

Rhodes Corporation: Income Statements for Year Ending December 31  
(Millions of Dollars)

	2013	2012
Sales	\$11,000	\$10,000
Operating costs excluding depreciation	9,360	8,500
Depreciation and amortization	<u>380</u>	<u>360</u>
Earnings before interest and taxes	\$ 1,260	\$ 1,140
Less interest	<u>120</u>	<u>100</u>
Pre-tax income	\$ 1,140	\$ 1,040
Taxes (40%)	<u>456</u>	<u>416</u>
Net income available to common stockholders	<u>\$ 684</u>	<u>\$ 624</u>
Common dividends	\$ 220	\$ 200

Rhodes Corporation: Balance Sheets as of December 31 (Millions of Dollars)

	2013	2012
<i>Assets</i>		
Cash	\$ 550	\$ 500
Short-term investments	110	100
Accounts receivable	2,750	2,500
Inventories	<u>1,650</u>	<u>1,500</u>
Total current assets	\$5,060	\$4,600
Net plant and equipment	<u>3,850</u>	<u>3,500</u>
Total assets	<u>\$8,910</u>	<u>\$8,100</u>
<i>Liabilities and Equity</i>		
Accounts payable	\$1,100	\$1,000
Accruals	550	500
Notes payable	<u>384</u>	<u>200</u>
Total current liabilities	\$2,034	\$1,700
Long-term debt	<u>1,100</u>	<u>1,000</u>
Total liabilities	\$3,134	\$2,700
Common stock	4,312	4,400
Retained earnings	<u>1,464</u>	<u>1,000</u>
Total common equity	<u>\$5,776</u>	<u>\$5,400</u>
Total liabilities and equity	<u>\$8,910</u>	<u>\$8,100</u>

(2-13)  
Loss Carryback and  
Carryforward

The Bookbinder Company has made \$150,000 before taxes during each of the last 15 years, and it expects to make \$150,000 a year before taxes in the future. However, in 2013 the firm incurred a loss of \$650,000. The firm will claim a tax credit at the time it files its 2013 income tax return, and it will receive a check from the U.S. Treasury. Show how it calculates this credit, and then indicate the firm's tax liability for each of the next 5 years. Assume a 40% tax rate on *all* income to ease the calculations.

Total assets turnover: 1.5

Gross profit margin on sales:  $(\text{Sales} - \text{Cost of goods sold})/\text{Sales} = 25\%$

Total liabilities-to-assets ratio: 40%

Quick ratio: 0.80

Days sales outstanding (based on 365-day year): 36.5 days

Inventory turnover ratio: 3.75

Partial Income	Statement Information	
Sales	_____	
Cost of goods sold	_____	
<b>Balance Sheet</b>		
Cash	_____	Accounts payable _____
Accounts receivable	_____	Long-term debt 50,000
Inventories	_____	Common stock _____
Fixed assets	_____	Retained earnings 100,000
Total assets	<u>\$400,000</u>	Total liabilities and equity <u>_____</u>

(3-12) Comprehensive Ratio Calculations The Kretovich Company had a quick ratio of 1.4, a current ratio of 3.0, a days sales outstanding of 36.5 days (based on a 365-day year), total current assets of \$810,000, and cash and marketable securities of \$120,000. What were Kretovich's annual sales?

(3-13) Comprehensive Ratio Analysis Data for Lozano Chip Company and its industry averages follow.

- Calculate the indicated ratios for Lozano.
- Construct the extended Du Pont equation for both Lozano and the industry.
- Outline Lozano's strengths and weaknesses as revealed by your analysis.

Lozano Chip Company: Balance Sheet as of December 31, 2013 (Thousands of Dollars)

Cash	\$ 225,000	Accounts payable	\$ 601,866
Receivables	1,575,000	Notes payable	326,634
Inventories	<u>1,125,000</u>	Other current liabilities	<u>525,000</u>
Total current assets	\$2,950,000	Total current liabilities	\$1,453,500
Net fixed assets	1,350,000	Long-term debt	1,068,750
		Common equity	<u>1,752,750</u>
Total assets	<u>\$4,275,000</u>	Total liabilities and equity	<u>\$4,275,000</u>

Lozano Chip Company: Income Statement for Year Ended December 31, 2013 (Thousands of Dollars)

Sales	\$ 7,500,000
Cost of goods sold	6,375,000
Selling, general, and administrative expenses	<u>825,000</u>
Earnings before interest and taxes (EBIT)	\$ 300,000
Interest expense	<u>111,631</u>
Earnings before taxes (EBT)	\$ 188,369
Federal and state income taxes (40%)	<u>75,348</u>
Net income	<u>\$ 113,022</u>

Ratio	Lozano	Industry Average
Current assets/Current liabilities	_____	2.0
Days sales outstanding (365-day year)	_____	35.0 days
COGS/Inventory	_____	6.7
Sales/Fixed assets	_____	12.1
Sales/Total assets	_____	3.0
Net income/Sales	_____	1.2%
Net income/Total assets	_____	3.6%
Net income/Common equity	_____	9.0%
Total debt/Total assets	_____	30.0%
Total liabilities/Total assets	_____	60.0%

(3-14)  
Comprehensive Ratio  
Analysis

The Jimenez Corporation's forecasted 2014 financial statements follow, along with some industry average ratios. Calculate Jimenez's 2014 forecasted ratios, compare them with the industry average data, and comment briefly on Jimenez's projected strengths and weaknesses.

Jimenez Corporation: Forecasted Balance Sheet as of December 31, 2014

<i>Assets</i>	
Cash	
Accounts receivable	\$ 72,000
Inventories	439,000
Total current assets	<u>894,000</u>
Fixed assets	\$ 1,405,000
Total assets	<u>431,000</u>
	<u>\$ 1,836,000</u>
<i>Liabilities and Equity</i>	
Accounts payable	
Notes payable	\$ 332,000
Accruals	100,000
Total current liabilities	<u>170,000</u>
Long-term debt	\$ 602,000
Common stock	404,290
Retained earnings	575,000
Total liabilities and equity	<u>254,710</u>
	<u>\$ 1,836,000</u>

Jimenez Corporation: Forecasted Income Statement for 2014

Sales	
Cost of goods sold	\$4,290,000
Selling, general, and administrative expenses	3,580,000
Depreciation and amortization	370,320
Earnings before taxes (EBT)	<u>159,000</u>
Taxes (40%)	\$ 180,680
Net income	<u>72,272</u>
	<u>\$ 108,408</u>

<i>Per Share Data</i>	
EPS	\$ 4.71
Cash dividends per share	\$ 0.95
P/E ratio	5.0
Market price (average)	\$ 23.57
Number of shares outstanding	23,000
<i>Industry Financial Ratios (2013)<sup>a</sup></i>	
Quick ratio	1.0
Current ratio	2.7
Inventory turnover <sup>b</sup>	7.0
Days sales outstanding <sup>c</sup>	32.0 days
Fixed assets turnover <sup>b</sup>	13.0
Total assets turnover <sup>b</sup>	2.6
Return on assets	9.1%
Return on equity	18.2%
Profit margin on sales	3.5%
Debt-to-assets ratio	21.0%
Liabilities-to-assets ratio	50.0%
P/E ratio	6.0
Price/Cash flow ratio	3.5
Market/Book ratio	3.5

<sup>a</sup>Industry average ratios have been constant for the past 4 years.

<sup>b</sup>Based on year-end balance sheet figures.

<sup>c</sup>Calculation is based on a 365-day year.

## SPREADSHEET PROBLEMS

(3-15)  
Build a Model: Ratio  
Analysis

Start with the partial model in the file *Ch03 P15 Build a Model.xls* from the textbook's Web site. Joshua & White (J&W) Technologies's financial statements are also shown below. Answer the following questions. (Note: Industry average ratios are provided in *Ch03 P15 Build a Model.xls*.)

### resource

- Has J&W's liquidity position improved or worsened? Explain.
- Has J&W's ability to manage its assets improved or worsened? Explain.
- How has J&W's profitability changed during the last year?
- Perform an extended DuPont analysis for J&W for 2012 and 2013. What do these results tell you?
- Perform a common size analysis. What has happened to the composition (that is, percentage in each category) of assets and liabilities?
- Perform a percentage change analysis. What does this tell you about the change in profitability and asset utilization?