

# Chapter 23

## Mergers and Acquisitions

### Chapter Organization

- 23.1 The Legal Forms of Acquisitions
- 23.2 Taxes and Acquisitions
- 23.3 Accounting for Acquisitions
- 23.4 Gains from Acquisition
- 23.5 Some Financial Side Effects of Acquisitions
- 23.6 The Cost of an Acquisition
- 23.7 Defensive Tactics
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- 23.9 Summary and Conclusions

## T23.2 How to Make a Merger Work

- Are there any rules of thumb for merger success? Consider the following.
- 1. Don't rush the wedding - do your homework carefully to prevent morning-after surprises.
- 2. Know what you're buying - not just the financials, but the corporate culture.
- 3. Adopt each partner's best practices - don't assume the bigger company or the acquirer has all the answers.
- 4. Be honest with employees about how a merger will affect them - start early and communicate honestly with them.
- 5. Take the time to do internal recruiting - make sure the managers you want to keep don't go wandering off to a competitor.

Adapted from "How to Make a Merger Work", Fortune magazine, January 24, 1994.

## T23.3 The Mechanics of Mergers & Acquisitions

### ■ I. Merger

#### ◆ *Advantages*

Simplicity (buyer assumes *all* assets and liabilities)

No minority interests

Not a taxable event for shareholders

#### ◆ *Disadvantages*

*All* liabilities assumed (including potential litigation)

Typically require two thirds of shareholders of both firms to approve

Requires post-merger cooperation between each firm's management

## T23.3 The Mechanics of Mergers & Acquisitions (concluded)

- II. Acquisition of Stock (Tender Offer)
  - ◆ *Advantage*
    - No shareholder (or even management) approval necessary
    - Used for hostile takeover conditions
  - ◆ *Disadvantage*
    - Integration difficult without 100% of shares
    - Requires offering circular and exchange filings
- III. Acquisition of Assets
  - ◆ *Advantages*
    - Buyer acquires assets with no minority shareholders
    - Only 50% of seller's shareholders need approve
  - ◆ *Disadvantages*
    - Courts may determine that exchange is effectively a merger
    - Individual transfer of assets may incur costly legal fees

## T23.4 Acquisition classifications

### ■ *Horizontal acquisition*

- ◆ Firms compete in the same industry

TransCanada Pipelines acquisition of Nova Corp.

Air Canada acquisition Canadian Airlines

### ■ *Vertical acquisition*

- ◆ Firms at different steps in production process

AOL's acquisition of Netscape

General Motors and Fisher Autobody

### ■ *Conglomerate acquisition*

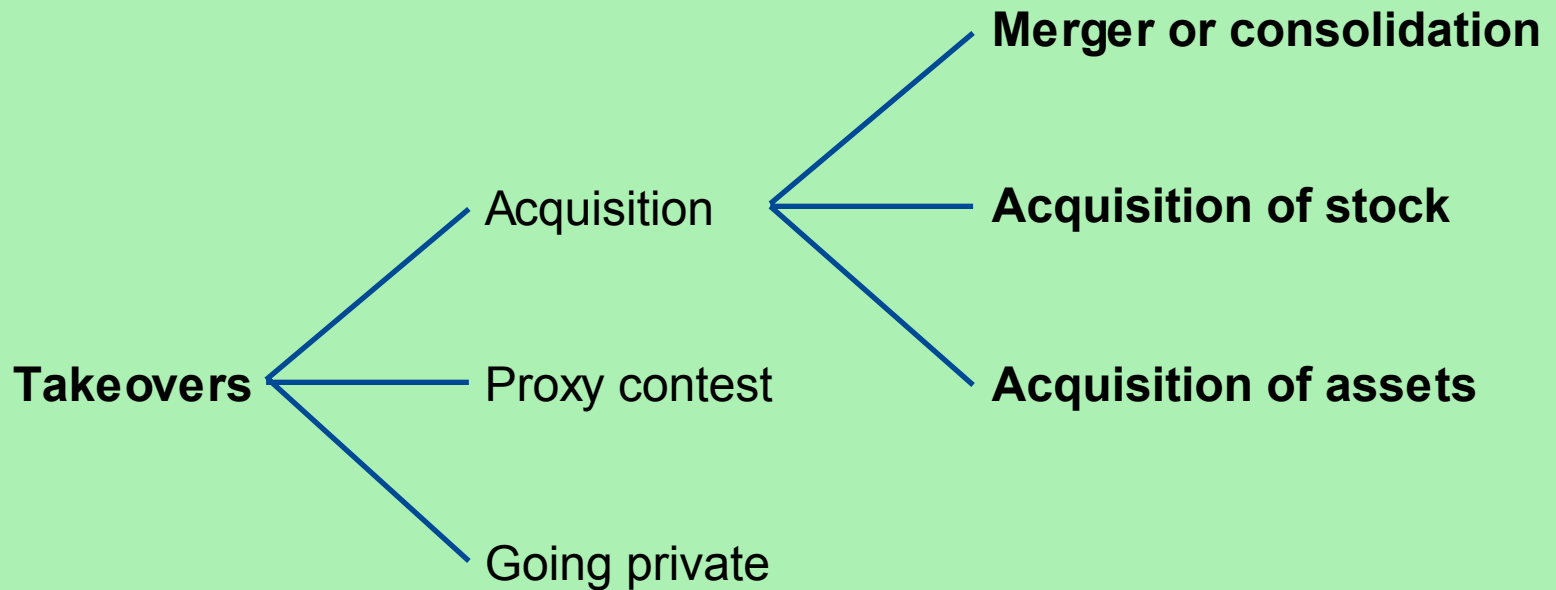
- ◆ Firms in unrelated businesses

Campeau's acquisition of Federated Department

Gulf & Western

ITT

## T23.5 A Note on Takeovers



## T23.6 Accounting for Acquisitions: Purchase (Table 23.2)

| Firm A          |                    |                    | Firm B          |                    |                    |                    |
|-----------------|--------------------|--------------------|-----------------|--------------------|--------------------|--------------------|
| Working capital | \$ 4               |                    | Equity          | \$20               |                    |                    |
| Fixed assets    | <u>16</u>          | —                  | Working capital | \$ 2               | Equity             | \$10               |
| Total           | <u><u>\$20</u></u> | <u><u>\$20</u></u> | Fixed assets    | <u>8</u>           | —                  | —                  |
|                 |                    |                    | Total           | <u><u>\$10</u></u> | <u><u>\$10</u></u> | <u><u>\$10</u></u> |

| Firm AB         |                    |                    |                    |
|-----------------|--------------------|--------------------|--------------------|
| Working capital | \$ 6               | Debt               | \$18               |
| Fixed assets    | 30                 | Equity             | 20                 |
| Goodwill        | <u>2</u>           | —                  | —                  |
| Total           | <u><u>\$38</u></u> | <u><u>\$38</u></u> | <u><u>\$38</u></u> |

The market value of the fixed assets of Firm B is \$14 million. Firm A pays \$18 million for Firm B by issuing debt.

## T23.6 Accounting for Acquisitions: Pooling (Table 23.3)

| Firm A  |                    |   | Firm B       |                    |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
|---|--------------------|---|--------------|--------------------|--------------------|-----------------|-----|--|--------|------|--|--------------|----|--|--|--|--|--|--|---|--|---|--|-------|--------------------|--|--|--------------------|--|
| Working capital   | \$ 4               |   | Equity       | \$20               |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
| Fixed assets  | <u>16</u>          |   | Fixed assets | <u>8</u>           |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
| Total   | <u><u>\$20</u></u> |   | Total        | <u><u>\$10</u></u> |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
|   |                    |   |              |                    | <u><u>\$10</u></u> |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">Firm AB</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Working capital</td> <td style="width: 15%; text-align: right;">\$6</td> <td style="width: 15%;"></td> <td style="width: 33%;">Equity</td> <td style="width: 15%; text-align: right;">\$30</td> <td style="width: 15%;"></td> </tr> <tr> <td>Fixed assets</td> <td style="text-align: right;">24</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">—</td> <td></td> <td style="text-align: center;">—</td> <td></td> </tr> <tr> <td>Total</td> <td style="text-align: right;"><u><u>\$30</u></u></td> <td></td> <td></td> <td style="text-align: right;"><u><u>\$30</u></u></td> <td></td> </tr> </table> |                    |   |              |                    |                    | Working capital | \$6 |  | Equity | \$30 |  | Fixed assets | 24 |  |  |  |  |  |  | — |  | — |  | Total | <u><u>\$30</u></u> |  |  | <u><u>\$30</u></u> |  |
| Working capital   | \$6                |   | Equity       | \$30               |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
| Fixed assets  | 24                 |   |              |                    |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
|   |                    | — |              | —                  |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |
| Total   | <u><u>\$30</u></u> |   |              | <u><u>\$30</u></u> |                    |                 |     |  |        |      |  |              |    |  |  |  |  |  |  |   |  |   |  |       |                    |  |  |                    |  |

## T23.7 Gains from Acquisitions

### ■ I. Incremental Cash Flows

$$= \Delta \text{Revenue} - \Delta \text{Cost} - \Delta \text{Tax} - \Delta \text{Capital requirements}$$

#### A. Increased revenues

1. Increased market power – monopoly
2. Gains from better marketing efforts
3. Strategic benefits—“beachhead” into new markets

#### B. Decreased costs

1. Economies of scale
2. Economies of vertical integration
3. Complementary resources
4. Elimination of inefficiencies

## T23.7 Gains from Acquisitions (concluded)

### I. Incremental Cash Flows

$$= \Delta \text{Revenue} - \Delta \text{Cost} - \Delta \text{Tax} - \Delta \text{Capital requirements}$$

### C. Taxes

1. Transfer of net operating losses
2. Unused debt capacity
3. “Free cash flow”—reinvestment of surplus funds as an alternative to paying dividends or repurchasing stock
4. Ability to write-up depreciable assets

### D. More efficient allocation of capital resources

## T23.8 Capturing Gains from Acquisitions

### ■ Avoiding mistakes

- ◆ Market values
- ◆ Focus on incremental cash flows
- ◆ Use appropriate discount rate

Should you use Acquiring or Acquired's discount rate?

### ◆ Transaction costs

Direct- fees and consulting

Indirect- Management time and energy

### ■ Inefficient management

- ◆ Takeovers can discipline inefficient management

## T23.9 Acquisitions and EPS Growth

- Pizza Shack and Checkers Pizza are merging to form Stop 'N Go Pizza. The merger isn't expected to create any additional value. Stop 'N Go, valued at \$1,875,000, is to have 125,000 shares outstanding at \$15 per share

Before and after merger financial positions

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100,000 Stop 'N Go shares to Shack holders  
25,000 Stop 'N Go shares to Checkers holders

## T23.9 Acquisitions and EPS Growth (concluded)

|                    | Pizza Shack | Checkers Pizza | Stop 'N Go  |
|--------------------|-------------|----------------|-------------|
| Earnings per share | \$ 1.50     | \$ 1.50        | \$ 1.80     |
| Price per share    | 15.00       | 7.50           | 15.00       |
| P/E ratio          | 10          | 5              | 8.33        |
| Number of shares   | 100,000     | 50,000         | 125,000     |
| Total earnings     | \$150,000   | \$75,000       | \$225,000   |
| Total value        | \$1,500,000 | \$ 375,000     | \$1,875,000 |

## T23.10 Medium of Exchange in Acquisitions

- The net incremental gain from a merger of firms A and B is:

$$\Delta V = V_{AB} - (V_A + V_B)$$

- The total value of Firm B to Firm A is:  $V_B^* = V_B + \Delta V$
- The NPV of the merger is:  $NPV = V_B^* - \text{Cost to Firm A of the acquisition}$
- The cost of the acquisition to Firm A depends on the medium of exchange used to acquire Firm B: cash or stock.
- Whether cash or stock is used to finance the acquisition depends on the following factors:

*Sharing gains.* If cash is used, the selling firm's shareholders will not participate in the potential gains (or losses) from the merger.

*Taxes.* Cash acquisitions are generally taxable; stock acquisitions generally are not.

*Control.* Control of the acquiring firm is unaffected in a cash acquisition. Acquisition with voting shares may have implications for control of the merged firm.

## T23.11 Defensive Tactics

Managers who believe their firms are likely to become takeover targets and who wish to fend off unwanted acquirers often implement one or more *takeover defenses*. These *defensive tactics* take several forms:

- The Corporate Charter

*Establishes conditions that allow for a takeover. Can be amended to make acquisitions more difficult (e.g. supermajority agreement, staggered boards).*

- Repurchase and Standstill Agreements

*Targeted repurchases (“greenmail”)– purchase of stock from single bidder at a premium – appears to be ruled out in Canada.*

*Bidders agree to limit holdings of target via standstill agreements.*

## T23.11 Defensive Tactics (continued)

- Exclusionary Offers and non-voting stock

*The opposite of a targeted repurchase—firm makes a tender offer for a given amount of its own stock while excluding targeted stockholders. Ontario Securities Commission unlikely to allow exclusionary offers.*

- Poison Pills and Share Rights Plans (SRPs)

*Poison pill—a financial device designed to make unfriendly takeover attempts unappealing, if not impossible.*

*Share rights plan—provisions allowing existing stockholder to purchase stock at some fixed price (often  $\frac{1}{2}$  of market price) should an outside tender offer meet board disapproval, discouraging hostile takeover attempts.*

- Going Private and Leveraged Buyouts (LBOs)

*In a going private transaction, the publicly owned stock in a firm is replaced with complete equity ownership by a private group.*

*In a leveraged buyout, debt is used to acquire most or all of the publicly traded shares in taking the firm private.*

## T23.11 Defensive Tactics (concluded)

- Golden parachutes
  - ◆ Aligning target manager and shareholder interests
- Crown jewels
  - ◆ Sell off valuable assets, leaving nothing of value
- White knight
  - ◆ Find a friendly bidder

## T23.12 Evidence on Acquisitions: Stock Price Changes in Takeovers

| Takeover<br>Technique | Successful<br>Takeovers |                | Unsuccessful<br>Takeovers |                |
|-----------------------|-------------------------|----------------|---------------------------|----------------|
|                       | Target<br>(%)           | Bidders<br>(%) | Target<br>(%)             | Bidders<br>(%) |
| Tender offers         | 30                      | 4              | -3                        | -1             |
| Mergers               | 20                      | 0              | -3                        | -5             |
| Proxy contest         | 8                       | n/a            | 8                         | n/a            |

From Michael C. Jensen and Richard S. Ruback, "The Market for Corporate Control: The Scientific Evidence," *Journal of Financial Economics* 11 (April 1983), pp. 7, 8.

## T23.13 Evidence on Acquisitions: Canadian experience

- Summary of Empirical Findings from table 23.7

| Transaction type and date                 | Target Bidder |    |
|---|---------------|----|
| 1,930 mergers, 1964-1983                  | 9%            | 3% |
| 119 mergers, 1963-1982                    | 23            | 11 |
| 173 going-private transactions, 1977-1989 | 25            | NA |
| Minority buyout                           | 27            |    |
| Non-controlling bidder                    | 24            |    |

## T23.14 Chapter 23 Quick Quiz

1. What is the difference between a merger and a consolidation?

*A merger is the complete absorption of one company by another. A consolidation is a merger in which an entirely new firm is created; both acquirer and acquired cease to exist.*

2. What is “synergy”? Under what conditions might it exist?

*Synergy is the positive incremental net gain associated with the combination of two firms through merger or acquisition.*

*Synergy exists if a transaction results in increased revenues, decreased costs, lower taxes, or a reduction in capital requirements.*

3. Are defensive tactics by target firm managers good or bad for the target firm shareholders? Explain.

*The answer is “it depends.” Sometimes resistance serves to increase the price offered for the target (which benefits target shareholders); other times, resistance serves only to entrench poor managers.*

## T23.15 Solution to Problem 23.7

- Eastman Corp. is analyzing the possible acquisition of Kodiak Company. Both firms have no debt. Eastman believes the acquisition will increase its total after-tax annual cash flows by \$1.3M indefinitely. The current market value of Kodiak is \$51M, and that of Eastman is \$70M. The appropriate discount rate for the incremental cash flows is 12%. Eastman is trying to decide whether it should offer 40% of its stock or \$55M in cash to Kodiak's shareholders.
  - a. What is the cost of each alternative?
  - b. What is the NPV of each alternative?
  - c. Which alternative should Eastman use?

## T23.15 Solution to Problem 23.7 (continued)

a.  $V_{EK}^*$  = current value of Kodiak plus PV of incremental cash flows attributable to the acquisition

$$= \$51M + (\$ \underline{\quad} / \underline{\quad}) = \$ \underline{\quad}$$

$$\text{Cash cost} = \$55M$$

$$\text{Equity cost} = .40(\$70M + \$ \underline{\quad}) = \$ \underline{\quad}$$

b. NPV cash =  $\$ \underline{\quad} - \$55M = \$8M$

$$\text{NPV stock} = \$ \underline{\quad} - \$ \underline{\quad} = \$ \underline{\quad}$$

c. They should acquire Kodiak using           .

## T23.15 Solution to Problem 23.7 (concluded)

a.  $V_{EK}^*$  = current value of Kodiak plus PV of incremental cash flows attributable to the acquisition

$$= \$51M + (\$1.3M/.12) = \$61.8M$$

$$\text{Cash cost} = \$55M$$

$$\text{Equity cost} = .40(\$70M + \$61.8M) = \$52.7M$$

b. NPV cash =  $\$61.83M - \$55M = \$6.8M$

$$\text{NPV stock} = \$61.83M - \$52.7M = \$9.1M$$

c. They should acquire Kodiak using **stock**, since the NPV is larger.

## T23.16 Solution to Problem 23.8

- The shareholders of On The Brink Security Company have voted in favor of a buyout offer from Insecure Corp. Information about each firm is given here:

|                      | On The Brink | Insecure  |
|----------------------|--------------|-----------|
| Price/earnings ratio | 3.5          | 14        |
| Shares outstanding   | 40,000       | 120,000   |
| Earnings             | \$200,000    | \$450,000 |

On The Brink's shareholders will receive one share in Insecure stock for every three shares they hold in On The Brink.

- a. What will the EPS of Insecure be after the merger? What will the P/E ratio be if the NPV of the acquisition is zero?

## T23.16 Solution to Problem 23.8 (continued)

a. Calculate the EPS and P/E for the combined firm.

|                    | On The Brink | Insecure Combined |       |
|--------------------|--------------|-------------------|-------|
| Shares outstanding | 40,000       | 120,000           | _____ |
| Earnings           | \$200,000    | \$450,000         | _____ |
| EPS                | \$5.00       | \$3.75            | _____ |
| P/E ratio          | 3.5          | 14                | _____ |

b. What must Insecure feel is the value of the synergy between these two firms? Explain how your answer can be reconciled with the decision to go ahead with the takeover.

## T23.16 Solution to Problem 23.8 (continued)

a. Calculate the EPS and P/E for the combined firm.

|                    | On The Brink | Insecure Combined |         |
|--------------------|--------------|-------------------|---------|
| Shares outstanding | 40,000       | 120,000           | 133,333 |
| Earnings           | \$200,000    | \$450,000         | 650,000 |
| EPS                | \$5.00       | \$3.75            | \$4.875 |
| P/E ratio          | 3.5          | 14                | 10.77   |

## T23.16 Solution to Problem 23.8 (concluded)

- b. What must Insecure feel is the value of the synergy between these two firms? Explain how your answer can be reconciled with the decision to go ahead with the takeover.

$$\text{NPV} = 0 = \text{VB} + \Delta V - \text{Cost} = \$200,000(3.5) + \Delta V - (1/3)(40,000)(52.50)$$

$$\Delta V = 0$$

- Given the zero NPV of the transaction, there is not a financial reason to go ahead with the takeover. However, it may occur for nonfinancial reasons (e.g., managerial empire-building, or hubris).