | –0– | (500,000) |
| Retained earnings | (6,000,000) | (1,100,000) |
| Total liabilities and equities | $(12,000,000) | $(5,600,000) |

Prepare a January 1, 2013, consolidated balance sheet for Pinnacle Corporation and its subsidiary Strata Corporation.

LO4, LO5, LO7

eXcel

23. On January 1, 2013, Marshall Company acquired 100 percent of the outstanding common stock of Tucker Company. To acquire these shares, Marshall issued $200,000 in long-term liabilities and 20,000 shares of common stock having a par value of $1 per share but a fair value of $10 per share. Marshall paid $30,000 to accountants, lawyers, and brokers for assistance in the acquisition and another $12,000 in connection with stock issuance costs.

Prior to these transactions, the balance sheets for the two companies were as follows:

| | Marshall Company Book Value | Tucker Company Book Value |
|---|---|---|
| Cash | $ 60,000 | $ 20,000 |
| Receivables | 270,000 | 90,000 |
| Inventory | 360,000 | 140,000 |
| Land | 200,000 | 180,000 |
| Buildings (net) | 420,000 | 220,000 |
| Equipment (net) | 160,000 | 50,000 |
| Accounts payable | (150,000) | (40,000) |
| Long-term liabilities | (430,000) | (200,000) |
| Common stock—$1 par value | (110,000) | |
| Common stock—$20 par value | | (120,000) |
| Additional paid-in capital | (360,000) | –0– |
| Retained earnings, 1/1/13 | (420,000) | (340,000) |

Note: Parentheses indicate a credit balance.

In Marshall's appraisal of Tucker, it deemed three accounts to be undervalued on the subsidiary's books: Inventory by $5,000, Land by $20,000, and Buildings by $30,000. Marshall plans to maintain Tucker's separate legal identity and to operate Tucker as a wholly owned subsidiary.

*a.* Determine the amounts that Marshall Company would report in its postacquisition balance sheet. In preparing the postacquisition balance sheet, any required adjustments to income accounts from the acquisition should be closed to Marshall's retained earnings.

*b.* To verify the answers found in part (*a*), prepare a worksheet to consolidate the balance sheets of these two companies as of January 1, 2013.

LO4, LO5, LO7, LO8

eXcel

24. Pratt Company acquired all of Spider, Inc.'s outstanding shares on December 31, 2013, for $495,000 cash. Pratt will operate Spider as a wholly owned subsidiary with a separate legal and accounting identity. Although many of Spider's book values approximate fair values, several of its accounts have fair values that differ from book values. In addition, Spider has internally developed assets that remain unrecorded on its books. In deriving the acquisition price, Pratt assessed Spider's fair and book value differences as follows:

| | Book Values | Fair Values |
|---|---|---|
| Computer software | $ 20,000 | $ 70,000 |
| Equipment | 40,000 | 30,000 |
| Client contracts | –0– | 100,000 |
| In-process research and development | –0– | 40,000 |
| Notes payable | (60,000) | (65,000) |

At December 31, 2013, the following financial information is available for consolidation:

| | Pratt | Spider |
|---|---|---|
| Cash | $ 36,000 | $ 18,000 |
| Receivables | 116,000 | 52,000 |
| Inventory | 140,000 | 90,000 |
| Investment in Spider | 495,000 | –0– |
| Computer software | 210,000 | 20,000 |
| Buildings (net) | 595,000 | 130,000 |
| Equipment (net) | 308,000 | 40,000 |
| Client contracts | –0– | –0– |
| Goodwill | –0– | –0– |
| Total assets | $ 1,900,000 | $ 350,000 |
| Accounts payable | $ (88,000) | $ (25,000) |
| Notes payable | (510,000) | (60,000) |
| Common stock | (380,000) | (100,000) |
| Additional paid-in capital | (170,000) | (25,000) |
| Retained earnings | (752,000) | (140,000) |
| Total liabilities and equities | $(1,900,000) | $(350,000) |

Prepare a consolidated balance sheet for Pratt and Spider as of December 31, 2013.

LO4, LO5, LO6

25. Allerton Company acquires all of Deluxe Company's assets and liabilities for cash on January 1, 2013, and subsequently formally dissolves Deluxe. At the acquisition date, the following book and fair values were available for the Deluxe Company accounts:

| | Book Values | Fair Values |
|---|---|---|
| Current assets | $ 60,000 | $ 60,000 |
| Building | 90,000 | 50,000 |
| Land | 10,000 | 20,000 |
| Trademark | –0– | 30,000 |
| Goodwill | 15,000 | ? |
| Liabilities | (40,000) | (40,000) |
| Common stock | (100,000) | |
| Retained earnings | (35,000) | |

Prepare Allerton's entry to record its acquisition of Deluxe in its accounting records assuming the following cash exchange amounts:

(1) $145,000.

(2) $110,000.

LO4, LO6, LO9

26. On June 30, 2013, Sampras Company reported the following account balances:

| | | | |
|---|---|---|---|
| Receivables | $ 80,000 | Current liabilities | $ (10,000) |
| Inventory | 70,000 | Long-term liabilities | (50,000) |
| Buildings (net) | 75,000 | Common stock | (90,000) |
| Equipment (net) | 25,000 | Retained earnings | (100,000) |
| Total assets | $250,000 | Total liabilities and equities | $(250,000) |

On June 30, 2013, Pelham paid $300,000 cash for all assets and liabilities of Sampras, which will cease to exist as a separate entity. In connection with the acquisition, Pelham paid $10,000 in legal fees. Pelham also agreed to pay $50,000 to the former owners of Sampras contingent on meeting certain revenue goals during 2014. Pelham estimated the present value of its probability adjusted expected payment for the contingency at $15,000.

In determining its offer, Pelham noted the following pertaining to Sampras:

- It holds a building with a fair value $40,000 more than its book value.
- It has developed a customer list appraised at $22,000, although it is not recorded in its financial records.
- It has research and development activity in process with an appraised fair value of $30,000. However, the project has not yet reached technological feasibility and the assets used in the activity have no alternative future use.
- Book values for the receivables, inventory, equipment, and liabilities approximate fair values.

Prepare Pelham's accounting entry to record the combination with Sampras.

LO4, LO5

27. SafeData Corporation has the following account balances and respective fair values on June 30:

| | Book Values | Fair Values |
|---|---|---|
| Receivables | $ 80,000 | $ 80,000 |
| Patented technology | 100,000 | 700,000 |
| Customer relationships | –0– | 500,000 |
| In-process research and development | –0– | 300,000 |
| Liabilities | (400,000) | (400,000) |
| Common stock | (100,000) | |
| Additional paid-in capital | (300,000) | |
| Retained earnings deficit, 1/1 | 700,000 | |
| Revenues | (300,000) | |
| Expenses | 220,000 | |

Privacy First, Inc., obtained all of the outstanding shares of SafeData on June 30 by issuing 20,000 shares of common stock having a $1 par value but a $75 fair value. Privacy First incurred $10,000 in stock issuance costs and paid $75,000 to an investment banking firm for its assistance in arranging the combination. In negotiating the final terms of the deal, Privacy First also agrees to pay $100,000 to SafeData's former owners if it achieves certain revenue goals in the next two years. Privacy First estimates the probability adjusted present value of this contingent performance obligation at $30,000.

*a.* What is the fair value of the consideration transferred in this combination?

*b.* How should the stock issuance costs appear in Privacy First's postcombination financial statements?

*c.* How should Privacy First account for the fee paid to the investment bank?

*d.* How does the issuance of these shares affect the stockholders' equity accounts of Privacy First, the parent?

*e.* How is the fair value of the consideration transferred in the combination allocated among the assets acquired and the liabilities assumed?

*f.* What is the effect of SafeData's revenues and expenses on consolidated totals? Why?

*g.* What is the effect of SafeData's Common Stock and Additional Paid-In Capital balances on consolidated totals?

*h.* If Privacy First's stock had been worth only $50 per share rather than $75, how would the consolidation of SafeData's assets and liabilities have been affected?

LO4, LO5, LO6, LO7, LO8

28. On January 1, 2013, NewTune Company exchanges 15,000 shares of its common stock for all of the outstanding shares of On-the-Go, Inc. Each of NewTune's shares has a $4 par value and a $50 fair value. The fair value of the stock exchanged in the acquisition was considered equal to On-the-Go's fair value. NewTune also paid $25,000 in stock registration and issuance costs in connection with the merger.

    Several of On-the-Go's accounts have fair values that differ from their book values on this date:

| | **Book Values** | **Fair Values** |
|---|---|---|
| Receivables | $ 65,000 | $ 63,000 |
| Trademarks | 95,000 | 225,000 |
| Record music catalog | 60,000 | 180,000 |
| In-process research and development | –0– | 200,000 |
| Notes payable | (50,000) | (45,000) |

Precombination January 1, 2013, book values for the two companies are as follows:

| | **NewTune** | **On-the-Go** |
|---|---|---|
| Cash | $ 60,000 | $ 29,000 |
| Receivables | 150,000 | 65,000 |
| Trademarks | 400,000 | 95,000 |
| Record music catalog | 840,000 | 60,000 |
| Equipment (net) | 320,000 | 105,000 |
| Totals | $ 1,770,000 | $ 354,000 |
| Accounts payable | $ (110,000) | $ (34,000) |
| Notes payable | (370,000) | (50,000) |
| Common stock | (400,000) | (50,000) |
| Additional paid-in capital | (30,000) | (30,000) |
| Retained earnings | (860,000) | (190,000) |
| Totals | $(1,770,000) | $(354,000) |

*a.* Assume that this combination is a statutory merger so that On-the-Go's accounts will be transferred to the records of NewTune. On-the-Go will be dissolved and will no longer exist as a legal entity. Prepare a postcombination balance sheet for NewTune as of the acquisition date.

*b.* Assume that no dissolution takes place in connection with this combination. Rather, both companies retain their separate legal identities. Prepare a worksheet to consolidate the two companies as of the combination date.

*c.* How do the balance sheet accounts compare across parts (*a*) and (*b*)?

LO4, LO5, LO7

29. On December 31, 2012, Pacifica, Inc., acquired 100 percent of the voting stock of Seguros Company. Pacifica will maintain Seguros as a wholly owned subsidiary with its own legal and accounting identity. The consideration transferred to the owner of Seguros included 50,000 newly issued Pacifica common shares ($20 market value, $5 par value) and an agreement to pay an additional $130,000 cash if Seguros meets certain project completion goals by December 31, 2013. Pacifica estimates a 50 percent probability that Seguros will be successful in meeting these goals and uses a 4 percent discount rate to represent the time value of money.

    Immediately prior to the acquisition, the following data for both firms were available:

| | **Pacifica** | **Seguros Book Values** | **Seguros Fair Values** |
|---|---|---|---|
| Revenues | $(1,200,000) | | |
| Expenses | 875,000 | | |
| Net income | $ (325,000) | | |
| Retained earnings, 1/1/12 | $ (950,000) | | |
| Net income | (325,000) | | |
| Dividends paid | 90,000 | | |
| Retained earnings, 12/31/12 | $(1,185,000) | | |

(*continued*)

| | Pacifica | Seguros Book Values | Seguros Fair Values |
|---|---|---|---|
| Cash | $ 110,000 | $ 85,000 | $ 85,000 |
| Receivables and inventory | 750,000 | 190,000 | 180,000 |
| Property, plant, and equipment | 1,400,000 | 450,000 | 600,000 |
| Trademarks | 300,000 | 160,000 | 200,000 |
| Total assets | $ 2,560,000 | $ 885,000 | |
| Liabilities | $ (500,000) | $(180,000) | $(180,000) |
| Common stock | (400,000) | (200,000) | |
| Additional paid-in capital | (475,000) | (70,000) | |
| Retained earnings | (1,185,000) | (435,000) | |
| Total liabilities and equities | $(2,560,000) | $(885,000) | |

In addition, Pacifica assessed a research and development project under way at Seguros to have a fair value of $100,000. Although not yet recorded on its books, Pacifica paid legal fees of $15,000 in connection with the acquisition and $9,000 in stock issue costs.

Prepare the following:

*a.* Pacifica's entries to account for the consideration transferred to the former owners of Seguros, the direct combination costs, and the stock issue and registration costs. (Use a 0.961538 present value factor where applicable.)

*b.* A postacquisition column of accounts for Pacifica.

*c.* A worksheet to produce a consolidated balance sheet as of December 31, 2012.

## Appendix Problems

LO9

30. In a pre-2009 business combination, Acme Company acquired all of Brem Company's assets and liabilities for cash. After the combination Acme formally dissolved Brem. At the acquisition date, the following book and fair values were available for the Brem Company accounts:

| | Book Values | Fair Values |
|---|---|---|
| Current assets | $ 80,000 | $ 80,000 |
| Equipment | 120,000 | 180,000 |
| Trademark | –0– | 320,000 |
| Liabilities | (55,000) | (55,000) |
| Common stock | (100,000) | |
| Retained earnings | (45,000) | |

In addition, Acme paid an investment bank $25,000 cash for assistance in arranging the combination.

*a.* Using the legacy purchase method for pre-2009 business combinations, prepare Acme's entry to record its acquisition of Brem in its accounting records assuming the following cash amounts were paid to the former owners of Brem:

1. $610,000
2. $425,000

*b.* How would these journal entries change if the acquisition occurred post-2009 and therefore Acme applied the acquisition method?

LO9

31. On February 1, Piscina Corporation completed a combination with Swimwear Company. At that date, Swimwear's account balances were as follows:

| | Book Values | Fair Values |
|---|---|---|
| Inventory | $ 600,000 | $ 650,000 |
| Land | 450,000 | 750,000 |
| Buildings | 900,000 | 1,000,000 |
| Unpatented technology | –0– | 1,500,000 |
| Common stock ($10 par value) | (750,000) | |
| Retained earnings, 1/1 | (1,100,000) | |
| Revenues | (600,000) | |
| Expenses | 500,000 | |

Piscina issued 30,000 shares of its common stock with a par value of $25 and a fair value of $150 per share to the owners of Swimwear for all of their Swimwear shares. Upon completion of the combination, Swimwear Company was formally dissolved.

Prior to 2002, business combinations were accounted for using either purchase or pooling of interests accounting. The two methods often produced substantially different financial statement effects. For the scenario above,

*a.* What are the respective consolidated values for Swimwear's assets under the pooling method and the purchase method?

*b.* Under each of the following methods, how would Piscina account for Swimwear's current year, but prior to acquisition, revenues and expenses?

- Pooling of interests method
- Purchase method

*c.* Explain the alternative impact of pooling versus purchase accounting on performance ratios such as return on assets and earnings per share in periods subsequent to the combination.

# Develop Your Skills

## FASB ASC RESEARCH AND ANALYSIS CASE—CONSIDERATION OR COMPENSATION?

CPA skills

NaviNow Company agrees to pay $20 million in cash to the four former owners of TrafficEye for all of its assets and liabilities. These four owners of TrafficEye developed and patented a technology for real-time monitoring of traffic patterns on the nation's top 200 frequently congested highways. NaviNow plans to combine the new technology with its existing global positioning systems and projects a resulting substantial revenue increase.

As part of the acquisition contract, NaviNow also agrees to pay additional amounts to the former owners upon achievement of certain financial goals. NaviNow will pay $8 million to the four former owners of TrafficEye if revenues from the combined system exceed $100 million over the next three years. NaviNow estimates this contingent payment to have a probability adjusted present value of $4 million.

The four former owners have also been offered employment contracts with NaviNow to help with system integration and performance enhancement issues. The employment contracts are silent as to service periods, have nominal salaries similar to those of equivalent employees, and specify a profit-sharing component over the next three years (if the employees remain with the company) that NaviNow estimates to have a current fair value of $2 million. The four former owners of TrafficEye say they will stay on as employees of NaviNow for at least three years to help achieve the desired financial goals.

Should NaviNow account for the contingent payments promised to the former owners of TrafficEye as consideration transferred in the acquisition or as compensation expense to employees?

## ASC RESEARCH CASE—DEFENSIVE INTANGIBLE ASSET

CPA skills

Ahorita Company manufactures wireless transponders for satellite applications. Ahorita has recently acquired Zelltech Company, which is primarily known for its software communications development but also manufactures a specialty transponder under the trade name "Z-Tech" that competes with one of Ahorita's products. Ahorita will now discontinue Z-Tech and projects that its own product line will see a market share increase. Nonetheless, Ahorita's management will maintain the rights to the Z-Tech trade name as a defensive intangible asset to prevent its use by competitors, despite the fact that its highest and best use would be to sell the trade name. Ahorita estimates that the trade name has an internal value of $1.5 million, but if sold would yield $2 million.

Answer the following with supporting citations from the FASB ASC:

*a.* How does the FASB ASC Glossary define a defensive intangible asset?

*b.* According to ASC Topic 805 Business Combinations, what is the measurement principle that an acquirer should follow in recording identifiable assets acquired in a business combination?

*c.* According to ASC Topic 820 Fair Value Measurement, what value premise (in-use or in-exchange) should Ahorita assign to the Z-Tech trade name in its consolidated financial statements?

*d.* According to ASC Topic 350 General Intangibles Other than Goodwill, how should Ahorita determine the estimated useful life of its defensive intangible asset?

## RESEARCH CASE—ABBOTT'S ACQUISITION OF SOLVAY PHARMACEUTICALS

In February 2010, Abbott Laboratories acquired Solvay Pharmaceuticals in exchange for $6.1 billion in cash plus contingent consideration. Referring to Abbott's 2010 financial statements, answer the following questions related to Abbott's acquisition of Solvay Pharmaceuticals:

1. Why did Abbott acquire Solvay Pharmaceuticals?
2. What policies did Abbot follow in accounting for the acquisition?
3. What allocations did Abbott make to the assets acquired and liabilities assumed in the acquisition? Provide a calculation showing how Abbott determined the amount allocated to goodwill.
4. How did Abbott account for the contingent consideration portion of the deal?
5. How did Abbott account for the in-process research and development acquired in the combination?
6. How did Abbott account for its acquisition-related expenses?

## FASB ASC RESEARCH CASE—THE DOW CHEMICAL COMPANY'S ACQUIRED CONTINGENCIES

CPA skills

On April 1, 2009, The Dow Chemical Company completed its acquisition of Rohm and Haas Company. Dow Chemical paid $15,681 million cash consideration to Rohm and Haas stockholders in exchange for their ownership shares. Rohm and Haas continued as a wholly owned subsidiary of Dow Chemical.

Refer to Dow Chemical's 2009 second-quarter report, as well as related GAAP, to answer the following questions:

1. Did Dow Chemical recognize any acquired contingencies for its acquisition of Rohm and Haas? If it did, how were they measured? If not, why not?
2. Under what circumstances should a firm recognize an asset acquired or a liability assumed in a business combination that arises from a contingency?
3. How should Dow Chemical account for its acquired contingencies in periods after the acquisition date?
4. What is the disclosure requirement for Dow Chemical's acquired contingencies?
5. What are some potential concerns with authoritative accounting literature for acquired contingencies?

KAPLAN CPA REVIEW

### Please visit the text website for the online Kaplan CPA simulation:

**Consolidation**
Situation: For each parent-subsidiary relationship, determine the proper accounting treatment.

**Topics to be covered:**

- Consolidation requirements
- Consolidation exceptions