

TABLE 4-6 A Summary of Key Financial Ratios

Ratio	How Calculated	What It Measures
Liquidity Ratios		
Current Ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	The extent to which a firm can meet its short-term obligations
Quick Ratio	$\frac{\text{Current assets minus inventory}}{\text{Current liabilities}}$	The extent to which a firm can meet its short-term obligations without relying on the sale of its inventories
Leverage Ratios		
Debt-to-Total-Assets Ratio	$\frac{\text{Total debt}}{\text{Total assets}}$	The percentage of total funds that are provided by creditors
Debt-to-Equity Ratio	$\frac{\text{Total debt}}{\text{Total stockholders' equity}}$	The percentage of total funds provided by creditors versus by owners
Long-Term Debt-to-Equity Ratio	$\frac{\text{Long-term debt}}{\text{Total stockholders' equity}}$	The balance between debt and equity in a firm's long-term capital structure
Times-Interest-Earned Ratio	$\frac{\text{Profits before interest and taxes}}{\text{Total interest charges}}$	The extent to which earnings can decline without the firm becoming unable to meet its annual interest costs
Activity Ratios		
Inventory Turnover	$\frac{\text{Sales}}{\text{Inventory of finished goods}}$	Whether a firm holds excessive stocks of inventories and whether a firm is slowly selling its inventories compared to the industry average
Fixed Assets Turnover	$\frac{\text{Sales}}{\text{Fixed assets}}$	Sales productivity and plant and equipment utilization
Total Assets Turnover	$\frac{\text{Sales}}{\text{Total assets}}$	Whether a firm is generating a sufficient volume of business for the size of its asset investment
Accounts Receivable Turnover	$\frac{\text{Annual credit sales}}{\text{Accounts receivable}}$	The average length of time it takes a firm to collect credit sales (in percentage terms)
Average Collection Period	$\frac{\text{Accounts receivable}}{\text{Total credit sales/365 days}}$	The average length of time it takes a firm to collect on credit sales (in days)
Profitability Ratios		
Gross Profit Margin	$\frac{\text{Sales minus cost of goods sold}}{\text{Sales}}$	The total margin available to cover operating expenses and yield a profit
Operating Profit Margin	$\frac{\text{Earnings before interest and taxes EBIT}}{\text{Sales}}$	Profitability without concern for taxes and interest
Net Profit Margin	$\frac{\text{Net income}}{\text{Sales}}$	After-tax profits per dollar of sales
Return on Total Assets (ROA)	$\frac{\text{Net income}}{\text{Total assets}}$	After-tax profits per dollar of assets; this ratio is also called return on investment (ROI)
Return on Stockholders' Equity (ROE)		After-tax profits per dollar of stockholders' investment in the firm
Earnings Per Share (EPS)	$\frac{\text{Net income}}{\text{Number of shares of common stock outstanding}}$	Earnings available to the owners of common stock
Price-Earnings Ratio	$\frac{\text{Market price per share}}{\text{Earnings per share}}$	Attractiveness of firm on equity markets
Growth Ratios		
Sales	Annual percentage growth in total sales	Firm's growth rate in sales
Net Income	Annual percentage growth in profits	Firm's growth rate in profits
Earnings Per Share	Annual percentage growth in EPS	Firm's growth rate in EPS
Dividends Per Share	Annual percentage growth in dividends per share	Firm's growth rate in dividends per share

3. *How does each ratio compare with key competitors?* Oftentimes competition is more intense between several competitors in a given industry or location than across all rival firms in the industry. When this is true, financial ratio analysis should include comparison to those key competitors. For example, if a firm's profitability ratio is trending up over time and compares favorably to the industry average, but it is trending down relative to its leading competitor, there may be reason for concern.

Financial ratio analysis is not without some limitations. First of all, financial ratios are based on accounting data, and firms differ in their treatment of such items as depreciation, inventory valuation, R&D expenditures, pension plan costs, mergers, and taxes. Also, seasonal factors can influence comparative ratios. Therefore, conformity to industry composite ratios does not establish with certainty that a firm is performing normally or that it is well managed. Likewise, departures from industry averages do not always indicate that a firm is doing especially well or badly. For example, a high inventory turnover ratio could indicate efficient inventory management and a strong working capital position, but it also could indicate a serious inventory shortage and a weak working capital position.

Another limitation of financial ratios in terms of including them as key internal factors in the upcoming IFE Matrix is that financial ratios are not very "actionable" in terms of revealing potential strategies needed, i.e. since they generally are based on performance of the overall firm. For example, to include as a key internal factor that the firm's "current ratio increased from 1.8 to 2.1" is not as "actionable" as "the firm's fragrance division revenues increased 18 percent in Africa in 2013." Recall from the prior chapter the importance of selecting "actionable" key factors, both externally and internally, upon which to formulate strategies. Selecting "actionable" key factors, both externally and internally, upon which to formulate strategies is important.

A firm's financial condition depends not only on the functions of finance, but also on many other factors that include (1) management, marketing, management production and operations, R&D, and MIS; (2) actions by competitors, suppliers, distributors, creditors, customers, and shareholders; and (3) economic, social, cultural, demographic, environmental, political, governmental, legal, and technological trends.

Breakeven Analysis

Because consumers remain price sensitive, many firms have lowered prices to compete. As a firm lowers prices, its **breakeven (BE) point** in terms of units sold increases, as illustrated in Figure 4-4. The breakeven point can be defined as the quantity of units that a firm must sell for its total revenues (TR) to equal its total costs (TC). Note that the before and after chart in Figure 4-4 reveals that the TR line rotates to the right with a decrease in price, thus increasing the quantity (Q) that must be sold just to break even. Increasing the breakeven point is thus a huge drawback of lowering prices. Of course when rivals are lowering prices, a firm may have to lower prices anyway to compete. However, the breakeven concept should be kept in mind because it is so important, especially in recessionary times.

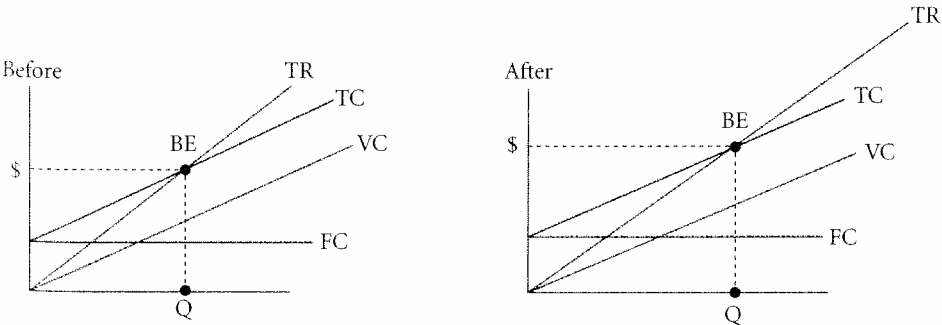


FIGURE 4-4 A Before and After Breakeven Chart When Prices Are Lowered