Chapter 2 Understanding Financial Statements

Financial Statement

2.1

(a)

- Current assets = \$150,000 + \$200,000 + \$150,000 + \$50,000 + \$30,000 = \$580,000
- Current liabilities = \$50,000 + \$100,000 + \$80,000 = \$230,000
- Working capital = \$580,000 - \$230,000 = \$350,000
- Shareholder's equity = \$100,000 + \$150,000 + \$150,000 + \$70,000 = \$470,000

(b) EPS = \$500,000/10,000 = \$50 per share

(c) Par value = \$15; capital surplus = \$150,000/10,000 = \$15;
Market price = \$15 + \$15 = \$30 per share

2.2

(a) Working capital = Current assets – Current liabilities;
Working capital requirements = Changes in current assets – Changes in current liabilities
WC req. = (+\$100,000 - \$20,000) – (+\$30,000 - \$40,000) = \$90,000

(b) Taxable income = \$1,500,000 - \$650,000 - \$150,000 - \$20,000 = \$680,000

(c) Net income = \$680,000 - \$272,000 = \$408,000

(d) Net cash flow:

A. Operating activities = net income + depreciation – WC = \$408,000 + \$200,000 - \$90,000 = \$518,000
B. Investing activities = equipment purchase = (\$400,000)
C. Financing activities = borrowed fund = \$200,000
D. Net cash flow = \$518,000 - \$400,000 + \$200,000 = \$318,000

2.3

(a) Debt ratio = \$55,663/\$513,378 = 10.84%

(b) Time-interest-earned ratio: not defined

(c) Current ratio = \$377,833/\$55,663 = 6.79

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(d) Quick ratio = ($377,833 – 0)/$55,633 = 6.79

(e) Inventory turn over ratio: not defined

(f) DSO = ($24,582 - $632)/($102,606/360) = 84.03 days

(g) Total assets turnover ratio = $102,606/$513,378 = 0.20 times

(h) Profit margin on sales = -$9,034/$102,606 = -8.8%

(i) Return on total assets = (-$9,034 + 0)/(($513,378 + $36,671)/2) = -3.28%

(j) Return on common equity = -$9,034/(($457,713 + $17,064)/2) = -3.81%

(k) Price-earning ratio = $56.67/-0.10 = -566.70

(l) Book value per share = $457,715,000/90,340,000 = $5.07 (Note: The total number of outstanding shares in year 2005 was 90,340,000.)

2.4

(a) Debt ratio = ($922,653 + $113,186)/$4,834,690 = 42.10%

(b) Time-interest-earned ratio = ($432,342 + $36,479)/$36,479 = 12.85 times

(c) Current ratio = $3,994,084/$1,113,186 = 3.59 times

(d) Quick ratio = ($3,994,084 - $1,080,083)/$1,113,186 = 2.62 times

(e) Inventory turn over ratio = $8,391,409/(($1,080,083 + $788,519)/2) = 8.98 times

(f) DSO = ($1,123,901 - $5,580)/($8,391,409/360) = 47.98 days

(g) Total assets turnover ratio = $8,391,409/$4,834,696 = 1.74 times

(h) Profit margin on sales = $293,935/$8,391,409 = 3.5%

(i) Return on total assets = ($239,935 + $36,479(1 – 0.3201))/(($4,834,696 + $2,410,568)/2) = 8.80%

(j) Return on common equity = $293,935/(($2,793,091 + $1,181,326)/2) = 14.79%

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(k) Price-Earning ratio = \$65/\$1.13 = \$57.52 Note: Assumed a share price of \$65. The stock prices were fluctuating between \$78.93 and \$52.25 during the fourth quarter.

(l) Book value per share = \$2,793,091,000/247,004,200 = \$11.30 (Note: The total outstanding number of shares in year 2005 was 247,004,200.)

2.5

- Given Olson's EPS = \$8 per share; Cash dividend = \$4 per share; Book value per share = \$80; Changes in the retained earnings = \$24 million; Total debt = \$240 million; Find debt ratio = total debt/total assets
- $EPS = \frac{\text{Net Income}}{\text{X}} = \$8$

  Where X = the number of outstanding shares

- $\text{Book value} = \frac{\text{Total shareholders' equity}}{\text{X}} = \$80$
- Retained earnings = Net income – Cash dividend; Net income = 8X from EPS relationship and the total cash dividend = 4X, so we rewrite 8X – 4X = \$24 million, or X = 6 million shares

- From book value per share, we know that total shareholders' equity = 80X, or \$480 million; Total assets = Total liabilities + Total shareholders' equity = \$240 million + \$480 million = \$720 million

- Debt ratio = \$240 million/\$720 million = 0.33

2.6 (b)

2.7 (b)

2.8 (d)

2.9 (b)

Short Case Studies

ST2.1 & ST2.2 – Not given

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