Certified Lease & Finance Professional
Financial Ratio Review

Calculating Financial Ratios

Learning goal: practice calculating financial ratios using these sample financial statements. Do you understand where to pull data to calculate each ratio?

Part I

ABC Company has come to you to lease a $1,250,000 machine tool over a seven-year period. **Review the following condensed financial information for ABC Company.**

Income Statement		
Net Sales	$	18,000,000
Cost of Goods Sold	$	15,000,000
Gross Profit	$	3,000,000
Operating Expenses (G&A)	$	1,800,000
Operating Profit (EBIT)	$	1,200,000
Interest Expense	$	300,000
Earnings Before Tax	$	900,000
Tax Expense	$	100,000
Net Profit	$	800,000

	Balance Sheet				
Cash	$	1,000,000	Accounts Payable	$	1,500,000.00
Accounts Receiveable	$	1,500,000	Notes Payable - Bank	$	1,000,000.00
Inventory	$	2,000,000	Current Portion LT Debt	$	500,000.00
Current Assets	$	4,500,000	Current Liabilities	$	3,000,000.00
Fixed Assets	$	6,000,000	Long Term Debt	$	4,000,000.00
Other	$	500,000	Total Liabilities	$	7,000,000.00
			Net Worth	$	4,000,000.00
Total Assets	$	11,000,000	Total Liabilities & Net Worth	$	11,000,000.00

Calculate each of the following financial ratios for ABC Company.

1. Gross Profit Margin

2. Current Ratio

3. Total Liabilities to Net Worth (Debt to Equity)

4. Return on Assets (ROA)

5. Return on Equity

6. Quick Ratio

7. Inventory Turn Over

8. Accounts Receivable Turn Over

9. Based on your analysis, what are the strengths and weaknesses of this transaction?

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Part II

Using the ratios you calculated in part 1, let's compare ABC Company's ratios to another firm in the same industry, XYZ Company. The two companies are located twenty-five miles away from each other and have nearly identical revenues and total asset bases. Assuming all other credit decision-making elements are identical, how would you interpret this information?

	ABC Company	XYZ Company
Gross Profit Margin		4%
Current Ratio		1.0
Debt to Equity		5.5:1
Return on Assets		6.50%
Return on Equity		10%
Quick Ratio		0.7
Inventory Turnover		90 days
Accounts Receivable Turnover		75 days

1. Inventory turns faster in which company?

2. Which company is converting inventory into cash faster?

3. Which company is selling more efficiently?

4. Which company is performing better?

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Answers

Part I

Calculate Ratios for ABC Company

1. **Gross Profit Margin = (Gross Profit on Sales / Net Sales)**
   In this example: $3,000,000 / $18,000,000 = **16.7%**
2. **Current Ratio = (Current Assets / Current Liabilities)**
   In this example: $4,500,000 / $3,000,000 = **1:5:1**
3. **Debt to Equity = (Total Liabilities / Net Worth)**
   In this example: $7,000,000 / $4,000,000 = **1:75:1**
4. **Return on Assets = (Net Income After Tax / Total Assets)**
   In this example: $800,000 / $11,000,000 = **7.27%**
5. **Return on Equity = (Net Income After Tax / Net Worth)**
   In this example: $800,000 / $4,000,000 = **20%**
6. **Quick Ratio = ((Current Assets - Inventory) / Current Liabilities)**
   In this example: (($4,500,000-$2,000,000) / $3,000,000)) = **0.83**
7. **Inventory Turnover (in days) = ((Average Inventory / Costs of Goods Sold) * 365)**
   In this example: (($2,000,000-$15,000,000) *365)) = **48.67 days**
8. **Accounts Receivable Turn Over (in days) = ((Average Accounts Receivable / Net Sales) * 365)**
   In this example: (($1,500,000-$18,000,000) *365)) = **30.42 days**
9. **Strengths:**
   Low leverage, attractive gross profit margin, adequate liquidity, acceptable ROE
   Weaknesses:
   Inventory may be a little high, need to compare to industry averages

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Part II

Compare ABC Company and XYZ Company

	ABC Company	XYZ Company
Gross Profit Margin	16.67%	4%
Current Ratio	1.5	1.0
Debt to Equity	1.75	5.5:1
Return on Assets	7.27%	6.50%
Return on Equity	20%	10%
Quick Ratio	0.83	0.7
Inventory Turnover	46.67 days	90 days
Accounts Receivable Turnover	30.42 days	75 days

1. Inventory turns faster in which company? **ABC Company**

2. Which company is converting inventory into cash faster? **ABC Company**

3. Which company is selling more efficiently? **ABC Company**

4. Which company is performing better? **ABC Company**