ACCT 102 – Fundamentals of Accounting II
Chapter 13 – Analyzing Financial Statements

I. Standards of Comparison – a company will analyze and interpret its performance as compared to different standards.

A. Intracompany – based on the company's own prior performance.

B. Competitor – based on the performance of its competitors.

C. Industry – based on statistics and standards of the industry in which the company operates

D. Guidelines – or "rules of thumb", general guidelines of acceptable performance that develop from experience.

II. Tools of Analysis

A. Horizontal Analysis – the analysis of financial data across time, or from year-to-year.

1. Dollar change = Analysis period amount – prior period amount

2. Percent change = $\dfrac{\text{(Analysis period amount – prior period amount)}}{\text{prior period amount}}$

3. Trend Analysis – form of horizontal analysis that can reveal patterns in data across several years, using the *same year* as the base year for each calculation.

$$\text{Trend Percent} = \frac{\text{Analysis period amount}}{\text{Base period amount}}$$

B. Vertical Analysis – used to analyze individual financial statements items as a percentage of a base amount.

1. Income Statement – base amount is usually Net Sales

2. Balance Sheet – base amount is usually Total Assets

3. The percentages from one year can be compared to the percentages from a previous or future to highlight any significant differences or changes from year to year.

C. Ratio Analysis – widely used tool of financial analysis that provides clues to and symptoms of underlying conditions. Ratio analysis puts the data for different years into comparable data.

Ratio	Formula	Measure of
Liquidity and Efficiency		
Current ratio	$=\dfrac{\text{Current assets}}{\text{Current liabilities}}$	Short-term debt-paying ability
Acid-test ratio	$=\dfrac{\text{Cash} + \text{Short-term investments} + \text{Current receivables}}{\text{Current liabilities}}$	Immediate short-term debt-paying ability
Accounts receivable turnover	$=\dfrac{\text{Net sales}}{\text{Average accounts receivable, net}}$	Efficiency of collection
Inventory turnover	$=\dfrac{\text{Cost of goods sold}}{\text{Average inventory}}$	Efficiency of inventory management
Days' sales uncollected	$=\dfrac{\text{Accounts receivable, net}}{\text{Net sales}} \times 365$	Liquidity of receivables
Days' sales in inventory	$=\dfrac{\text{Ending inventory}}{\text{Cost of goods sold}} \times 365$	Liquidity of inventory
Total asset turnover	$=\dfrac{\text{Net sales}}{\text{Average total assets}}$	Efficiency of assets in producing sales
Solvency		
Debt ratio	$=\dfrac{\text{Total liabilities}}{\text{Total assets}}$	Creditor financing and leverage
Equity ratio	$=\dfrac{\text{Total equity}}{\text{Total assets}}$	Owner financing
Debt-to-equity ratio	$=\dfrac{\text{Total liabilities}}{\text{Total equity}}$	Debt versus equity financing
Times interest earned	$=\dfrac{\text{Income before interest expense and income taxes}}{\text{Interest expense}}$	Protection in meeting interest payments
Profitability		
Profit margin ratio	$=\dfrac{\text{Net income}}{\text{Net sales}}$	Net income in each sales dollar
Gross margin ratio	$=\dfrac{\text{Net sales} - \text{Cost of goods sold}}{\text{Net sales}}$	Gross margin in each sales dollar
Return on total assets	$=\dfrac{\text{Net income}}{\text{Average total assets}}$	Overall profitability of assets
Return on common stockholders' equity	$=\dfrac{\text{Net income} - \text{Preferred dividends}}{\text{Average common stockholders' equity}}$	Profitability of owner investment
Book value per common share	$=\dfrac{\text{Shareholders' equity applicable to common shares}}{\text{Number of common shares outstanding}}$	Liquidation at reported amounts
Basic earnings per share	$=\dfrac{\text{Net income} - \text{Preferred dividends}}{\text{Weighted-average common shares outstanding}}$	Net income per common share
Market Prospects		
Price-earnings ratio	$=\dfrac{\text{Market price per common share}}{\text{Earnings per share}}$	Market value relative to earnings
Dividend yield	$=\dfrac{\text{Annual cash dividends per share}}{\text{Market price per share}}$	Cash return per common share

* Additional ratios also examined in previous chapters included credit risk ratio; plant asset useful life; plant asset age; days' cash expense coverage; cash coverage of growth; cash coverage of debt; free cash flow; cash flow on total assets; and payout ratio.