LEARNING GOALS

LG1 Understand merger fundamentals, including basic terminology, motives for merging, and types of mergers.

LG2 Describe the objectives and procedures used in leveraged buyouts (LBOs) and divestitures.

LG3 Demonstrate the procedures used to value the target company, and discuss the effect of stock swap transactions on earnings per share.

LG4 Discuss the merger negotiation process, the role of holding companies, and international mergers.

LG5 Understand the types and major causes of business failure and the use of voluntary settlements to sustain or liquidate the failed firm.

LG6 Explain bankruptcy legislation and the procedures involved in reorganizing or liquidating a bankrupt firm.

Across the Disciplines  WHY THIS CHAPTER MATTERS TO YOU

Accounting: You need to understand mergers (including the tax considerations involved), leveraged buyouts, and divestitures of assets in order to record and report these organizational changes; you also need to understand bankruptcy procures because you will play a large part in any reorganization or liquidation.

Information systems: You need to understand what data need to be tracked in the case of mergers, leveraged buyouts, divestitures of assets, or bankruptcy, in order to devise the systems needed to effect these organizational changes.

Management: You need to understand the motives for mergers so that you will know when and why a merger is a good idea. Also you may need to know how to fend off an unwelcome takeover attempt, when to divest the firm of assets for strategic reasons, and what options are available in the case of business failure.

Marketing: You need to understand mergers and divestitures, which may enable the firm to grow, diversify, or achieve synergy in ways that will promote marketing’s strategic goals.

Operations: You need to understand mergers and divestitures because ongoing operations will be significantly affected by these organizational changes. Also, you should know that business failure does not necessarily mean a cessation of operations but, rather, may require reorganization with funds sufficient for working capital and to cover fixed charges.
For CEO Stephen Bollenbach, the 1999 Hilton Hotels Corp. (HHC) merger with Promus Hotels was “our defining acquisition.” It moved Hilton into a position to compete with larger competitors such as Marriott and Starwood. (HHC owns the Hilton name in North America; Hilton International owns the rights in the rest of the world.)

“The Promus management was so delighted we acquired them,” says Matthew Hart, CFO at HHC. “We were in the same industry. We knew the business,” he says. Moreover, “they had what we needed, and we had what they needed.”

What Hilton needed was more hotels. With only 250 North American properties, it trailed competitors such as Marriott with 1,800 and Starwood with 750. The Promus merger brought Hilton the Embassy Suites, Hampton Inn, Doubletree, and Red Lion chains. The new Hilton had 1,900 hotels, with brands from budget to luxury to fit the pocketbooks of all travelers.

Plagued by problems resulting from its own merger with Doubletree Hotels, Promus needed Hilton’s financial strength to support its premium hotel brands. The two companies had discussed a merger in 1997 but couldn’t agree on price. In mid-1999, Hilton again approached Promus, and they struck a deal based on a value for Promus of about eight times projected 2000 earnings before interest, taxes, depreciation, and amortization. The $4-billion deal priced Promus shares at $38.50—a nearly 45 percent premium above the share price in late August 1999. Some lodging industry analysts believed the higher price was fair, citing Hilton’s ability to consolidate the two companies, achieve economies of scale, and increase market share.

Once the merger was approved and financed, the work of integrating the operations of two very different companies began. By looking for ways to improve synergy among the chains, Hilton achieved cost savings of $72 million, 30 percent more than anticipated, in the first year. Hilton expanded its Honors guest rewards program to another 1,400 hotels and developed e-business solutions to improve cross-selling. With its new system, reservations agents can access multiple hotel chains from one screen and find another room at a sister hotel when a customer’s first choice is full.

Successful horizontal mergers (mergers of firms in the same line of business) such as that of Hilton and Promus require careful evaluation of the target firm and a clear understanding of the motives involved on both sides. Not all mergers turn out as well, and disappointing outcomes may call for other actions. This chapter looks at several types of corporate restructuring—mergers, leveraged buyouts, and divestitures—as well as at restructuring that results from business failure.
17.1 Merger Fundamentals

Firms sometimes use mergers to expand externally by acquiring control of another firm. Whereas the overriding objective for a merger should be to improve the firm’s share value, a number of more immediate motivations such as diversification, tax considerations, and increasing owner liquidity frequently exist. Sometimes mergers are pursued to acquire needed assets rather than the going concern. Here we discuss merger fundamentals—terminology, motives, and types. In the following sections, we will describe the related topics of leveraged buyouts and divestitures and will review the procedures used to analyze and negotiate mergers.

Basic Terminology

In the broadest sense, activities involving expansion or contraction of a firm’s operations or changes in its asset or financial (ownership) structure are called corporate restructuring. The topics addressed in this chapter—mergers, LBOs, and divestitures—are some of the most common forms of corporate restructuring; there are many others, which are beyond the scope of this text. Here, we define some basic merger terminology; other terms are introduced and defined as needed in subsequent discussions.

Mergers, Consolidations, and Holding Companies

A merger occurs when two or more firms are combined and the resulting firm maintains the identity of one of the firms. Usually, the assets and liabilities of the smaller firm are merged into those of the larger firm. Consolidation, on the other hand, involves the combination of two or more firms to form a completely new corporation. The new corporation normally absorbs the assets and liabilities of the companies from which it is formed. Because of the similarity of mergers and consolidations, the term merger is used throughout this chapter to refer to both.

A holding company is a corporation that has voting control of one or more other corporations. Having control in large, widely held companies generally requires ownership of between 10 and 20 percent of the outstanding stock. The companies controlled by a holding company are normally referred to as its subsidiaries. Control of a subsidiary is typically obtained by purchasing a sufficient number of shares of its stock.

Acquiring versus Target Companies

The firm in a merger transaction that attempts to acquire another firm is commonly called the acquiring company. The firm that the acquiring company is pursuing is referred to as the target company. Generally, the acquiring company identifies, evaluates, and negotiates with the management and/or shareholders of the target company. Occasionally, the management of a target company initiates its acquisition by seeking to be acquired.

---

CHAPTER 17 Mergers, LBOs, Divestitures, and Business Failure

Friendly versus Hostile Takeovers

Mergers can occur on either a friendly or a hostile basis. Typically, after identifying the target company, the acquirer initiates discussions. If the target management is receptive to the acquirer’s proposal, it may endorse the merger and recommend shareholder approval. If the stockholders approve the merger, the transaction is typically consummated either through a cash purchase of shares by the acquirer or through an exchange of the acquirer’s stock, bonds, or some combination for the target firm’s shares. This type of negotiated transaction is known as a friendly merger.

If, on the other hand, the takeover target’s management does not support the proposed takeover, it can fight the acquirer’s actions. In this case, the acquirer can attempt to gain control of the firm by buying sufficient shares of the target firm in the marketplace. This is typically accomplished by using tender offers, which, as noted in Chapter 13, are formal offers to purchase a given number of shares at a specified price. This type of unfriendly transaction is commonly referred to as a hostile merger. Clearly, hostile mergers are more difficult to consummate because the target firm’s management acts to deter rather than facilitate the acquisition. Regardless, hostile takeovers are sometimes successful.

Strategic versus Financial Mergers

Mergers are undertaken for either strategic or financial reasons. Strategic mergers seek to achieve various economies of scale by eliminating redundant functions, increasing market share, improving raw material sourcing and finished product distribution, and so on. In these mergers, the operations of the acquiring and target firms are somehow combined to achieve economies and thereby cause the performance of the merged firm to exceed that of the premerged firms. The mergers of Daimler-Benz and Chrysler (both auto manufacturers) and Norwest and Wells Fargo (both banks) are examples of strategic mergers. An interesting variation of the strategic merger involves the purchase of specific product lines (rather than the whole company) for strategic reasons.

Financial mergers, on the other hand, are based on the acquisition of companies that can be restructured to improve their cash flow. These mergers involve the acquisition of the target firm by an acquirer, which may be another company or a group of investors—often the firm’s existing management. The objective of the acquirer is to cut costs drastically and sell off certain unproductive or non-compatible assets in order to increase the firm’s cash flow. The increased cash flow is used to service the sizable debt that is typically incurred to finance these transactions. Financial mergers are based, not on the firm’s ability to achieve economies of scale, but on the acquirer’s belief that through restructuring, the firm’s hidden value can be unlocked.

The ready availability of junk bond financing throughout the 1980s fueled the financial merger mania during that period. With the collapse of the junk bond

---

2. A somewhat similar nonmerger arrangement is the strategic alliance, an agreement typically between a large company with established products and channels of distribution and an emerging technology company with a promising research and development program in areas of interest to the larger company. In exchange for its financial support, the larger, established company obtains a stake in the technology being developed by the emerging company. Today, strategic alliances are commonplace in the biotechnology, information technology, and software industries.
market in the early 1990s, the bankruptcy filings of a number of prominent financial mergers of the 1980s, and the rising stock market of the later 1990s, financial mergers lost their luster. As a result, the strategic merger, which does not rely so heavily on debt, tends to dominate today.

**Motives for Merging**

Firms merge to fulfill certain objectives. The overriding goal for merging is maximization of the owners’ wealth as reflected in the acquirer’s share price. More specific motives include growth or diversification, synergy, fund raising, increased managerial skill or technology, tax considerations, increased ownership liquidity, and defense against takeover. These motives should be pursued when they are believed to be consistent with owner wealth maximization.

**Growth or Diversification**

Companies that desire rapid growth in size or market share or diversification in the range of their products may find that a merger can be used to fulfill this objective. Instead of going through the time-consuming process of internal growth or diversification, the firm may achieve the same objective in a short period of time by merging with an existing firm. Such a strategy is often less costly than the alternative of developing the necessary production capacity. If a firm that wants to expand operations can find a suitable going concern, it may avoid many of the risks associated with the design, manufacture, and sale of additional or new products. Moreover, when a firm expands or extends its product line by acquiring another firm, it also removes a potential competitor.

**Synergy**

The synergy of mergers is the economies of scale resulting from the merged firms’ lower overhead. These economies of scale from lowering the combined overhead increase earnings to a level greater than the sum of the earnings of each of the independent firms. Synergy is most obvious when firms merge with other firms in the same line of business, because many redundant functions and employees can thereby be eliminated. Staff functions, such as purchasing and sales, are probably most greatly affected by this type of combination.

**Fund Raising**

Often, firms combine to enhance their fund-raising ability. A firm may be unable to obtain funds for its own internal expansion but able to obtain funds for external business combinations. Quite often, one firm may combine with another that

---

3. Certain legal constraints on growth exist—especially when the elimination of competition is expected. The various antitrust laws, which are strictly enforced by the Federal Trade Commission (FTC) and the Justice Department, prohibit business combinations that eliminate competition, particularly when the resulting enterprise would be a monopoly.
has high liquid assets and low levels of liabilities. The acquisition of this type of “cash-rich” company immediately increases the firm’s borrowing power by decreasing its financial leverage. This should allow funds to be raised externally at lower cost.

**Increased Managerial Skill or Technology**

Occasionally, a firm will have good potential that it finds itself unable to develop fully because of deficiencies in certain areas of management or an absence of needed product or production technology. If the firm cannot hire the management or develop the technology it needs, it might combine with a compatible firm that has the needed managerial personnel or technical expertise. Of course, any merger should contribute to maximizing the owners’ wealth.

**Tax Considerations**

Quite often, tax considerations are a key motive for merging. In such a case, the tax benefit generally stems from the fact that one of the firms has a **tax loss carryforward**. This means that the company’s tax loss can be applied against a limited amount of future income of the merged firm over 20 years or until the total tax loss has been fully recovered, whichever comes first.4 Two situations could actually exist. A company with a tax loss could acquire a profitable company to utilize the tax loss. In this case, the acquiring firm would boost the combination’s after-tax earnings by reducing the taxable income of the acquired firm. A tax loss may also be useful when a profitable firm acquires a firm that has such a loss. In either situation, however, the merger must be justified not only on the basis of the tax benefits but also on grounds consistent with the goal of owner wealth maximization. Moreover, the tax benefits described can be used only in mergers—not in the formation of holding companies—because only in the case of mergers are operating results reported on a consolidated basis. An example will clarify the use of the tax loss carryforward.

**EXAMPLE**

Bergen Company, a wheel bearing manufacturer, has a total of $450,000 in tax loss carryforwards resulting from operating tax losses of $150,000 a year in each of the past 3 years. To use these losses and to diversify its operations, Hudson Company, a molder of plastics, has acquired Bergen through a merger. Hudson expects to have **earnings before taxes** of $300,000 per year. We assume that these earnings are realized, that they fall within the annual limit that is legally allowed for application of the tax loss carryforward resulting from the merger (see footnote 4), that the Bergen portion of the merged firm just breaks even, and that Hudson is in the 40% tax bracket. The total taxes paid by the two firms and their after-tax earnings without and with the merger are as shown in Table 17.1.

---

4. To deter firms from combining solely to take advantage of tax loss carryforwards, the **Tax Reform Act of 1986** imposed an annual limit on the amount of taxable income against which such losses can be applied. The annual limit is determined by formula and is tied to the value of the loss corporation before the combination. Although not fully eliminating this motive for combination, the act makes it more difficult for firms to justify combinations solely on the basis of tax loss carryforwards.
TABLE 17.1 Total Taxes and After-Tax Earnings for Hudson Company Without and With Merger

<table>
<thead>
<tr>
<th>Year</th>
<th>Total for 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total taxes and after-tax earnings without merger</td>
<td></td>
</tr>
<tr>
<td>(1) Earnings before taxes</td>
<td>$300,000</td>
</tr>
<tr>
<td>(2) Taxes [0.40 \times (1)]</td>
<td>120,000</td>
</tr>
<tr>
<td>(3) Earnings after taxes [(1) - (2)]</td>
<td>$180,000</td>
</tr>
<tr>
<td>Total taxes and after-tax earnings with merger</td>
<td></td>
</tr>
<tr>
<td>(4) Earnings before losses</td>
<td>$300,000</td>
</tr>
<tr>
<td>(5) Tax loss carryforward</td>
<td>300,000</td>
</tr>
<tr>
<td>(6) Earnings before taxes [(4) - (5)]</td>
<td>$0</td>
</tr>
<tr>
<td>(7) Taxes [0.40 \times (6)]</td>
<td>0</td>
</tr>
<tr>
<td>(8) Earnings after taxes [(4) - (7)]</td>
<td>$300,000</td>
</tr>
</tbody>
</table>

With the merger the total tax payments are less—$180,000 (total of line 7) versus $360,000 (total of line 2). With the merger the total after-tax earnings are more—$720,000 (total of line 8) versus $540,000 (total of line 3). The merged firm is able to deduct the tax loss over 20 years or until the total tax loss is fully recovered, whichever comes first. In this example, the total tax loss is fully deducted by the end of year 2.

**Increased Ownership Liquidity**

The merger of two small firms or of a small and a larger firm may provide the owners of the small firm(s) with greater liquidity. This is due to the higher marketability associated with the shares of larger firms. Instead of holding shares in a small firm that has a very “thin” market, the owners will receive shares that are traded in a broader market and can thus be liquidated more readily. Also, owning shares for which market price quotations are readily available provides owners with a better sense of the value of their holdings. Especially in the case of small, closely held firms, the improved liquidity of ownership obtainable through merger with an acceptable firm may have considerable appeal.

**Defense Against Takeover**

Occasionally, when a firm becomes the target of an unfriendly takeover, it will as a defense acquire another company. Such a strategy typically works like this: The original target firm takes on additional debt to finance its defensive acquisition; because of the debt load, the target firm becomes too highly levered financially to be of any further interest to its suitor. To be effective, a defensive takeover must create greater value for shareholders than they would have realized had the firm been merged with its suitor.
**Types of Mergers**

The four types of mergers are the (1) horizontal merger, (2) vertical merger, (3) congeneric merger, and (4) conglomerate merger. A **horizontal merger** results when two firms in the same line of business are merged. An example is the merger of two machine tool manufacturers. This form of merger results in the expansion of a firm’s operations in a given product line and at the same time eliminates a competitor. A **vertical merger** occurs when a firm acquires a supplier or a customer. For example, the merger of a machine tool manufacturer with its supplier of castings is a vertical merger. The economic benefit of a vertical merger stems from the firm’s increased control over the acquisition of raw materials or the distribution of finished goods.

A **congeneric merger** is achieved by acquiring a firm that is in the same general industry but is neither in the same line of business nor a supplier or customer. An example is the merger of a machine tool manufacturer with the manufacturer of industrial conveyor systems. The benefit of a congeneric merger is the resulting ability to use the same sales and distribution channels to reach customers of both businesses. A **conglomerate merger** involves the combination of firms in unrelated businesses. The merger of a machine tool manufacturer with a chain of fast-food restaurants is an example of this kind of merger. The key benefit of the conglomerate merger is its ability to reduce risk by merging firms that have different seasonal or cyclic patterns of sales and earnings.5

**Review Questions**

17–1 Define and differentiate among the members of each of the following sets of terms: (a) mergers, consolidations, and holding companies; (b) acquiring company and target company; (c) friendly merger and hostile merger; and (d) strategic merger and financial merger.

17–2 Briefly describe each of the following motives for merging: (a) growth or diversification, (b) synergy, (c) fund raising, (d) increased managerial skill or technology, (e) tax considerations, (f) increased ownership liquidity, and (g) defense against takeover.

17–3 Briefly describe each of the following types of mergers: (a) horizontal, (b) vertical, (c) congeneric, and (d) conglomerate.

**17.2 LBOs and Divestitures**

Before we address the mechanics of merger analysis and negotiation, you need to understand two topics that are closely related to mergers—LBOs and divestitures. An LBO is a method of structuring an acquisition, and divestitures involve the sale of a firm’s assets.

---

5. A discussion of the key concepts underlying the portfolio approach to the diversification of risk was presented in Chapter 5. In the theoretical literature, some questions exist about whether diversification by the firm is a proper motive consistent with shareholder wealth maximization. Many scholars argue that by buying shares in different firms, investors can obtain the same benefits as they would realize from owning stock in the merged firm. It appears that other benefits need to be available to justify mergers.
Leveraged Buyouts (LBOs)

A popular technique that was widely used during the 1980s to make acquisitions is the leveraged buyout (LBO), which involves the use of a large amount of debt to purchase a firm. LBOs are a clear-cut example of a financial merger undertaken to create a high-debt private corporation with improved cash flow and value. Typically, in an LBO, 90 percent or more of the purchase price is financed with debt. A large part of the borrowing is secured by the acquired firm’s assets, and the lenders, because of the high risk, take a portion of the firm’s equity. Junk bonds have been routinely used to raise the large amounts of debt needed to finance LBO transactions. Of course, the purchasers in an LBO expect to use the improved cash flow to service the large amount of junk bond and other debt incurred in the buyout.

An attractive candidate for acquisition via a leveraged buyout should possess three key attributes:

1. It must have a good position in its industry, with a solid profit history and reasonable expectations of growth.
2. The firm should have a relatively low level of debt and a high level of “bankable” assets that can be used as loan collateral.
3. It must have stable and predictable cash flows that are adequate to meet interest and principal payments on the debt and provide adequate working capital.

Of course, a willingness on the part of existing ownership and management to sell the company on a leveraged basis is also needed.

Many LBOs did not live up to original expectations. One of the largest ever was the late-1988, $24.5-billion buyout of RJR Nabisco by KKR. RJR was taken public in 1991, and the firm continued to struggle under the heavy debt of the LBO for a few years before improving its debt position and credit rating. Campeau Corporation’s buyouts of Allied Stores and Federated Department Stores resulted in its later filing for bankruptcy protection, from which reorganized companies later emerged. In recent years, other highly publicized LBOs have defaulted on the high-yield debt incurred to finance the buyout. Although the LBO remains a viable financing technique under the right circumstances, its use is greatly diminished from the frenzied pace of the 1980s. Whereas the LBOs of the 1980s were used, often indiscriminately, for hostile takeovers, today LBOs are most often used to finance management buyouts.

Divestitures

Companies often achieve external expansion by acquiring an operating unit—plant, division, product line, or subsidiary, and so on—of another company. In such a case, the seller generally believes that the value of the firm will be enhanced by converting the unit into cash or some other more productive asset. The selling of some of a firm’s assets is called divestiture. Unlike business failure, divestiture is often undertaken for positive motives: to generate cash for expansion of other product lines, to get rid of a poorly performing operation, to streamline the corporation, or to restructure the corporation’s business in a manner consistent with its strategic goals.
FOCUS ON PRACTICE Sara Lee’s New Recipe for a Trimmer Company

Sara Lee Corporation is a conglomerate that sells everything from its well-known bakery products to Chock Full o’ Nuts Coffee, Hillshire Farms packaged meats, Kiwi shoe polish, Hanes underwear, and Wonderbras. With so many diverse product lines, the company was struggling. In May 2000, CEO C. Steven McMillan announced a reshaping program to continue the restructuring begun in 1997 when the company “deverticalized” by selling off yarn-, textile-, and food-manufacturing operations. Through a program of strategic divestitures and acquisitions, Sara Lee would focus on three core nondurable-goods business segments: food and beverage, intimates and underwear, and household products. In deciding whether to sell or acquire a brand, management considered five criteria: global reach, brand leadership, multiple distribution channels, product innovation, and competitive cost structure.

By early 2002, the company had approved the disposition of 18 noncore businesses and had received at least $3 billion from sales and IPOs. Among the first brands it targeted were sports-wear and accessories and food services. Through IPOs, it spun off Coach, a premier leather goods business, and food distributor PYA/Monarch. Other transactions included the sale of several European food, apparel, and textile operations and the Australasian intimates and underwear business.

At the same time, Sara Lee began to reorganize business units, centralizing many operations to maximize overall efficiency, and it used sales proceeds to acquire strong brands for its core lines. Its purchase of the Earthgrain’s Company bakery brought a state-of-the-art direct store distribution system on which to build Sara Lee’s national bakery business. On the international scene, Sara Lee became Brazil’s number-1 coffee company with the acquisition of Uniao.


Firms divest themselves of operating units by a variety of methods. One involves the sale of a product line to another firm. An example is Paramount’s sale of Simon and Schuster to Pearson PLC to free up cash and allow Paramount to focus its business better on global mass consumer markets. Outright sales of operating units can be accomplished on a cash or stock swap basis via the procedures described later in this chapter. A second method that has become popular involves the sale of the unit to existing management. This sale is often achieved through the use of a leveraged buyout (LBO).

Sometimes divestiture is achieved through a spin-off, which results in an operating unit becoming an independent company. A spin-off is accomplished by issuing shares in the divested operating unit on a pro rata basis to the parent company’s shareholders. Such an action allows the unit to be separated from the corporation and to trade as a separate entity. An example was the decision by AT&T to spin off its Global Information Solutions unit (formerly and now NCR, which produces electronic terminals and computers), to allow AT&T to focus better on its core communications business. Like outright sale, this approach achieves the divestiture objective, although it does not bring additional cash or stock to the parent company. The final and least popular approach to divestiture involves liquidation of the operating unit’s individual assets.

spin-off
A form of divestiture in which an operating unit becomes an independent company through the issuance of shares in it, on a pro rata basis, to the parent company’s shareholders.
Regardless of the method used to divest a firm of an unwanted operating unit, the goal typically is to create a more lean and focused operation that will enhance the efficiency as well as the profitability of the enterprise and create maximum value for shareholders. Recent divestitures seem to suggest that many operating units are worth much more to others than to the firm itself. Comparisons of postdivestiture and predivestiture market values have shown that the breakup value—the sum of the values of a firm’s operating units if each were sold separately—of many firms is significantly greater than their combined value. As a result of market valuations, divestiture often creates value in excess of the cash or stock received in the transaction. Although these outcomes frequently occur, financial theory has been unable to explain them fully and satisfactorily.6

**Review Questions**

17–4 What is a leveraged buyout (LBO)? What are the three key attributes of an attractive candidate for acquisition via an LBO?

17–5 What is an operating unit? What is a divestiture? What are four common methods used by firms to divest themselves of operating units? What is breakup value?

### 17.3 Analyzing and Negotiating Mergers

We now turn to the procedures that are used to analyze and negotiate mergers. Initially, we will consider how to value the target company and how to use stock swap transactions to acquire companies. Next we will look at the merger negotiation process. Then we will review the major advantages and disadvantages of holding companies. Finally, we will discuss international mergers.

**Valuing the Target Company**

Once the acquiring company isolates a target company that it wishes to acquire, it must estimate the target’s value. The value is then used, along with a proposed financing scheme, to negotiate the transaction—on a friendly or hostile basis. The value of the target is estimated by using the valuation techniques presented in Chapter 7 and applied to long-term investment decisions in Chapters 8, 9, and 10. Similar capital budgeting techniques are applied whether the target firm is being acquired for its assets or as a going concern.

**Acquisitions of Assets**

Occasionally, a firm is acquired not for its income-earning potential but as a collection of assets (generally fixed assets) that the acquiring company needs. The price paid for this type of acquisition depends largely on which assets are being

---

acquired; consideration must also be given to the value of any tax losses. To
determine whether the purchase of assets is financially justified, the acquirer must
estimate both the costs and the benefits of the target assets. This is a capital bud-
getting problem (see Chapters 8, 9, and 10), because an initial cash outlay is made
to acquire assets, and as a result, future cash inflows are expected.

**EXAMPLE**

Clark Company, a major manufacturer of electrical transformers, is interested in
acquiring certain fixed assets of Noble Company, an industrial electronics com-
pany. Noble, which has tax loss carryforwards from losses over the past 5 years,
is interested in selling out, but it wishes to sell out entirely, not just to get rid of
certain fixed assets. A condensed balance sheet for Noble Company follows.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and Stockholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash $2,000</td>
<td>Total liabilities $80,000</td>
</tr>
<tr>
<td>Marketable securities 0</td>
<td>Stockholders’ equity 120,000</td>
</tr>
<tr>
<td>Accounts receivable 8,000</td>
<td>Total liabilities and stockholders’ equity $200,000</td>
</tr>
<tr>
<td>Inventories 10,000</td>
<td></td>
</tr>
<tr>
<td>Machine A 10,000</td>
<td></td>
</tr>
<tr>
<td>Machine B 30,000</td>
<td></td>
</tr>
<tr>
<td>Machine C 25,000</td>
<td></td>
</tr>
<tr>
<td>Land and buildings 115,000</td>
<td></td>
</tr>
<tr>
<td>Total assets $200,000</td>
<td></td>
</tr>
</tbody>
</table>

Clark Company needs only machines B and C and the land and buildings. How-
ever, it has made some inquiries and has arranged to sell the accounts receiv-
able, inventories, and machine A for $23,000. Because there is also $2,000 in
cash, Clark will get $25,000 for the excess assets. Noble wants $100,000 for the
total company, which means that Clark will have to pay the firm’s creditors
$80,000 and its owners $20,000. The actual outlay required of Clark after liq-
duating the unneeded assets will be $75,000 [(80,000 + 20,000) – 25,000]. In
other words, to obtain the use of the desired assets (machines B and C and the
land and buildings) and the benefits of Noble’s tax losses, Clark must pay
$75,000. The *after-tax cash inflows* that are expected to result from the new
assets and applicable tax losses are $14,000 per year for the next 5 years and
$12,000 per year for the following 5 years. The desirability of this asset acquisi-
tion can be determined by calculating the net present value of this outlay using
Clark Company’s 11% cost of capital, as shown in Table 17.2. Because the net
present value of $3,072 is greater than zero, Clark’s value should be increased by
acquiring Noble Company’s assets.

**Acquisitions of Going Concerns**

Acquisitions of target companies that are going concerns are best analyzed by
using capital budgeting techniques similar to those described for asset acquisi-
tions. The methods of estimating expected cash flows from an acquisition are
similar to those used in estimating capital budgeting cash flows. Typically, *pro forma income statements* reflecting the postmerger revenues and costs attributable to the target company are prepared (see Chapter 3). They are then adjusted to reflect the expected cash flows over the relevant time period. Whenever a firm considers acquiring a target company that has different risk behaviors, it should adjust the cost of capital appropriately before applying the appropriate capital budgeting techniques (see Chapter 10).

**EXAMPLE**

Square Company, a major media company, is contemplating the acquisition of Circle Company, a small independent film producer that can be purchased for $60,000. Square currently has a high degree of financial leverage, which is reflected in its 13% cost of capital. Because of the low financial leverage of Circle Company, Square estimates that its overall cost of capital will drop to 10% after the acquisition. Because the effect of the less risky capital structure cannot be reflected in the expected cash flows, the postmerger cost of capital (10%) must be used to evaluate the cash flows that are expected from the acquisition. The postmerger cash flows attributable to the target company are forecast over a 30-year time horizon. These estimated cash flows (all inflows) and the resulting net present value of the target company, Circle Company, are shown in Table 17.3.

Because the $2,357 net present value of the target company is greater than zero, the merger is acceptable. Note that if the effect of the changed capital structure on the cost of capital had not been considered, the acquisition would have been found unacceptable, because the net present value at a 13% cost of capital is negative $11,864 (or $11,868 using a financial calculator).
TABLE 17.3  Net Present Value of the Circle Company Acquisition

<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Cash inflows</th>
<th>Present value factor at 10%a</th>
<th>Present value [(1) × (2)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–10</td>
<td>$ 5,000</td>
<td>6.145</td>
<td>$30,725</td>
</tr>
<tr>
<td>11–18</td>
<td>13,000</td>
<td>(8.201 – 6.145)b</td>
<td>26,728</td>
</tr>
<tr>
<td>19–30</td>
<td>4,000</td>
<td>(9.427 – 8.201)b</td>
<td>4,904</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Present value of inflows</td>
<td>$62,357</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less: Cash purchase price</td>
<td>60,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net present valuec</td>
<td>$ 2,357</td>
</tr>
</tbody>
</table>

aPresent value interest factors for annuities, PVIFA, obtained from Table A–4.
bThese factors are found by using a shortcut technique that can be applied to annuities for periods of years beginning at some point in the future. By finding the appropriate interest factor for the present value of an annuity given for the last year of the annuity and subtracting the present value interest factor of an annuity for the year immediately preceding the beginning of the annuity, the appropriate interest factor for the present value of an annuity beginning sometime in the future can be obtained. You can check this shortcut by using the long approach and comparing the results.
cWhen we use a financial calculator, we get a net present value of $2,364.

Stock Swap Transactions

Once the value of the target company is determined, the acquirer must develop a proposed financing package. The simplest (but probably the least common) case is a pure cash purchase. Beyond this extreme case, there are virtually an infinite number of financing packages that use various combinations of cash, debt, preferred stock, and common stock.

Here we look at the other extreme—stock swap transactions, in which the acquisition is paid for using an exchange of common stock. The acquiring firm exchanges its shares for shares of the target company according to a predetermined ratio. The ratio of exchange of shares is determined in the merger negotiations. This ratio affects the various financial yardsticks that are used by existing and prospective shareholders to value the merged firm’s shares. With the demise of LBOs, the use of stock swaps to finance mergers has grown in popularity during recent years.

Ratio of Exchange

When one firm swaps its stock for the shares of another firm, the firms must determine the number of shares of the acquiring firm to be exchanged for each share of the target firm. The first requirement, of course, is that the acquiring company have sufficient shares available to complete the transaction. Often, a firm’s repurchase of shares (discussed in Chapter 13) is necessary to obtain sufficient shares for such a transaction. The acquiring firm generally offers more for
ratio of exchange
The ratio of the amount paid per share of the target company to the market price per share of the acquiring firm.

Each share of the target company than the current market price of its publicly traded shares. The actual ratio of exchange is merely the ratio of the amount paid per share of the target company to the market price per share of the acquiring firm. It is calculated in this manner because the acquiring firm pays the target firm in stock, which has a value equal to its market price.

**Example**

Grand Company, a leather products concern, whose stock is currently selling for $80 per share, is interested in acquiring Small Company, a producer of belts. To prepare for the acquisition, Grand has been repurchasing its own shares over the past 3 years. Small’s stock is currently selling for $75 per share, but in the merger negotiations, Grand has found it necessary to offer Small $110 per share. Because Grand does not have sufficient financial resources to purchase the firm for cash and does not wish to raise these funds, Small has agreed to accept Grand’s stock in exchange for its shares. As stated, Grand’s stock currently sells for $80 per share, and it must pay $110 per share for Small’s stock. Therefore, the ratio of exchange is 1.375 (110/80). This means that Grand Company must exchange 1.375 shares of its stock for each share of Small’s stock.

**Effect on Earnings Per Share**

Although cash flows and value are the primary focus, it is useful to consider the effects of a proposed merger on earnings per share—the accounting returns that are related to cash flows and value (see Chapter 7). Ordinarily, the resulting earnings per share differ from the premerger earnings per share for both the acquiring firm and the target firm. They depend largely on the ratio of exchange and the premerger earnings per share of each firm. It is best to view the initial and long-run effects of the ratio of exchange on earnings per share separately.

*Initial Effect* When the ratio of exchange is equal to 1 and both the acquiring firm and the target firm have the same premerger earnings per share, the merged firm’s earnings per share will initially remain constant. In this rare instance, both the acquiring firm and the target firm would also have equal price/earnings (P/E) ratios. In actuality, the earnings per share of the merged firm are generally above the premerger earnings per share of one firm and below the premerger earnings per share of the other, after the necessary adjustment has been made for the ratio of exchange.

**Example**

As we saw in the preceding example, Grand Company is contemplating acquiring Small Company by swapping 1.375 shares of its stock for each share of Small’s stock. The current financial data related to the earnings and market price for each of these companies are given in Table 17.4.

To complete the merger and retire the 20,000 shares of Small Company stock outstanding, Grand will have to issue and (or) use treasury stock totaling 27,500 shares (1.375 × 20,000 shares). Once the merger is completed, Grand will have 152,500 shares of common stock (125,000 + 27,500) outstanding. If the earnings of each of the firms remain constant, the merged company will be expected to have earnings available for the common stockholders of $600,000 ($500,000 + $100,000). The earnings per share of the merged company therefore should equal approximately $3.93 ($600,000 ÷ 152,500 shares).
It would appear at first that Small Company’s shareholders have sustained a decrease in per-share earnings from $5 to $3.93, but because each share of Small Company’s original stock is equivalent to 1.375 shares of the merged company’s stock, the equivalent earnings per share are actually $5.40 ($3.93 \times 1.375). In other words, as a result of the merger, Grand Company’s original shareholders experience a decrease in earnings per share from $4 to $3.93 to the benefit of Small Company’s shareholders, whose earnings per share increase from $5 to $5.40. These results are summarized in Table 17.5.

The postmerger earnings per share for owners of the acquiring and target companies can be explained by comparing the price/earnings ratio paid by the acquiring company with its initial P/E ratio. This relationship is summarized in Table 17.6. By paying more than its current value per dollar of earnings to acquire each dollar of earnings (P/E paid \( \geq \) P/E of acquiring company), the acquiring firm transfers the claim on a portion of its premerger earnings to the owners of the target firm. Therefore, on a postmerger basis the target firm’s EPS increases, and the acquiring firm’s EPS decreases. Note that this outcome is nearly always the case, because the acquirer typically pays, on average, a 50 percent premium above the target firm’s market price, which results in the P/E paid being much above its own...
PART 6 Special Topics in Managerial Finance

**TABLE 17.6 Effect of Price/Earnings (P/E) Ratios on Earnings Per Share (EPS)**

<table>
<thead>
<tr>
<th>Relationship between P/E paid and P/E of acquiring company</th>
<th>Effect on EPS Acquiring company</th>
<th>Effect on EPS Target company</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/E paid &gt; P/E of acquiring company</td>
<td>Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>P/E paid = P/E of acquiring company</td>
<td>Constant</td>
<td>Constant</td>
</tr>
<tr>
<td>P/E paid &lt; P/E of acquiring company</td>
<td>Increase</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

P/E. The P/E ratios associated with the Grand–Small merger demonstrate the effect of the merger on EPS.

**EXAMPLE**

Grand Company’s P/E ratio is 20, and the P/E ratio paid for Small Company’s earnings was 22 ($110 ÷ $5). Because the P/E paid for Small Company was greater than the P/E for Grand Company (22 versus 20), the effect of the merger was to decrease the EPS for original holders of shares in Grand Company (from $4.00 to $3.93) and to increase the effective EPS of original holders of shares in Small Company (from $5.00 to $5.40).

**Long-Run Effect**

The long-run effect of a merger on the earnings per share of the merged company depends largely on whether the earnings of the merged firm grow. Often, although an initial decrease in the per-share earnings of the stock held by the original owners of the acquiring firm is expected, the long-run effects of the merger on earnings per share are quite favorable. Because firms generally expect growth in earnings, the key factor enabling the acquiring company to experience higher future EPS than it would have without the merger is that the earnings attributable to the target company’s assets grow more rapidly than those resulting from the acquiring company’s premerger assets. An example will clarify this point.

**EXAMPLE**

In 2003, Grand Company acquired Small Company by swapping 1.375 shares of its common stock for each share of Small Company. Other key financial data and the effects of this exchange ratio were discussed in preceding examples. The total earnings of Grand Company were expected to grow at an annual rate of 3% without the merger; Small Company’s earnings were expected to grow at a 7% annual rate without the merger. The same growth rates are expected to apply to the component earnings streams with the merger.7 The table in Figure 17.1 shows the future effects on EPS for Grand Company without and with the proposed Small Company merger, on the basis of these growth rates.

The table indicates that the earnings per share without the merger will be greater than the EPS with the merger for the years 2003 through 2005. After 2005, however, the EPS will be higher than they would have been without the

---

7. Frequently, because of synergy, the combined earnings stream is greater than the sum of the individual earnings streams. This possibility is ignored here.
merger as a result of the faster earnings growth rate of Small Company (7% versus 3%). Although a few years are required for this difference in the growth rate of earnings to pay off, in the future Grand Company will receive an earnings benefit as a result of merging with Small Company at a 1.375 ratio of exchange. The long-run earnings advantage of the merger is clearly depicted in Figure 17.1.8

Effect on Market Price Per Share

The market price per share does not necessarily remain constant after the acquisition of one firm by another. Adjustments occur in the marketplace in response to changes in expected earnings, the dilution of ownership, changes in risk, and

8. To discover properly whether the merger is beneficial, the earnings estimates under each alternative would have to be made over a long period of time—say, 50 years—and then converted to cash flows and discounted at the appropriate rate. The alternative with the higher present value would be preferred. For simplicity, only the basic intuitive view of the long-run effect is presented here.
certain other operating and financial changes. By using the ratio of exchange, we can calculate a ratio of exchange in market price. It indicates the market price per share of the acquiring firm paid for each dollar of market price per share of the target firm. This ratio, the $MPR$, is defined by Equation 17.1:

$$MPR = \frac{MP_{acquiring} \times RE}{MP_{target}}$$  \hspace{1cm} (17.1)

where

- $MPR$ = market price ratio of exchange
- $MP_{acquiring}$ = market price per share of the acquiring firm
- $MP_{target}$ = market price per share of the target firm
- $RE$ = ratio of exchange

**EXAMPLE**

The market price of Grand Company’s stock was $80, and that of Small Company’s was $75. The ratio of exchange was 1.375. Substituting these values into Equation 17.1 yields a ratio of exchange in market price of 1.47 \left[\frac{($80 \times 1.375)}{$75}\right]. This means that $1.47 of the market price of Grand Company is given in exchange for every $1.00 of the market price of Small Company.

The ratio of exchange in market price is normally greater than 1, which indicates that to acquire a firm, the acquirer must pay a premium above its market price. Even so, the original owners of the acquiring firm may still gain, because the merged firm’s stock may sell at a price/earnings ratio above the individual premerger ratios. This results from the improved risk and return relationship perceived by shareholders and other investors.

**EXAMPLE**

The financial data developed earlier for the Grand–Small merger can be used to explain the market price effects of a merger. If the earnings of the merged company remain at the premerger levels, and if the stock of the merged company sells at an assumed multiple of 21 times earnings, the values in Table 17.7 can be expected. Although Grand Company’s earnings per share decline from $4.00 to $3.93 (see Table 17.5), the market price of its shares will increase from $80.00 to $82.53 as a result of the merger.

### Table 17.7 Postmerger Market Price of Grand Company Using a P/E Ratio of 21

<table>
<thead>
<tr>
<th>Item</th>
<th>Merged company</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Earnings available for common stock</td>
<td>$600,000</td>
</tr>
<tr>
<td>(2) Number of shares of common stock outstanding</td>
<td>152,500</td>
</tr>
<tr>
<td>(3) Earnings per share (\left{(1) \div (2)\right})</td>
<td>$3.93</td>
</tr>
<tr>
<td>(4) Price/earnings (P/E) ratio</td>
<td>21</td>
</tr>
<tr>
<td>(5) Expected market price per share (\left{(3) \times (4)\right})</td>
<td>$82.53</td>
</tr>
</tbody>
</table>
Although the behavior exhibited in this example is not unusual, the financial manager must recognize that only with proper management of the merged enterprise can its market value be improved. If the merged firm cannot achieve sufficiently high earnings in view of its risk, there is no guarantee that its market price will reach the forecast value. Nevertheless, a policy of acquiring firms with low P/Es can produce favorable results for the owners of the acquiring firm. Acquisitions are especially attractive when the acquiring firm’s stock price is high, because fewer shares must be exchanged to acquire a given firm.

The Merger Negotiation Process

Mergers are often handled by investment bankers—financial intermediaries who, in addition to their role in selling new security issues (described in Chapter 7), can be hired by acquirers to find suitable target companies and assist in negotiations. Once a target company is selected, the investment banker negotiates with its management or investment banker. Likewise, when management wishes to sell the firm or an operating unit of the firm, it will hire an investment banker to seek out potential buyers.

If attempts to negotiate with the management of the target company break down, the acquiring firm, often with the aid of its investment banker, can make a direct appeal to shareholders by using tender offers (as explained below). The investment banker is typically compensated with a fixed fee, a commission tied to the transaction price, or a combination of fees and commissions.

Management Negotiations

To initiate negotiations, the acquiring firm must make an offer either in cash or based on a stock swap with a specified ratio of exchange. The target company then reviews the offer and, in light of alternative offers, accepts or rejects the terms presented. A desirable merger candidate usually receives more than a single offer. Normally, it is necessary to resolve certain nonfinancial issues related to the existing management, product line policies, financing policies, and the independence of the target firm. The key factor, of course, is the per-share price offered in cash or reflected in the ratio of exchange. Sometimes negotiations break down.

Tender Offers

When negotiations for an acquisition break down, tender offers may be used to negotiate a “hostile merger” directly with the firm’s stockholders. As noted in Chapter 13, a tender offer is a formal offer to purchase a given number of shares of a firm’s stock at a specified price. The offer is made to all the stockholders at a premium above the market price. Occasionally, the acquirer will make a two-tier offer, in which the terms offered are more attractive to those who tender shares early. For example, the acquirer offers to pay $25 per share for the first 60 percent of the outstanding shares tendered and only $23 per share for the remaining shares. The stockholders are advised of a tender offer through announcements in
financial newspapers or through direct communications from the offering firm. Sometimes a tender offer is made to add pressure to existing merger negotiations. In other cases, the tender offer may be made without warning as an attempt at an abrupt corporate takeover.

**Fighting Hostile Takeovers**

If the management of a target firm does not favor a merger or considers the price offered in a proposed merger too low, it is likely to take defensive actions to ward off the *hostile takeover*. Such actions are generally developed with the assistance of investment bankers and lawyers who help the firm develop and employ effective *takeover defenses*. There are obvious strategies, such as informing stockholders of the alleged damaging effects of a takeover, acquiring another company (discussed earlier in the chapter), or attempting to sue the acquiring firm on antitrust or other grounds. In addition, many other defenses exist (some with colorful names)—white knight, poison pills, greenmail, leveraged recapitalization, golden parachutes, and shark repellents.

The **white knight** strategy involves the target firm finding a more suitable acquirer (the “white knight”) and prompting it to compete with the initial hostile acquirer to take over the firm. The basic premise of this strategy is that if being taken over is nearly certain, the target firm ought to attempt to be taken over by the firm that is deemed most acceptable to its management. **Poison pills** typically involve the creation of securities that give their holders certain rights that become effective when a takeover is attempted. The “pill” allows the shareholders to receive special voting rights or securities that make the firm less desirable to the hostile acquirer. **Greenmail** is a strategy by which the firm repurchases, through private negotiation, a large block of stock at a premium from one or more shareholders to end a hostile takeover attempt by those shareholders. Clearly, greenmail is a form of corporate blackmail by the holders of a large block of shares.

Another defense against hostile takeover involves the use of a **leveraged recapitalization**, which is a strategy involving the payment of a large debt-financed cash dividend. This strategy significantly increases the firm’s financial leverage, thereby deterring the takeover attempt. In addition, as a further deterrent, the recapitalization is often structured to increase the equity and control of the existing management. **Golden parachutes** are provisions in the employment contracts of key executives that provide them with sizable compensation if the firm is taken over. Golden parachutes deter hostile takeovers to the extent that the cash outflows required by these contracts are large enough to make the takeover unattractive to the acquirer. Another defense is use of **shark repellents**, which are antitakeover amendments to the corporate charter that constrain the firm’s ability to transfer managerial control of the firm as a result of a merger. Although this defense could entrench existing management, many firms have had these amendments ratified by shareholders.

Because takeover defenses tend to insulate management from shareholders, the potential for litigation is great when these strategies are employed. Lawsuits are sometimes filed against management by dissident shareholders. In addition, federal and state governments frequently intervene when a proposed takeover is deemed to be in violation of federal or state law. A number of states have legislation on their books limiting or restricting hostile takeovers of companies domiciled within their boundaries.
Holding Companies

A holding company is a corporation that has voting control of one or more other corporations. The holding company may need to own only a small percentage of the outstanding shares to have this voting control. In the case of companies with a relatively small number of shareholders, as much as 30 to 40 percent of the stock may be required. In the case of firms with a widely dispersed ownership, 10 to 20 percent of the shares may be sufficient to gain voting control. A holding company that wants to obtain voting control of a firm may use direct market purchases or tender offers to acquire needed shares. Although there are relatively few holding companies and they are far less important than mergers, it is helpful to understand their key advantages and disadvantages.

Advantages of Holding Companies

The primary advantage of holding companies is the leverage effect that permits the firm to control a large amount of assets with a relatively small dollar investment. In other words, the owners of a holding company can control significantly larger amounts of assets than they could acquire through mergers.

Example

Carr Company, a holding company, currently holds voting control of two subsidiaries—company X and company Y. The balance sheets for Carr and its two subsidiaries are presented in Table 17.8. It owns approximately 17% ($10 ÷ $60)

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and Stockholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carr Company</td>
<td></td>
</tr>
<tr>
<td>Common stock holdings</td>
<td>Long-term debt $ 6</td>
</tr>
<tr>
<td>Company X</td>
<td>$ 10 Preferred stock $ 6</td>
</tr>
<tr>
<td>Company Y</td>
<td>$ 14 Common stock equity $ 12</td>
</tr>
<tr>
<td>Total</td>
<td>$ 24 Total $ 24</td>
</tr>
<tr>
<td>Company X</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>$ 30 Current liabilities $ 15</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>$ .70 Long-term debt $ 25</td>
</tr>
<tr>
<td>Total</td>
<td>$100 Common stock equity $ 60</td>
</tr>
<tr>
<td></td>
<td>Total $100</td>
</tr>
<tr>
<td>Company Y</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>$ 20 Current liabilities $ 10</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>$140 Long-term debt $ 60</td>
</tr>
<tr>
<td>Total</td>
<td>$160 Preferred stock $ 20</td>
</tr>
<tr>
<td></td>
<td>Common stock equity $ 70</td>
</tr>
<tr>
<td></td>
<td>Total $160</td>
</tr>
</tbody>
</table>
Pyramiding
An arrangement among holding companies wherein one holding company controls other holding companies, thereby causing an even greater magnification of earnings and losses.

The owners of Carr Company’s $12 worth of equity have control over $260 worth of assets (company X’s $100 worth and company Y’s $160 worth). Thus the owners’ equity represents only about 4.6% ($12 ÷ 260) of the total assets controlled. From the discussions of ratio analysis, leverage, and capital structure in Chapters 2 and 12, you should recognize that this is quite a high degree of leverage. If an individual stockholder or even another holding company owns $3 of Carr Company’s stock, which is assumed to be sufficient for its control, it will in actuality control the whole $260 of assets. The investment itself in this case would represent only 1.15% ($3 ÷ 260) of the assets controlled.

The high leverage obtained through a holding company arrangement greatly magnifies earnings and losses for the holding company. Quite often, a pyramiding of holding companies occurs when one holding company controls other holding companies, thereby causing an even greater magnification of earnings and losses. The greater the leverage, the greater the risk involved. The risk–return tradeoff is a key consideration in the holding company decision.

Another commonly cited advantage of holding companies is the risk protection resulting from the fact that the failure of one of the companies (such as Y in the preceding example) does not result in the failure of the entire holding company. Because each subsidiary is a separate corporation, the failure of one company should cost the holding company, at maximum, no more than its investment in that subsidiary. Other advantages include the following: (1) Certain state tax benefits may be realized by each subsidiary in its state of incorporation. (2) Lawsuits or legal actions against a subsidiary do not threaten the remaining companies. (3) It is generally easy to gain control of a firm, because stockholder or management approval is not generally necessary.

Disadvantages of Holding Companies

A major disadvantage of holding companies is the increased risk resulting from the leverage effect. When general economic conditions are unfavorable, a loss by one subsidiary may be magnified. For example, if subsidiary company X in Table 17.8 experiences a loss, its inability to pay dividends to Carr Company could result in Carr Company’s inability to meet its scheduled payments.

Another disadvantage is double taxation. Before paying dividends, a subsidiary must pay federal and state taxes on its earnings. Although a 70 percent tax exclusion is allowed on dividends received by one corporation from another, the remaining 30 percent received is taxable. (In the event that the holding company owns between 20 and 80 percent of the stock in a subsidiary, the exclusion is 80 percent; if it owns more than 80 percent of the stock in the subsidiary, 100 percent of the dividends are excluded.) If a subsidiary were part of a merged company, double taxation would not exist.

The fact that holding companies are difficult to analyze is another disadvantage. Security analysts and investors typically have difficulty understanding holding companies because of their complexity. As a result, these firms tend to sell at low multiples of earnings (P/Es), and the shareholder value of holding companies may suffer.
A final disadvantage of holding companies is the generally high cost of administration that results from maintaining each subsidiary company as a separate entity. A merger, on the other hand, is likely to result in certain administrative economies of scale. The need for coordination and communication between the holding company and its subsidiaries may further elevate these costs.

**International Mergers**

Perhaps in no other area does U.S. financial practice differ more fundamentally from practices in other countries than in the field of mergers. Outside of the United States (and, to a lesser degree, Great Britain), hostile takeovers are virtually nonexistent, and in some countries (such as Japan), takeovers of any kind are uncommon. The emphasis in the United States and Great Britain on shareholder value and reliance on public capital markets for financing is generally inapplicable in continental Europe. This occurs because companies there are generally smaller and because other stakeholders, such as employees, bankers, and governments, are accorded greater consideration. The U.S. approach is also a poor fit for Japan and other Asian nations.

**Changes in Western Europe**

Today, there are signs that Western Europe is moving toward a U.S.-style approach to shareholder value and public capital market financing. Since the final plan for European economic integration was unveiled in 1988, the number, size, and importance of cross-border European mergers have exploded. Nationally focused companies want to achieve economies of scale in manufacturing, encourage international product development strategies, and develop distribution networks across the continent. They are also driven by the need to compete with U.S. companies, which have been operating on a continentwide basis in Europe for decades.

These larger European-based companies will probably prove to be even more formidable competitors once national barriers are fully removed. Although the vast majority of these cross-border mergers are friendly in nature, a few have been actively resisted by target firm managements. It seems clear that as European companies come to rely more on public capital markets for financing, and as the market for common stock becomes more truly European in character, rather than French or British or German, active markets for European corporate equity will inevitably evolve.

**Foreign Takeovers of U.S. Companies**

Both European and Japanese companies have been active as acquirers of U.S. companies in recent years. Foreign companies purchased U.S. firms for two major reasons: to gain access to the world’s single largest, richest, and least regulated market and to acquire world-class technology at a bargain price. British companies have been historically the most active acquirers of U.S. firms. In the late 1980s, Japanese corporations surged to prominence with a series of very large acquisitions, including two in the entertainment industry: Sony’s purchase...
of Columbia Pictures and Matsushita’s acquisition of MCA. More recently, German firms have become especially active acquirers of U.S. companies as producing export goods in Germany has become prohibitively expensive. (German workers have one of the world’s highest wages and shortest workweeks.) It seems inevitable that in the years ahead, foreign companies will continue to acquire U.S. firms even as U.S. companies continue to seek attractive acquisitions abroad.

**Review Questions**

17–6 Describe the procedures that are typically used by an acquirer to value a target company, whether it is being acquired for its assets or as a going concern.

17–7 What is the ratio of exchange? Is it based on the current market prices of the shares of the acquiring and target firms? Why may a long-run view of the merged firm’s earnings per share change a merger decision?

17–8 What role do investment bankers often play in the merger negotiation process? What is a tender offer? When and how is it used?

17–9 Briefly describe each of the following takeover defenses against a hostile merger: (a) white knight, (b) poison pill, (c) greenmail, (d) leveraged recapitalization, (e) golden parachutes, and (f) shark repellents.

17–10 What key advantages and disadvantages are associated with holding companies? What is pyramiding and what are its consequences?

17–11 Discuss the differences in merger practices between U.S. companies and companies in other countries. What changes are occurring in international merger activity, particularly in Western Europe and Japan?

### 17.4 Business Failure Fundamentals

A business failure is an unfortunate circumstance. Although the majority of firms that fail do so within the first year or two of life, other firms grow, mature, and fail much later. The failure of a business can be viewed in a number of ways and can result from one or more causes.

**Types of Business Failure**

A firm may fail because its returns are negative or low. A firm that consistently reports operating losses will probably experience a decline in market value. If the firm fails to earn a return that is greater than its cost of capital, it can be viewed as having failed. Negative or low returns, unless remedied, are likely to result eventually in one of the following more serious types of failure.

A second type of failure, **technical insolvency**, occurs when a firm is unable to pay its liabilities as they come due. When a firm is technically insolvent, its assets are still greater than its liabilities, but it is confronted with a **liquidity crisis**. If some of its assets can be converted into cash within a reasonable period, the
CHAPTER 17  Mergers, LBOs, Divestitures, and Business Failure

9. Because on a balance sheet the firm’s assets equal the sum of its liabilities and stockholders’ equity, the only way a firm that has more liabilities than assets can balance its balance sheet is to have a negative stockholders’ equity.9

Bankruptcy occurs when the stated value of a firm’s liabilities exceeds the fair market value of its assets. A bankrupt firm has a negative stockholders’ equity.9 This means that the claims of creditors cannot be satisfied unless the firm’s assets can be liquidated for more than their book value. Although bankruptcy is an obvious form of failure, the courts treat technical insolvency and bankruptcy in the same way. They are both considered to indicate the financial failure of the firm.

Major Causes of Business Failure

The primary cause of business failure is mismanagement, which accounts for more than 50 percent of all cases. Numerous specific managerial faults can cause the firm to fail. Overexpansion, poor financial actions, an ineffective sales force, and high production costs can all singly or in combination cause failure. For example, poor financial actions include bad capital budgeting decisions (based on unrealistic sales and cost forecasts, failure to identify all relevant cash flows, or failure to assess risk properly), poor financial evaluation of the firm’s strategic plans prior to making financial commitments, inadequate or nonexistent cash flow planning, and failure to control receivables and inventories. Because all major corporate decisions are eventually measured in terms of dollars, the financial manager may play a key role in avoiding or causing a business failure. It is his or her duty to monitor the firm’s financial pulse. For example, the largest bankruptcy ever, Enron Corporation’s early 2002 bankruptcy, was largely attributed to questionable partnerships set up by Enron’s CFO, Andrew Fastow. Those partnerships were intended to hide Enron’s debt, inflate its profits, and enrich its top management. In late 2001, these transactions blew up, causing the corporation to file bankruptcy and resulting in criminal charges against Enron’s key executives as well as its auditor, Arthur Andersen, who failed to accurately disclose Enron’s financial condition.

Economic activity—especially economic downturns—can contribute to the failure of a firm.10 If the economy goes into a recession, sales may decrease abruptly, leaving the firm with high fixed costs and insufficient revenues to cover them. Rapid rises in interest rates just prior to a recession can further contribute to cash flow problems and make it more difficult for the firm to obtain and maintain needed financing.

A final cause of business failure is corporate maturity. Firms, like individuals, do not have infinite lives. Like a product, a firm goes through the stages of birth, growth, maturity, and eventual decline. The firm’s management should attempt to prolong the growth stage through research, new products, and mergers. Once the firm has matured and has begun to decline, it should seek to be acquired by

---

9. Because on a balance sheet the firm’s assets equal the sum of its liabilities and stockholders’ equity, the only way a firm that has more liabilities than assets can balance its balance sheet is to have a negative stockholders’ equity.

10. The success of some firms runs countercyclical to economic activity, and other firms are unaffected by economic activity. For example, the auto repair business is likely to grow during a recession, because people are less likely to buy new cars and therefore need more repairs on their unwarranted older cars. The sales of boats and other luxury items may decline during a recession, whereas sales of staple items such as electricity are likely to be unaffected. In terms of beta—the measure of nondiversifiable risk developed in Chapter 5—a negative-beta stock would be associated with a firm whose behavior is generally countercyclical to economic activity.
extension
An arrangement whereby the firm’s creditors receive payment in full, although not immediately.

composition
A pro rata cash settlement of creditor claims by the debtor firm; a uniform percentage of each dollar owed is paid.

creditor control
An arrangement in which the creditor committee replaces the firm’s operating management and operates the firm until all claims have been settled.

another firm or liquidate before it fails. Effective management planning should help the firm to postpone decline and ultimate failure.

Voluntary Settlements

When a firm becomes technically insolvent or bankrupt, it may arrange with its creditors a voluntary settlement, which enables it to bypass many of the costs involved in legal bankruptcy proceedings. The settlement is normally initiated by the debtor firm, because such an arrangement may enable it to continue to exist or to be liquidated in a manner that gives the owners the greatest chance of recovering part of their investment. The debtor arranges a meeting between itself and all its creditors. At the meeting, a committee of creditors is selected to analyze the debtor’s situation and recommend a plan of action. The recommendations of the committee are discussed with both the debtor and the creditors, and a plan for sustaining or liquidating the firm is drawn up.

Voluntary Settlement to Sustain the Firm

Normally, the rationale for sustaining a firm is that it is reasonable to believe that the firm’s recovery is feasible. By sustaining the firm, the creditor can continue to receive business from it. A number of strategies are commonly used. An extension is an arrangement whereby the firm’s creditors receive payment in full, although not immediately. Normally, when creditors grant an extension, they require the firm to make cash payments for purchases until all past debts have been paid. A second arrangement, called composition, is a pro rata cash settlement of creditor claims. Instead of receiving full payment of their claims, creditors receive only a partial payment. A uniform percentage of each dollar owed is paid in satisfaction of each creditor’s claim.

A third arrangement is creditor control. In this case, the creditor committee may decide that maintaining the firm is feasible only if the operating management is replaced. The committee may then take control of the firm and operate it until all claims have been settled. Sometimes, a plan involving some combination of extension, composition, and creditor control will result. An example of this is a settlement whereby the debtor agrees to pay a total of 75 cents on the dollar in three annual installments of 25 cents on the dollar, and the creditors agree to sell additional merchandise to the firm on 30-day terms if the existing management is replaced by new management that is acceptable to them.

Voluntary Settlement Resulting in Liquidation

After the situation of the firm has been investigated by the creditor committee, the only acceptable course of action may be liquidation of the firm. Liquidation can be carried out in two ways—privately or through the legal procedures provided by bankruptcy law. If the debtor firm is willing to accept liquidation, legal procedures may not be required. Generally, the avoidance of litigation enables the creditors to obtain quicker and higher settlements. However, all the creditors must agree to a private liquidation for it to be feasible.
The objective of the voluntary liquidation process is to recover as much per dollar owed as possible. Under voluntary liquidation, common stockholders (the firm’s true owners) cannot receive any funds until the claims of all other parties have been satisfied. A common procedure is to have a meeting of the creditors at which they make an assignment by passing the power to liquidate the firm’s assets to an adjustment bureau, a trade association, or a third party, which is designated the assignee. The assignee’s job is to liquidate the assets, obtaining the best price possible. The assignee is sometimes referred to as the trustee, because it is entrusted with the title to the company’s assets and the responsibility to liquidate them efficiently. Once the trustee has liquidated the assets, it distributes the recovered funds to the creditors and owners (if any funds remain for the owners). The final action in a private liquidation is for the creditors to sign a release attesting to the satisfactory settlement of their claims.

**Review Questions**

17–12 What are the three types of business failure? What is the difference between *technical insolvency* and *bankruptcy*? What are the major causes of business failure?

17–13 Define an *extension* and a *composition*, and explain how they might be combined to form a voluntary settlement plan to sustain the firm. How is a voluntary settlement resulting in liquidation handled?

### 17.5 Reorganization and Liquidation in Bankruptcy

If a voluntary settlement for a failed firm cannot be agreed upon, the firm can be forced into bankruptcy by its creditors. As a result of bankruptcy proceedings, the firm may be either reorganized or liquidated.

**Bankruptcy Legislation**

*Bankruptcy* in the legal sense occurs when the firm cannot pay its bills or when its liabilities exceed the fair market value of its assets. In either case, a firm may be declared legally bankrupt. However, creditors generally attempt to avoid forcing a firm into bankruptcy if it appears to have opportunities for future success.

The governing bankruptcy legislation in the United States today is the **Bankruptcy Reform Act of 1978**, which significantly modified earlier bankruptcy legislation. This law contains eight odd-numbered chapters (1 through 15) and one even-numbered chapter (12). A number of these chapters would apply in the instance of failure; the two key ones are Chapters 7 and 11. Chapter 7 of the Bankruptcy Reform Act of 1978 details the procedures to be followed when liquidating a failed firm. This chapter typically comes into play once it has been determined that a fair, equitable, and feasible basis for the reorganization of a failed firm does not exist (although a firm may of its own accord choose not to
PART 6 Special Topics in Managerial Finance

Chapter 11
The portion of the Bankruptcy Reform Act of 1978 that outlines the procedures for reorganizing a failed (or failing) firm, whether its petition is filed voluntarily or involuntarily.

Reorganization in Bankruptcy (Chapter 11)

There are two basic types of reorganization petitions—voluntary and involuntary. Any firm that is not a municipal or financial institution can file a petition for voluntary reorganization on its own behalf.\(^1\) Involuntary reorganization is initiated by an outside party, usually a creditor. An involuntary petition against a firm can be filed if one of three conditions is met:

1. The firm has past-due debts of $5,000 or more.
2. Three or more creditors can prove that they have aggregate unpaid claims of $5,000 against the firm. If the firm has fewer than 12 creditors, any creditor that is owed more than $5,000 can file the petition.
3. The firm is insolvent, which means that (a) it is not paying its debts as they come due, (b) within the preceding 120 days a custodian (a third party) was appointed or took possession of the debtor’s property, or (c) the fair market value of the firm’s assets is less than the stated value of its liabilities.

Procedures

A reorganization petition under Chapter 11 must be filed in a federal bankruptcy court. Upon the filing of this petition, the filing firm becomes the debtor in possession (DIP) of the assets. If creditors object to the filing firm being the debtor in possession, they can ask the judge to appoint a trustee. After reviewing the firm’s situation, the debtor in possession submits a plan of reorganization and a disclosure statement summarizing the plan to the court. A hearing is held to determine whether the plan is fair, equitable, and feasible and whether the disclosure statement contains adequate information. The court’s approval or disapproval is based on its evaluation of the plan in light of these standards. A plan is considered fair and equitable if it maintains the priorities of the contractual claims of the creditors, preferred stockholders, and common stockholders. The court must also find the reorganization plan feasible, which means that it must be workable. The reorganized corporation must have sufficient working capital, sufficient funds to cover fixed charges, sufficient credit prospects, and sufficient ability to retire or refund debts as proposed by the plan.

Once approved, the plan and the disclosure statement are given to the firm’s creditors and shareholders for their acceptance. Under the Bankruptcy Reform Act, creditors and owners are separated into groups with similar types of claims.

---

\(^{11}\) Firms sometimes file a voluntary petition to obtain temporary legal protection from creditors or from prolonged litigation. Once they have straightened out their financial or legal affairs—prior to further reorganization or liquidation actions—they will have the petition dismissed. Although such actions are not the intent of the bankruptcy law, difficulty in enforcing the law has allowed this abuse to occur.
FOCUS ON PRACTICE  Picture This

The year 2001 was anything but picture perfect for Polaroid Corp. In February, management suspended the common stock dividend and embarked on a major restructuring plan to cut the workforce, streamline operations, reduce capital expenditures, and sell underutilized assets. In July, managers announced that the company would miss the August payments on its almost $1 billion of long-term debt. At the same time, bank lenders granted the instant-imaging company a waiver on a $363-million line of credit, hoping that additional time would enable the company to stabilize revenue, reduce costs, and maximize cash flow.

Despite these and other drastic measures, on October 12, 2001, Polaroid filed a petition for voluntary reorganization under Chapter 11 of the Bankruptcy Reform Act of 1978. Polaroid’s banks provided $50 million of debtor-in-possession financing so that it could continue to operate during the restructuring process. CEO Gary DiCamillo called the filing “prudent and necessary” to allow Polaroid to evaluate strategic alternatives and work with its creditors on a plan to resolve their financial claims.

The imaging technology pioneer’s downward slide began in 1995 as sales dropped sharply and it laid off 2,500 employees. Stockholders criticized management for moving away from its core business of instant photography to explore new technology. Ironically, the rise of digital-photography technology, which competed with the company’s exclusive instant-photography franchise, was a factor in the company’s eventual failure. Its new digital-printing technology came too late to save the company, forcing it to compete in a crowded field with Sony, Eastman Kodak, and Fuji Film, and Polaroid’s low-end digital camera made little headway against well-capitalized competitors such as Olympus, Sony, and Canon.

As of early 2002, Polaroid’s future remained blurry: Would it remain intact? Or would it have to sell off its primary assets—its brand name, the instant-camera business, and the Opal and Onyx printing technologies?


In the case of creditor groups, approval of the plan is required by holders of at least two-thirds of the dollar amount of claims, as well as by a numerical majority of creditors. In the case of ownership groups (preferred and common stockholders), two-thirds of the shares in each group must approve the reorganization plan for it to be accepted. Once accepted and confirmed by the court, the plan is put into effect as soon as possible.

Role of the Debtor in Possession (DIP)

Because reorganization activities are largely in the hands of the debtor in possession (DIP), it is useful to understand the DIP’s responsibilities. The DIP’s first responsibility is the valuation of the firm to determine whether reorganization is appropriate. To do this, the DIP must estimate both the liquidation value of the business and its value as a going concern. If the firm’s value as a going concern is less than its liquidation value, the DIP will recommend liquidation. If the opposite is found to be true, the DIP will recommend reorganization, and a plan of reorganization must be drawn up.

The key portion of the reorganization plan generally concerns the firm’s capital structure. Because most firms’ financial difficulties result from high fixed charges, the company’s capital structure is generally recapitalized to reduce these
charges. Under recapitalization, debts are generally exchanged for equity or the maturities of existing debts are extended. When recapitalizing the firm, the DIP seeks to build a mix of debt and equity that will allow the firm to meet its debts and provide a reasonable level of earnings for its owners.

Once the revised capital structure has been determined, the DIP must establish a plan for exchanging outstanding obligations for new securities. The guiding principle is to observe priorities. Senior claims (those with higher legal priority) must be satisfied before junior claims (those with lower legal priority). To comply with this principle, senior suppliers of capital must receive a claim on new capital equal to their previous claim. The common stockholders are the last to receive any new securities. (It is not unusual for them to receive nothing.) Security holders do not necessarily have to receive the same type of security they held before; often they receive a combination of securities. Once the debtor in possession has determined the new capital structure and distribution of capital, it will submit the reorganization plan and disclosure statement to the court as described.

**Liquidation in Bankruptcy (Chapter 7)**

The liquidation of a bankrupt firm usually occurs once the bankruptcy court has determined that reorganization is not feasible. A petition for reorganization must normally be filed by the managers or creditors of the bankrupt firm. If no petition is filed, if a petition is filed and denied, or if the reorganization plan is denied, the firm must be liquidated.

**Procedures**

When a firm is adjudged bankrupt, the judge may appoint a trustee to perform the many routine duties required in administering the bankruptcy. The trustee takes charge of the property of the bankrupt firm and protects the interest of its creditors. A meeting of creditors must be held between 20 and 40 days after the bankruptcy judgment. At this meeting, the creditors are made aware of the prospects for the liquidation. The trustee is given the responsibility to liquidate the firm, keep records, examine creditors’ claims, disburse money, furnish information as required, and make final reports on the liquidation. In essence, the trustee is responsible for the liquidation of the firm. Occasionally, the court will call subsequent creditor meetings, but only a final meeting for closing the bankruptcy is required.

**Priority of Claims**

It is the trustee’s responsibility to liquidate all the firm’s assets and to distribute the proceeds to the holders of provable claims. The courts have established certain procedures for determining the provability of claims. The priority of claims, which is specified in Chapter 7 of the Bankruptcy Reform Act, must be maintained by the trustee when distributing the funds from liquidation. Any secured creditors have specific assets pledged as collateral and, in liquidation, receive proceeds from the sale of those assets. If these proceeds are inadequate to fully satisfy their claims, the secured creditors become unsecured, or general, creditors for the unrecovered amount, because specific collateral no longer exists. These and all
TABLE 17.9 \textbf{Order of Priority of Claims in Liquidation of a Failed Firm}

1. The expenses of administering the bankruptcy proceedings.

2. Any unpaid interim expenses incurred in the ordinary course of business between filing the bankruptcy petition and the entry of an Order for Relief in an involuntary proceeding. (This step is not applicable in a voluntary bankruptcy.)

3. Wages of not more than $2,000 per worker that have been earned by workers in the 90-day period immediately preceding the commencement of bankruptcy proceedings.

4. Unpaid employee benefit plan contributions that were to be paid in the 180-day period preceding the filing of bankruptcy or the termination of business, whichever occurred first. For any employee, the sum of this claim plus eligible unpaid wages (item 3) cannot exceed $2,000.

5. Claims of farmers or fishermen in a grain-storage or fish-storage facility, not to exceed $2,000 for each producer.

6. Unsecured customer deposits, not to exceed $900 each, resulting from purchasing or leasing a good or service from the failed firm.

7. Taxes legally due and owed by the bankrupt firm to the federal government, state government, or any other governmental subdivision.

8. Claims of secured creditors, who receive the proceeds from the sale of collateral held, regardless of the preceding priorities. If the proceeds from the liquidation of the collateral are insufficient to satisfy the secured creditors’ claims, the secured creditors become unsecured creditors for the unpaid amount.

9. Claims of unsecured creditors. The claims of unsecured, or general, creditors and unsatisfied portions of secured creditors’ claims (item 8) are all treated equally.

10. Preferred stockholders, who receive an amount up to the par, or stated, value of their preferred stock.

11. Common stockholders, who receive any remaining funds, which are distributed on an equal per-share basis. If different classes of common stock are outstanding, priorities may exist.

Other unsecured creditors will divide up, on a pro rata basis, any funds remaining after all prior claims have been satisfied. If the proceeds from the sale of secured assets are in excess of the claims against them, the excess funds become available to meet claims of unsecured creditors.

The complete order of priority of claims is given in Table 17.9. In spite of the priorities listed in items 1 through 7, secured creditors have first claim on proceeds from the sale of their collateral. The claims of unsecured creditors, including the unpaid claims of secured creditors, are satisfied next, and then, finally, the claims of preferred and common stockholders. An example of the application of these priorities is included on the text’s Web site at www.aw.com/gitman.

**Final Accounting**

After the trustee has liquidated all the bankrupt firm’s assets and distributed the proceeds to satisfy all provable claims in the appropriate order of priority, he or she makes a final accounting to the bankruptcy court and creditors. Once the court approves the final accounting, the liquidation is complete.
PART 6 Special Topics in Managerial Finance

Summary

Focus on Value

The financial manager is sometimes involved in corporate restructuring activities, which involve the expansion and contraction of the firm’s operations or changes in its asset or financial (ownership) structure. Included among corporate restructuring activities are mergers, consolidations, and holding companies. A variety of motives, such as synergy, increasing managerial skill or technology, and defense against takeover, could drive a firm toward a merger, but the overriding goal should be maximization of the owners’ wealth. Occasionally, merger transactions are heavily debt-financed leveraged buyouts (LBOs). In other cases, firms attempt to improve value by divesting themselves of certain operating units that are believed to constrain the firm’s value, particularly when the breakup value is believed to be greater than the firm’s current value.

Regardless of whether the firm makes a cash purchase or uses a stock swap to acquire another firm, the analysis should center on making sure that the risk-adjusted net present value of the transaction is positive. In stock swap transactions, the long-run impact on the firm’s earnings and risk can be evaluated in order to estimate the acquiring firm’s postacquisition value. Only in cases where additional value is created should the transaction be made.

Review Questions

17–14 What is the concern of Chapter 11 of the Bankruptcy Reform Act of 1978? How is the debtor in possession (DIP) involved in (1) the valuation of the firm, (2) the recapitalization of the firm, and (3) the exchange of obligations using the priority rule?

17–15 What is the concern of Chapter 7 of the Bankruptcy Reform Act of 1978? Under which conditions is a firm liquidated in bankruptcy? Describe the procedures (including the role of the trustee) involved in liquidating the bankrupt firm.

17–16 Indicate in which order the following claims would be settled when distributing the proceeds from liquidating a bankrupt firm: (a) claims of preferred stockholders; (b) claims of secured creditors; (c) expenses of administering the bankruptcy; (d) claims of common stockholders; (e) claims of unsecured, or general, creditors; (f) taxes legally due; (g) unsecured deposits of customers; (h) certain eligible wages; (i) unpaid employee benefit plan contributions; (j) unpaid interim expenses incurred between the time of filing and the entry of an Order for Relief; and (k) claims of farmers or fishermen in a grain-storage or fish-storage facility.
Business failure, though unpleasant, must be treated similarly; a failing firm should be reorganized only when such an act will maximize the owners’ wealth. Otherwise, liquidation should be pursued in a fashion that allows the owners the greatest amount of recovery. Regardless of whether the firm is growing, contracting, or being reorganized or liquidated in bankruptcy, the firm should take action only when that action is believed to result in a positive contribution to the maximization of the owners’ wealth.

**REVIEW OF LEARNING GOALS**

LG1 Understand merger fundamentals, including basic terminology, motives for merging, and types of mergers. Mergers result from the combining of firms. Typically, the acquiring company pursues and attempts to merge with the target company, on either a friendly or a hostile basis. Mergers are undertaken either for strategic reasons to achieve economies of scale or for financial reasons to restructure the firm to improve its cash flow. The overriding goal of merging is maximization of owners’ wealth (share price). Other specific merger motives include growth or diversification, synergy, fund raising, increased managerial skill or technology, tax considerations, increased ownership liquidity, and defense against takeover. The four basic types of mergers are horizontal (the merger of two firms in the same line of business); vertical (acquisition of a supplier or customer); congeneric (acquisition of a firm in the same general industry but neither in the same business nor a supplier or customer); and conglomerate (merger between unrelated businesses).

LG2 Describe the objectives and procedures used in leveraged buyouts (LBOs) and divestitures. Leveraged buyouts (LBOs) involve use of a large amount of debt to purchase a firm. LBOs are generally used to finance management buyouts. Divestiture involves the sale of a firm’s assets, typically an operating unit, to another firm or existing management; the spin-off of assets into an independent company; or the liquidation of assets. Motives for divestiture include cash generation and corporate restructuring.

LG3 Demonstrate the procedures used to value the target company, and discuss the effect of stock swap transactions on earnings per share. The value of a target company can be estimated by applying capital budgeting techniques to the relevant cash flows. All proposed mergers with positive net present values are considered acceptable. In a stock swap transaction in which an acquisition is paid for by an exchange of common stock, a ratio of exchange must be established to measure the amount paid per share of the target company relative to the per-share market price of the acquiring firm. The resulting relationship between the price/earnings (P/E) ratio paid by the acquiring firm and its initial P/E affects the merged firm’s earnings per share (EPS) and market price. If the P/E paid is greater than the P/E of the acquiring company, the EPS of the acquiring company decreases and the EPS of the target company increases.

LG4 Discuss the merger negotiation process, the role of holding companies, and international mergers. Investment bankers are commonly hired by the acquirer to find a suitable target company and assist in negotiations. A merger can be negotiated with the target firm’s management or, in the case of a hostile merger, directly with the firm’s shareholders by using tender offers. When the management of the target firm does not favor the merger, it can employ various takeover defenses—a white knight, poison pill, greenmail, leveraged recapitalization, golden parachutes, and shark repellents. A holding company can be created by one firm gaining control of other companies, often by owning as little as 10 to 20 percent of their stock. The chief advantages of holding companies are the leverage effect, risk protection, tax benefits, protection against lawsuits, and the ease of gaining control of a subsidiary. Disadvantages include increased risk due to the
magnification of losses, double taxation, difficulty of analysis, and the high cost of administration. In recent years, mergers of companies in Western Europe have moved toward the U.S.-style approach to shareholder value and public capital market financing. Both European and Japanese companies have become active acquirers of U.S. firms.

Understand the types and major causes of business failure and the use of voluntary settlements to sustain or liquidate the failed firm. A firm may fail because it has negative or low returns, because it is technically insolvent, or because it is bankrupt. The major causes of business failure are mismanagement, downturns in economic activity, and corporate maturity. Voluntary settlements are initiated by the debtor and can result in sustaining the firm via an extension, a composition, creditor control of the firm, or a combination of these strategies. If creditors do not agree to a plan to sustain a firm, they may recommend voluntary liquidation, which bypasses many of the legal requirements and costs of bankruptcy proceedings.

SELF-TEST PROBLEMS  (Solutions in Appendix B)

ST 17–1  Cash acquisition decision  Luxe Foods is contemplating acquisition of Valley Canning Company for a cash price of $180,000. Luxe currently has high financial leverage and therefore has a cost of capital of 14%. As a result of acquiring Valley Canning, which is financed entirely with equity, the firm expects its financial leverage to be reduced and its cost of capital therefore to drop to 11%. The acquisition of Valley Canning is expected to increase Luxe’s cash inflows by $20,000 per year for the first 3 years and by $30,000 per year for the following 12 years.

a. Determine whether the proposed cash acquisition is desirable. Explain your answer.

b. If the firm’s financial leverage would actually remain unchanged as a result of the proposed acquisition, would this alter your recommendation in part a? Support your answer with numerical data.

ST 17–2  Expected EPS—Merger decision  At the end of 2003, Lake Industries had 80,000 shares of common stock outstanding and had earnings available for common of $160,000. Butler Company, at the end of 2003, had 10,000 shares of common stock outstanding and had earned $20,000 for common shareholders. Lake’s earnings are expected to grow at an annual rate of 5%, and Butler’s growth rate in earnings should be 10% per year.
a. Calculate earnings per share (EPS) for Lake Industries for each of the next 5 years (2004–2008), assuming that there is no merger.
b. Calculate the next 5 years’ (2004–2008) earnings per share (EPS) for Lake if it acquires Butler at a ratio of exchange of 1.1.
c. Compare your findings in parts a and b, and explain why the merger looks attractive when viewed over the long run.

**PROBLEMS**

17–1 Tax effects of acquisition Connors Shoe Company is contemplating the acquisition of Salinas Boots, a firm that has shown large operating tax losses over the past few years. As a result of the acquisition, Connors believes that the total pretax profits of the merger will not change from their present level for 15 years. The tax loss carryforward of Salinas is $800,000, and Connors projects that annual earnings before taxes will be $280,000 per year for each of the next 15 years. These earnings are assumed to fall within the annual limit legally allowed for application of the tax loss carryforward resulting from the proposed merger (see footnote 4 on page 715). The firm is in the 40% tax bracket.

a. If Connors does not make the acquisition, what will be the company’s tax liability and earnings after taxes each year over the next 15 years?
b. If the acquisition is made, what will be the company’s tax liability and earnings after taxes each year over the next 15 years?
c. If Salinas can be acquired for $350,000 in cash, should Connors make the acquisition, judging on the basis of tax considerations? (Ignore present value.)

17–2 Tax effects of acquisition Trapani Tool Company is evaluating the acquisition of Sussman Casting. Sussman has a tax loss carryforward of $1.8 million. Trapani can purchase Sussman for $2.1 million. It can sell the assets for $1.6 million—their book value. Trapani expects earnings before taxes in the 5 years after the merger to be as shown in the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Earnings before taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$150,000</td>
</tr>
<tr>
<td>2</td>
<td>400,000</td>
</tr>
<tr>
<td>3</td>
<td>450,000</td>
</tr>
<tr>
<td>4</td>
<td>600,000</td>
</tr>
<tr>
<td>5</td>
<td>600,000</td>
</tr>
</tbody>
</table>

The expected earnings given are assumed to fall within the annual limit that is legally allowed for application of the tax loss carryforward resulting from the proposed merger (see footnote 4 on page 715). Trapani is in the 40% tax bracket.
a. Calculate the firm’s tax payments and earnings after taxes for each of the next 5 years without the merger.
b. Calculate the firm’s tax payments and earnings after taxes for each of the next 5 years with the merger.
c. What are the total benefits associated with the tax losses from the merger? (Ignore present value.)
d. Discuss whether you would recommend the proposed merger. Support your decision with figures.

17–3 Tax benefits and price  
Hahn Textiles has a tax loss carryforward of $800,000. Two firms are interested in acquiring Hahn for the tax loss advantage. Reilly Investment Group has expected earnings before taxes of $200,000 per year for each of the next 7 years and a cost of capital of 15%. Webster Industries has expected earnings before taxes for the next 7 years as shown in the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Earnings before taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>2</td>
<td>120,000</td>
</tr>
<tr>
<td>3</td>
<td>200,000</td>
</tr>
<tr>
<td>4</td>
<td>300,000</td>
</tr>
<tr>
<td>5</td>
<td>400,000</td>
</tr>
<tr>
<td>6</td>
<td>400,000</td>
</tr>
<tr>
<td>7</td>
<td>500,000</td>
</tr>
</tbody>
</table>

Both Reilly’s and Webster’s expected earnings are assumed to fall within the annual limit legally allowed for application of the tax loss carryforward resulting from the proposed merger (see footnote 4 on page 715). Webster has a cost of capital of 15%. Both firms are subject to a 40% tax rate on ordinary income.

a. What is the tax advantage of the merger each year for Reilly?
b. What is the tax advantage of the merger each year for Webster?
c. What is the maximum cash price each interested firm would be willing to pay for Hahn Textiles? (Hint: Calculate the present value of the tax advantages.)
d. Use your answers in parts a through c to explain why a target company can have different values to different potential acquiring firms.

17–4 Asset acquisition decision  
Zarin Printing Company is considering the acquisition of Freiman Press at a cash price of $60,000. Freiman Press has liabilities of $90,000. Freiman has a large press that Zarin needs; the remaining assets would be sold to net $65,000. As a result of acquiring the press, Zarin would experience an increase in cash inflow of $20,000 per year over the next 10 years. The firm has a 14% cost of capital.

a. What is the effective or net cost of the large press?
b. If this is the only way Zarin can obtain the large press, should the firm go ahead with the merger? Explain your answer.
c. If the firm could purchase a press that would provide slightly better quality and $26,000 annual cash inflow for 10 years for a price of $120,000, which alternative would you recommend? Explain your answer.

17–5 Cash acquisition decision  Benson Oil is being considered for acquisition by Dodd Oil. The combination, Dodd believes, would increase its cash inflows by $25,000 for each of the next 5 years and by $50,000 for each of the following 5 years. Benson has high financial leverage, and Dodd can expect its cost of capital to increase from 12% to 15% if the merger is undertaken. The cash price of Benson is $125,000.

a. Would you recommend the merger?

b. Would you recommend the merger if Dodd could use the $125,000 to purchase equipment that will return cash inflows of $40,000 per year for each of the next 10 years?

c. If the cost of capital did not change with the merger, would your decision in part b be different? Explain.

17–6 Ratio of exchange and EPS  Marla’s Cafe is attempting to acquire the Victory Club. Certain financial data on these corporations are summarized in the following table.

<table>
<thead>
<tr>
<th>Item</th>
<th>Marla’s Cafe</th>
<th>Victory Club</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings available for common stock</td>
<td>$20,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>Number of shares of common stock outstanding</td>
<td>20,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Market price per share</td>
<td>$12</td>
<td>$24</td>
</tr>
</tbody>
</table>

Marla’s Cafe has sufficient authorized but unissued shares to carry out the proposed merger.

a. If the ratio of exchange is 1.8, what will be the earnings per share (EPS) based on the original shares of each firm?

b. Repeat part a if the ratio of exchange is 2.0.

c. Repeat part a if the ratio of exchange is 2.2.

d. Discuss the principle illustrated by your answers to parts a through c.

17–7 EPS and merger terms  Cleveland Corporation is interested in acquiring Lewis Tool Company by swapping 0.4 share of its stock for each share of Lewis stock. Certain financial data on these companies are given in the following table.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cleveland Corporation</th>
<th>Lewis Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings available for common stock</td>
<td>$200,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Number of shares of common stock outstanding</td>
<td>50,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Earnings per share (EPS)</td>
<td>$4.00</td>
<td>$2.50</td>
</tr>
<tr>
<td>Market price per share</td>
<td>$50.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>Price/earnings (P/E) ratio</td>
<td>12.5</td>
<td>6</td>
</tr>
</tbody>
</table>
Cleveland has sufficient authorized but unissued shares to carry out the proposed merger.

a. How many new shares of stock will Cleveland have to issue to make the proposed merger?  
b. If the earnings for each firm remain unchanged, what will the postmerger earnings per share be?  
c. How much, effectively, has been earned on behalf of each of the original shares of Lewis stock? 
d. How much, effectively, has been earned on behalf of each of the original shares of Cleveland Corporation’s stock?

17–8 Ratio of exchange  
Calculate the ratio of exchange (1) of shares and (2) in market price for each of the cases shown in the following table. What does each ratio signify? Explain.

<table>
<thead>
<tr>
<th>Case</th>
<th>Acquiring company</th>
<th>Target company</th>
<th>Price per share offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$50</td>
<td>$25</td>
<td>$30.00</td>
</tr>
<tr>
<td>B</td>
<td>80</td>
<td>80</td>
<td>100.00</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>60</td>
<td>70.00</td>
</tr>
<tr>
<td>D</td>
<td>50</td>
<td>10</td>
<td>12.50</td>
</tr>
<tr>
<td>E</td>
<td>25</td>
<td>20</td>
<td>25.00</td>
</tr>
</tbody>
</table>

17–9 Expected EPS—Merger decision  
Graham & Sons wishes to evaluate a proposed merger into the RCN Group. Graham had 2003 earnings of $200,000, has 100,000 shares of common stock outstanding, and expects earnings to grow at an annual rate of 7%. RCN had 2003 earnings of $800,000, has 200,000 shares of common stock outstanding, and expects its earnings to grow at 3% per year.

a. Calculate the expected earnings per share (EPS) for Graham & Sons for each of the next 5 years (2004–2008) without the merger.  
b. What would Graham’s stockholders earn in each of the next 5 years (2004–2008) on each of their Graham shares swapped for RCN shares at a ratio of (1) 0.6 and (2) 0.8 shares of RCN for 1 share of Graham?  
c. Graph the premerger and postmerger EPS figures developed in parts a and b with year on the x axis and EPS on the y axis.  
d. If you were the financial manager for Graham & Sons, which would you recommend from part b, (1) or (2)? Explain your answer.

17–10 EPS and postmerger price  
Data for Henry Company and Mayer Services are given in the following table. Henry Company is considering merging with Mayer by swapping 1.25 shares of its stock for each share of Mayer stock. Henry
Company expects its stock to sell at the same price/earnings (P/E) multiple after the merger as before merging.

<table>
<thead>
<tr>
<th>Item</th>
<th>Henry Company</th>
<th>Mayer Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings available for common stock</td>
<td>$225,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Number of shares of common stock outstanding</td>
<td>90,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Market price per share</td>
<td>$45</td>
<td>$50</td>
</tr>
</tbody>
</table>

a. Calculate the ratio of exchange in market price.
b. Calculate the earnings per share (EPS) and price/earnings (P/E) ratio for each company.
c. Calculate the price/earnings (P/E) ratio used to purchase Mayer Services.
d. Calculate the postmerger earnings per share (EPS) for Henry Company.
e. Calculate the expected market price per share of the merged firm. Discuss this result in light of your findings in part a.

17–11 Holding company  Scully Corporation holds stock in company A and company B. Consider the accompanying simplified balance sheets for these companies.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and Stockholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scully Corporation</td>
</tr>
<tr>
<td></td>
<td>Company A</td>
</tr>
<tr>
<td></td>
<td>Company B</td>
</tr>
<tr>
<td>Common stock holdings</td>
<td>Long-term debt</td>
</tr>
<tr>
<td>Company A</td>
<td>$ 40,000</td>
</tr>
<tr>
<td>Company B</td>
<td>Preferred stock</td>
</tr>
<tr>
<td></td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Total</td>
<td>Common stock equity</td>
</tr>
<tr>
<td></td>
<td>$100,000</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>$100,000</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Company A</td>
<td>Current liabilities</td>
</tr>
<tr>
<td></td>
<td>$100,000</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>Long-term debt</td>
</tr>
<tr>
<td></td>
<td>$400,000</td>
</tr>
<tr>
<td>Total</td>
<td>Common stock equity</td>
</tr>
<tr>
<td></td>
<td>$500,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>$500,000</td>
</tr>
<tr>
<td>Company B</td>
<td>Current liabilities</td>
</tr>
<tr>
<td></td>
<td>$180,000</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>Long-term debt</td>
</tr>
<tr>
<td></td>
<td>$720,000</td>
</tr>
<tr>
<td>Total</td>
<td>Common stock equity</td>
</tr>
<tr>
<td></td>
<td>$900,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>$900,000</td>
</tr>
</tbody>
</table>

a. What percentage of the total assets controlled by Scully Corporation does its common stock equity represent?
b. If another company owns 15% of the common stock of Scully Corporation and, by virtue of this fact, has voting control, what percentage of the total assets controlled does the outside company’s equity represent?
c. How does a holding company effectively provide a great deal of control for a small dollar investment?

d. Answer parts a and b in light of the following additional facts.
   (1) Company A’s fixed assets consist of $20,000 of common stock in company C. This provides voting control.
   (2) Company C, which has total assets of $400,000, has voting control of company D, which has $50,000 of total assets.
   (3) Company B’s fixed assets consist of $60,000 of stock in both company E and company F. In both cases, this gives it voting control. Companies E and F have total assets of $300,000 and $400,000, respectively.

17–12 Voluntary settlements Classify each of the following voluntary settlements as an extension, a composition, or a combination of the two.

- a. Paying all creditors 30 cents on the dollar in exchange for complete discharge of the debt.
- b. Paying all creditors in full in three periodic installments.
- c. Paying a group of creditors with claims of $10,000 in full over 2 years and immediately paying the remaining creditors 75 cents on the dollar.

17–13 Voluntary settlements For a firm with outstanding debt of $125,000, classify each of the following voluntary settlements as an extension, a composition, or a combination of the two.

- a. Paying a group of creditors in full in four periodic installments and paying the remaining creditors in full immediately.
- b. Paying a group of creditors 90 cents on the dollar immediately and paying the remaining creditors 80 cents on the dollar in two periodic installments.
- c. Paying all creditors 15 cents on the dollar.
- d. Paying all creditors in full in 180 days.

17–14 Voluntary settlements—Payments Jacobi Supply Company recently ran into certain financial difficulties that have resulted in the initiation of voluntary settlement procedures. The firm currently has $150,000 in outstanding debts and approximately $75,000 in liquidatable short-term assets. Indicate, for each of the following plans, whether the plan is an extension, a composition, or a combination of the two. Also indicate the cash payments and timing of the payments required of the firm under each plan.

- a. Each creditor will be paid 50 cents on the dollar immediately, and the debts will be considered fully satisfied.
- b. Each creditor will be paid 80 cents on the dollar in two quarterly installments of 50 cents and 30 cents. The first installment is to be paid in 90 days.
- c. Each creditor will be paid the full amount of its claims in three installments of 50 cents, 25 cents, and 25 cents on the dollar. The installments will be made in 60-day intervals, beginning in 60 days.
- d. A group of creditors with claims of $50,000 will be immediately paid in full; the rest will be paid 85 cents on the dollar, payable in 90 days.
Sharon Scotia, CFO of Rome Industries, must decide what to do about Procras Corporation, a major customer that is bankrupt. Rome Industries is a large plastic-injection-molding firm that produces plastic products to customer order. Procras Corporation is a major customer of Rome Industries that designs and markets a variety of plastic toys. As a result of mismanagement and inventory problems, Procras has become bankrupt. Among its unsecured debts are total past-due accounts of $1.9 million owed to Rome Industries.

Recognizing that it probably cannot recover the full $1.9 million that Procras Corporation owes it, the management of Rome Industries has isolated two mutually exclusive alternative actions: (1) acquire Procras through an exchange of stock or (2) let Procras be liquidated and recover Rome Industries’ proportionate claim against any funds available for unsecured creditors. Rome’s management feels that acquisition of Procras would have appeal in that it would allow Rome to integrate vertically and expand its business from strictly industrial manufacturing to include product development and marketing. Of course, the firm wants to select the alternative that will create the most value for its shareholders. Charged with making a recommendation as to whether Rome should acquire Procras Corporation or allow it to be liquidated, Ms. Scotia gathered the following data.

**Acquire Procras Corporation** Negotiations with Procras management have resulted in a planned ratio of exchange of 0.6 share of Rome Industries for each share of Procras Corporation common stock. The following table reflects current data for Rome Industries and Rome’s expectations of the data values for Procras Corporation with proper management in place.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rome Industries</th>
<th>Procras Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings available for common stock</td>
<td>$640,000</td>
<td>$180,000</td>
</tr>
<tr>
<td>Number of shares of common stock outstanding</td>
<td>400,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Market price per share</td>
<td>$32</td>
<td>$30</td>
</tr>
</tbody>
</table>

Rome Industries estimates that after the proposed acquisition of Procras Corporation, its price/earnings (P/E) ratio will be 18.5.

**Liquidation of Procras Corporation** Procras Corporation was denied its petition for reorganization, and the court-appointed trustee was expected to charge $150,000 for his services in liquidating the firm. In addition, $100,000 in unpaid bills were expected to be incurred between the time of filing the bankruptcy petition and the entry of an Order for Relief. The firm’s preliquidation balance sheet is shown below. Use the liquidation example on the text’s Web site at [www.aw.com/gitman](http://www.aw.com/gitman) as a guide in analyzing this alternative.
The trustee expects to liquidate the assets for $3.2 million—$2.5 million from current assets and $700,000 from fixed assets.

**Required**

a. Calculate (1) the ratio of exchange in market price and (2) the earnings per share (EPS) and price/earnings (P/E) ratio for each company on the basis of the data given in the table that accompanies discussion of the acquisition alternative.

b. Find the postmerger earnings per share (EPS) for Rome Industries, assuming that it acquires Procras Corporation under the terms given.

c. Use the estimated postmerger price/earnings (P/E) ratio and your finding in part b to find the postmerger share price.

d. Use your finding in part c to determine how much, if any, the total market value of Rome Industries will change as a result of acquiring Procras Corporation.

e. Determine how much each claimant will receive if Procras Corporation is liquidated under the terms given.

f. How much, if any, of its $1.9 million balance due from Procras Corporation will Rome Industries recover as a result of liquidation of Procras?
g. Compare your findings in parts d and f, and make a recommendation for Rome Industries with regard to its best action—acquisition of Procras or the liquidation of Procras.

h. Which alternative would the shareholders of Procras Corporation prefer? Why?

WEB EXERCISE

Go to www.uscourts.gov/bankruptcycourts.html, the site of the U.S. Bankruptcy Courts. Click on the link at the bottom for Library. Under Statistical Reports, click on Federal Judicial Caseload Statistic and then on Judicial Business, a statistical report. Find the section on bankruptcy courts and answer the following questions.

1. Summarize recent trends in number of bankruptcy cases filed and in Chapter 7 filings.
2. Compare business and nonbusiness bankruptcy trends.

Go to www.moeb.uscourts.gov, the site for the Eastern District of Missouri Bankruptcy Court. Click on Statistics, and then, under the pull-down menu for Data tables, select Annual Filings.

3. Which year had the greatest number of filings in this district? What is the general trend?
4. Under which chapter were there the greatest number of filings?

Remember to check the book’s Web site at www.aw.com/gitman for additional resources, including additional Web exercises.