

Capítulo 4 Financial Statement Analysis

Exercise 12-1 (LO12-1, 12-2, 12-3, 12-4, 12-5, 12-6)

Items

- | | |
|----------|--------------------------------------|
| g | 1. Vertical analysis |
| e | 2. Horizontal analysis |
| a | 3. Liquidity |
| h | 4. Solvency |
| f | 5. Discontinued operation |
| d | 6. Quality of earnings |
| b | 7. Conservative accounting practices |
| c | 8. Aggressive accounting practices |

Exercise 12-15 (LO12-6)

Requirement 1

- (a) Aggressive
- (b) Conservative
- (c) Aggressive
- (d) Aggressive
- (e) Aggressive

Note: Changes resulting in higher revenues or lower expenses are considered aggressive. Changes resulting in lower revenues or higher expenses are considered conservative.

Exercise 12-4 (LO12-1, 12-2)

Requirement 1

Federer Sports Apparel				
Balance Sheet				
December 31				
	2022		2021	
Assets	Amount	%	Amount	%
Cash	\$ 2,300,000	14.7	\$ 800,000	5.8
Accounts receivable	1,500,000	9.6	1,200,000	8.8
Inventory	2,800,000	18.0	1,700,000	12.4
Buildings	11,000,000	70.5	11,000,000	80.3
Less: Accumulated depreciation	(2,000,000)	(12.8)	(1,000,000)	(7.3)
Total assets	\$15,600,000	100.0	\$13,700,000	100.0
Accounts payable	\$ 1,450,000	9.3	\$ 1,700,000	12.4
Litigation liability	1,500,000	9.6	0	0.0
Common stock	8,000,000	51.3	8,000,000	58.4
Retained earnings	4,650,000	29.8	4,000,000	29.2
Total liabilities and stockholders' equity	\$15,600,000	100.0	\$13,700,000	100.0

Requirement 2

Federer Sports Apparel				
Balance Sheet				
December 31				
	Year		Increase (Decrease)	
Assets	2022	2021	Amount	%
Cash	\$ 2,300,000	\$ 800,000	\$1,500,000	187.5
Accounts receivable	1,500,000	1,200,000	300,000	25.0
Inventory	2,800,000	1,700,000	1,100,000	64.7
Buildings	11,000,000	11,000,000	0	0
Less: Accumulated depreciation	(2,000,000)	(1,000,000)	(1,000,000)	100.0
Total assets	\$15,600,000	\$13,700,000	\$1,900,000	13.9
Accounts payable	\$ 1,450,000	\$ 1,700,000	\$ (250,000)	(14.7)
Litigation liability	1,500,000	0	1,500,000	N/A
Common stock	8,000,000	8,000,000	0	0
Retained earnings	4,650,000	4,000,000	650,000	16.3
Total liabilities and stockholders' equity	\$15,600,000	\$13,700,000	\$1,900,000	13.9

Exercise 12-6 (LO12-4)

Requirement 1

Profitability Ratios

Calculations

Gross profit ratio	$\frac{(\$19,310,000 - \$12,250,000)}{\$19,310,000}$	= 36.6%
Return on assets	$\frac{\$1,700,000}{(\$7,800,000 + \$9,200,000) / 2}$	= 20.0%
Profit margin	$\frac{\$1,700,000}{\$19,310,000}$	= 8.8%
Asset turnover	$\frac{\$19,310,000}{(\$7,800,000 + \$9,200,000) / 2}$	= 2.3 times
Return on equity	$\frac{\$1,700,000}{(\$3,540,000 + \$4,880,000) / 2}$	= 40.4%

Requirement 2

Adrian Express is less profitable than the industry average. The gross profit ratio, return on assets, profit margin, and asset turnover are all below the industry average. Return on equity of 40% is an exception, exceeding the industry average of 35%.

Exercise 12-14 (LO12-6)

- Conservative (lower income, lower assets)
- Aggressive (higher income, higher assets)
- Conservative (lower income, lower assets)
- Aggressive (higher income, lower liabilities)

Problem 12-1A (LO12-1)

Requirement 1

Sports Emporium Income Statements For the Year Ended December 31, 2021				
	Sporting Goods		Sports Apparel	
	Amount	%	Amount	%
Net sales	\$1,800,000	100.0	\$970,000	100.0
Cost of goods sold	1,040,000	57.8	440,000	45.4
Gross profit	760,000	42.2	530,000	54.6
Operating expenses	450,000	25.0	340,000	35.1
Operating income	310,000	17.2	190,000	19.5
Other income (expense)	20,000	1.1	(15,000)	(1.5)
Income before tax	330,000	18.3	175,000	18.0
Income tax expense	80,000	4.4	70,000	7.2
Net income	\$ 250,000	13.9	\$105,000	10.8

Requirement 2

The sporting goods segment has a higher net income (\$250,000) than the sports apparel segment (\$105,000). Vertical analysis further indicates the sporting goods segment is more profitable since net income is 13.9% of sales in that segment compared to only 10.8% of sales in the sports apparel segment. If these results continue, Sports Emporium may want to place greater focus on the expansion of the more profitable sporting goods segment.

Problem 12-2A (LO12-2)

Requirement 1

Anything Tennis Income Statements For the Years Ended December 31				
			Increase (Decrease)	
	2021	2020	Amount	%
Net sales	\$ 3,500,000	\$ 2,620,000	\$ 880,000	33.6
Cost of goods sold	2,150,000	1,380,000	770,000	55.8
Gross profit	1,350,000	1,240,000	110,000	8.9
Operating expenses	810,000	630,000	180,000	28.6
Operating income	540,000	610,000	(70,000)	(11.5)
Other income (expense)	10,000	6,000	4,000	66.7
Income before tax	550,000	616,000	(66,000)	(10.7)
Income tax expense	100,000	140,000	(40,000)	(28.6)
Net income	<u>\$ 450,000</u>	<u>\$ 476,000</u>	<u>\$ (26,000)</u>	<u>(5.5)</u>

Requirement 2

Sales increased \$880,000 (33.6%), but cost of goods sold increased \$770,000 (55.8%), resulting in a gross profit just slightly higher than the prior year. Operating expenses increased 28.6%, which explains why operating income, income before tax, and net income fell short of the prior year.