Chapter 15
Ratios
Review 10/24

-refer to Starbucks example from last week.

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Where #s Come from

Analyzing Financial Statements with Ratio Analysis

- Profitability ratios
- Asset utilization ratios
- Liquidity ratios
- Debt utilization ratios
- Per share data

Profitability Ratios

$$\text{Profit margin} = \frac{\text{Net income}}{\text{Sales}} \quad \Big\} \text{I/S}$$

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Assets}} \quad \frac{\text{I/S}}{\text{B/S}}$$

$$\text{Return on equity} = \frac{\text{Net income}}{\text{Equity}} \quad \frac{\text{I/S}}{\text{B/S}}$$

Asset Utilization Ratios

$$\text{Receivables turnover} = \frac{\text{Sales}}{\text{Receivables}} \quad \frac{\text{I/S}}{\text{B/S}}$$

$$\text{Inventory turnover} = \frac{\text{Sales}}{\text{Inventory}} \quad \frac{\text{I/S}}{\text{B/S}}$$

$$\text{Total asset turnover} = \frac{\text{Sales}}{\text{Total assets}} \quad \frac{\text{I/S}}{\text{B/S}}$$

Liquidity Ratios

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} \quad \Big\} \text{B/S}$$

$$\text{Quick ratio} = \frac{\text{Current assets - inventory}}{\text{Current liabilities}} \quad \Big\} \text{B/S}$$

Debt Utilization Ratios

$$\text{Debt to total assets} = \left.\frac{\text{Total debt}}{\text{Total assets}}\right\} \text{B/S}$$

$$\text{Times interest earned} = \left.\frac{\text{Income before interest \& taxes}}{\text{Interest expense}}\right\} \text{B/S}$$

Per Share Data

$$\text{Earnings per share} = \left.\frac{\text{Net income}}{\text{Number of shares outstanding}}\right\} \text{I/S}$$

$$\text{Dividends per share} = \left.\frac{\text{Total dividends paid}}{\text{Number of shares outstanding}}\right\} \text{I/S}$$

Industry Analysis

	Starbucks (SBUX)	Diedrich Coffee (DDRX)	Green Mountain Coffee Roasters (GMCR)
Profit margin	6.58%	1.92%	5.37%
Return on assets	9.83%	3.70%	10.45%
Return on equity	12.89%	5.38%	17.83%
Receivable turnover	35.61X	18.33X	9.19X
Inventory turnover	11.88X	18.33X	15.64X
Total asset turnover	1.49X	2.04X	1.95X
Current ratio	1.52X	1.29X	16.93X
Quick ratio	0.95X	0.86X	1.13X
Debt to total assets	23.71%	37.04%	41.41%

Source: 2003 Annual Report, Diedrich Coffee, www.corporate-ir.net/ireye/ir_site.zhtml?ticker=ddrx&script=950; 2003 Annual Report, Green Mountain Coffee Roasters, www.greenmountaincoffee.com/investor_services/scripts/annual_report.asp; Starbucks 2003 Annual Report, www.starbucks.com/aboutus/Annual_Report_2003_part2.pdf

REVIEW Ch. 15

Know the interpretations of ratios.

Know what financial statement to use.