

## Common Size Financial Statements

*Common size* ratios are used to compare financial statements of different-size companies, or of the same company over different periods. By expressing the items in proportion to some size-related measure, standardized financial statements can be created, revealing trends and providing insight into how the different companies compare.

The common size ratio for each line on the financial statement is calculated as follows:

$$\text{Common Size Ratio} = \frac{\text{Item of Interest}}{\text{Reference Item}}$$

For example, if the item of interest is inventory and it is referenced to total assets (as it normally would be), the common size ratio would be:

$$\text{Common Size Ratio for Inventory} = \frac{\text{Inventory}}{\text{Total Assets}}$$

The ratios often are expressed as percentages of the reference amount. Common size statements usually are prepared for the income statement and balance sheet, expressing information as follows:

- Income statement items - expressed as a percentage of total revenue
- Balance sheet items - expressed as a percentage of total assets

The following example income statement shows both the dollar amounts and the common size ratios:

### Common Size Income Statement

|                    | Income Statement | Common-Size<br>Income Statement |
|--------------------|------------------|---------------------------------|
| Revenue            | 70,134           | 100%                            |
| Cost of Goods Sold | <u>44,221</u>    | <u>63.1%</u>                    |
| Gross Profit       | 25,913           | 36.9%                           |

|                     |               |              |
|---------------------|---------------|--------------|
| SG&A Expense        | <u>13,531</u> | <u>19.3%</u> |
| Operating Income    | 12,382        | 17.7%        |
| Interest Expense    | 2,862         | 4.1%         |
| Provision for Taxes | <u>3,766</u>  | <u>5.4%</u>  |
| Net Income          | <u>5,754</u>  | 8.2%         |

For the balance sheet, the common size percentages are referenced to the total assets. The following sample balance sheet shows both the dollar amounts and the common size ratios:

### Common Size Balance Sheet

|   | <b>Balance Sheet</b> | <b>Common-Size Balance Sheet</b> |
|---|----------------------|----------------------------------|
| <b>ASSETS</b>                               |                      |                                  |
| Cash & Marketable Securities                | 6,029                | 15.1%                            |
| Accounts Receivable                         | 14,378               | 36.0%                            |
| Inventory                                   | <u>17,136</u>        | <u>42.9%</u>                     |
| Total Current Assets                        | 37,543               | 93.9%                            |
| Property, Plant, & Equipment                | <u>2,442</u>         | <u>6.1%</u>                      |
| Total Assets                                | 39,985               | 100%                             |
| <b>LIABILITIES AND SHAREHOLDERS' EQUITY</b> |                      |                                  |
| Current Liabilities                         | 14,251               | 35.6%                            |
| Long-Term Debt                              | <u>12,624</u>        | <u>31.6%</u>                     |
| Total Liabilities                           | 26,875               | 67.2%                            |
| Shareholders' Equity                        | <u>13,110</u>        | <u>32.8%</u>                     |
| Total Liabilities & Equity                  | 39,985               | 100%                             |

The above common size statements are prepared in a vertical analysis, referencing each line on the financial statement to a total value on the statement in a given period.

The ratios in common size statements tend to have less variation than the absolute values themselves, and trends in the ratios can reveal important changes in the business. Historical comparisons can be made in a time-series analysis to identify such trends.

Common size statements also can be used to compare the firm to other firms.

### **Comparisons Between Companies (Cross-Sectional Analysis)**

Common size financial statements can be used to compare multiple companies at the same point in time. A common-size analysis is especially useful when comparing companies of different sizes. It often is insightful to compare a firm to the best performing firm in its industry (benchmarking). A firm also can be compared to its industry as a whole. To compare to the industry, the ratios are calculated for each firm in the industry and an average for the industry is calculated. Comparative statements then may be constructed with the company of interest in one column and the industry averages in another. The result is a quick overview of where the firm stands in the industry with respect to key items on the financial statements.

#### **Limitations**

As with financial statements in general, the interpretation of common size statements is subject to many of the limitations in the accounting data used to construct them. For example:

- Different accounting policies may be used by different firms or within the same firm at different points in time. Adjustments should be made for such differences.
- Different firms may use different accounting calendars, so the accounting periods may not be directly comparable.