

Solutions Chapter 17

Exercise 17.1

a. Number of Sitting Duck shares = $\$10,000/\$2.50 = 4,000$.

Takeover sum: $4,000 \times 0.55 \times \$21 = \$46,200$.

b.

(\$)

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Goodwill	$\$46,200 - (0.55 \times \$28,000)$	30,800
Fixed assets	$25,000 + 45,000$	70,000
Current assets	$33,000 + (69,000 - 25,000)$	77,000
Total Assets		177,800
Common stock		17,000
Reserves		37,000
Debt	$30,000 + 60,000 + 21,200$	111,200
Minority interest	$0.45 \times 28,000$	12,600
Total Sources		177,800

c.

(\$)

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Fixed assets	$25,000 + 45,000$	70,000
Current assets	$33,000 + (69,000 - 25,000)$	77,000
Total Assets		147,000
Common stock		17,000
Reserves	$37,000 - 30,800$	6,200
Debt	$30,000 + 60,000 + 21,200$	111,200
Minority interest	$0.45 \times 28,000$	12,600
Total Sources		147,000

Exercise 17.2

a. Alco buys 3,500 Balco shares for \$91,000.

Alco issues $\$91,000/\$28 = 3,250$ new shares.

a.

Post takeover balance sheet (\$1,000)

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Financial asset	0.7×66	46.2
Goodwill	$91 - 46.2$	44.8
Property and plant		163
Inventory		25
Receivables		48
Cash		<u>22</u>
Total assets		349
Common stock	$100 + 32.5$	132.5
Reserves	$46 + 58.5$	104.5
Debt		<u>112</u>
Total Sources		349

b.

Fully consolidated balance sheet (\$1,000)

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Goodwill		44.8
Property and plant	$163 + 46$	209
Inventory	$25 + 27$	52
Receivables	$48 + 21$	69
Cash	$22 + 8$	<u>30</u>
Total Assets		404.8
Common stock		132.5
Reserves		104.5
Debt	$112 + 36$	148
Minority interest	0.3×66	<u>19.8</u>
Total Sources		404.8

c.

Proportionally consolidated balance sheet (\$1,000)

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Goodwill		44.8
Property and plant	$163 + 0.7 \times 46$	195.2
Inventory	$25 + 0.7 \times 27$	43.9
Receivables	$48 + 0.7 \times 21$	62.7
Cash	$22 + 0.7 \times 8$	<u>27.6</u>
Total Assets		374.2
Common stock		132.5
Reserves		104.5
Debt	$112 + 0.7 \times 36$	<u>137.2</u>
Total Sources		374.2

d. The inventory will be \$1,000 lower, reflecting the purchase price for the group. Simultaneously, the intercompany profit in this transaction must be eliminated by adjusting the reserves downward by \$1,000. Both receivables and debt must be \$4,000 lower.

Exercise 17.3

a.

<i>Item</i>	<i>Calculations (\$)</i>	<i>Amount (\$)</i>
Financial asset	$0.6 \times 4,000$	2,400
Inventory		8,000
Cash	$7,000 - 2,400$	4,600
Total Assets		15,000
Equity		10,000
Debt		5,000
Total Sources		15,000

b.

<i>Item</i>	<i>Calculations (\$)</i>	<i>Amount (\$)</i>
Inventory	$8,000 + 3,000$	11,000
Cash	$7,000 - 2,400 + 2,000$	6,600
Total Assets		17,600
Equity		10,000
Debt	$5,000 + 1,000$	6,000
Minority interest	$0.4 \times 4,000$	1,600
Total Sources		17,600

c.

<i>Item</i>	<i>Calculations (\$)</i>	<i>Amount (\$)</i>
Inventory		3,000
Cash	$2,000 + 500$	2,500
Total Assets		5,500
Equity	$4,000 + (500 - 200)$	4,300
Debt		1,000
Dividend payable	400×0.50	200
Total Sources		5,500

d.

<i>Item</i>	<i>Calculations (\$)</i>	<i>Amount (\$)</i>
Financial asset	$0.6 \times 4,300$	2,580
Inventory		8,000
Cash	$4,600 + 1,000$	5,600
Dividends receivable		120
Total Assets		16,300
Equity	$10,000 + 400 + 0.6 \times 500$	10,700
Debt		5,000
Dividend payable	500×1.20	600
Total Sources		16,300

e.

<i>Item</i>	<i>Calculations (\$)</i>	<i>Amount (\$)</i>
Inventory		11,000
Cash	$6,600 + 1,000 + 500$	8,100
Total Assets		19,100
Equity		10,700
Debt	$5,000 + 1,000$	6,000
Minority interest	$0.4 * 4,300$	1,720
Dividend payable	$600 + 0.4 * 200$	680
Total Sources		19,100

f. Changes on Mouse balance sheet:

Equity would be \$4,500 and dividends payable would be 0.

Changes on Cat balance sheet:

Financial asset would be \$2,700 ($=0.6 * \$4,500$).

Dividends receivable would be 0.

Changes on consolidated balance sheet:

Minority interest would be \$1,800 ($=0.4 * \$4,500$)

Dividends payable would be \$600.

Exercise 17.4

A controls 65% of D. D controls 70% of A. It's a close race but D seems to dominate A rather than the other way around.