Financial Ratios

In analyzing the financial statements it is common to use a number of ratios to determine what strengths or problem areas a business might have. There are also ratios published for different types of businesses, which can be used for comparison. These will show how your business compares with similar established businesses.

LIQUIDITY RATIOS

1. Current Ratio = $\dfrac{\text{Current Assets}}{\text{Current Liabilities}}$

    This measures the availability of liquid assets to meet current debts due within the year.

2. Quick Ratio = $\dfrac{\text{Cash+Receivables+Marketable Securities}}{\text{Current Liabilities}}$

    This measures the immediate debt paying ability of the business. The assets used in this calculation are those readily converted to cash.

3. Inventory Turnover = $\dfrac{\text{Net Sales}}{\text{Inventory}}$

    This ratio indicates the number of times the inventory is replaced in a given period of time. This gives an indication of how well the inventory is controlled. A slow turnover indicates that too much is invested in merchandise. A high turnover rate reflects favorably on the business.

4. Receivable Turnover = $\dfrac{\text{Net Sales}}{\text{Accounts and Notes Receivable}}$

    This ratio indicates the number of times receivables turnover in a year. The higher the turnover, the shorter the time between the sale and the collection of cash.

5. Ratio of Net Sales to Net Working Capital = $\dfrac{\text{Net Sales}}{\text{Net Working Capital}}$

    Net working capital equals current assets less current liabilities. Since working capital reflects the ability to finance current operations, relating sales to Net Working Capital measures how efficiently working capital is employed.

OPERATING RATIOS

1. Return On Equity (%) = $\dfrac{\text{Net Income Before Taxes}}{\text{Net Worth}} \times 100$

    The above ratio is your return on investment, the percentage of investment being returned through profit. This ratio indicates the ability of management to increase stockholders investment.

2. Return on Assets (%) = $\dfrac{\text{Net Income Before Taxes}}{\text{Total Assets}} \times 100$

    This relationship of net income to total assets indicates the amount of income generated for every dollar tied up in assets.

3. Fixed Asset Turnover = $\dfrac{\text{Net Sales}}{\text{Fixed Assets}}$

This is a measure of the capital investment needed to earn revenue. For example, a 1.0 turnover rate indicates that company uses $1.00 in capital to produce $1.00 of revenue (sales).

PROFITABILITY RATIO

Profit Margin (%) = $\dfrac{\text{Net Income Before Taxes}}{\text{Net Sales}}$ X 100

Profit margin represents the amount of profit resulting from each dollar of sales. For example, a 20% profit margin indicates that for every $1.00 in sales, a $.20 in profit was generated.

Again, the ratios are useful in indicating a company's financial position as related to others in a similar business. They are also used to indicate historical trends within the same company; for example, are the ratios consistent over a number of years, or are there points at which a change has occurred or is occurring.

ADDITIONAL RATIOS

Working Capital = Current Assets − Current Liabilities

Acid Test Ratio = $\dfrac{\text{Current Assets (Current Assets − Inventory)}}{\text{Current Liabilities}}$

Days Sales in A/R = $\dfrac{\text{Accounts Receivable}}{\text{Net Sales}}$ X Days in Period

Days Inventory = $\dfrac{\text{Inventory}}{\text{Cost of Sales}}$ X Days in Period

Days CGS in A/P = $\dfrac{\text{Accounts Payable}}{\text{Cost of Sales}}$ X Days in Period

Gross Profit Margin = $\dfrac{\text{Net Sales − Cost of Goods}}{\text{Net Sales}}$

Operating Expense Margin = $\dfrac{\text{Operating Expenses}}{\text{Net Sales}}$

Interest Coverage = $\dfrac{\text{Net Income Before Interest and Taxes + Depreciation}}{\text{Interest Expense}}$

Debt Service Coverage = $\dfrac{\text{Cash Flow from Operations}}{\text{Interest Expense + Current Portion of LT Debt}}$

Leverage Ratio = $\dfrac{\text{Total Liabilities}}{\text{Total Equity}}$