**List of Financial Ratios**

Here is a list of various financial ratios. Take note that most of the ratios can also be expressed in *percentage* by multiplying the decimal number by 100%. Each ratio is briefly described.

**Profitability Ratios**

1. **Gross Profit Rate = Gross Profit ÷ Net Sales**
   Evaluates how much gross profit is generated from sales. Gross profit is equal to net sales (*sales minus sales returns, discounts, and allowances*) minus cost of sales.

2. **Return on Sales = Net Income ÷ Net Sales**
   Also known as "net profit margin" or "net profit rate", it measures the percentage of income derived from dollar sales. Generally, the higher the ROS the better.

3. **Return on Assets = Net Income ÷ Average Total Assets**
   In financial analysis, it is the measure of the *return on investment*. ROA is used in evaluating management's efficiency in using assets to generate income.

4. **Return on Stockholders' Equity = Net Income ÷ Average Stockholders' Equity**
   Measures the percentage of income derived for every dollar of owners' equity.

**Liquidity Ratios**

1. **Current Ratio = Current Assets ÷ Current Liabilities**
   Evaluates the ability of a company to pay short-term obligations using current assets (cash, marketable securities, current receivables, inventory, and prepayments).

2. **Acid Test Ratio = Quick Assets ÷ Current Liabilities**
   Also known as "quick ratio", it measures the ability of a company to pay short-term obligations using the more liquid types of current assets or "quick assets" (cash, marketable securities, and current receivables).

3. **Cash Ratio = (Cash + Marketable Securities) ÷ Current Liabilities**
   Measures the ability of a company to pay its current liabilities using cash and marketable securities. Marketable securities are short-term debt instruments that are as good as cash.

4. **Net Working Capital = Current Assets - Current Liabilities**
   Determines if a company can meet its current obligations with its current assets; and how much excess or deficiency there is.
Management Efficiency Ratios

1. **Receivable Turnover** = Net Credit Sales ÷ Average Accounts Receivable
   Measures the efficiency of extending credit and collecting the same. It indicates the average number of times in a year a company collects its open accounts. A high ratio implies efficient credit and collection process.

2. **Days Sales Outstanding** = 360 Days ÷ Receivable Turnover
   Also known as "receivable turnover in days", "collection period". It measures the average number of days it takes a company to collect a receivable. The shorter the DSO, the better. Take note that some use 365 days instead of 360.

3. **Inventory Turnover** = Cost of Sales ÷ Average Inventory
   Represents the number of times inventory is sold and replaced. Take note that some authors use Sales in lieu of Cost of Sales in the above formula. A high ratio indicates that the company is efficient in managing its inventories.

4. **Days Inventory Outstanding** = 360 Days ÷ Inventory Turnover
   Also known as "inventory turnover in days". It represents the number of days inventory sits in the warehouse. In other words, it measures the number of days from purchase of inventory to the sale of the same. Like DSO, the shorter the DIO the better.

5. **Accounts Payable Turnover** = Net Credit Purchases ÷ Ave. Accounts Payable
   Represents the number of times a company pays its accounts payable during a period. A low ratio is favored because it is better to delay payments as much as possible so that the money can be used for more productive purposes.

6. **Days Payable Outstanding** = 360 Days ÷ Accounts Payable Turnover
   Also known as "accounts payable turnover in days", "payment period". It measures the average number of days spent before paying obligations to suppliers. Unlike DSO and DIO, the longer the DPO the better (as explained above).

7. **Operating Cycle** = Days Inventory Outstanding + Days Sales Outstanding
   Measures the number of days a company makes 1 complete operating cycle, i.e. purchase merchandise, sell them, and collect the amount due. A shorter operating cycle means that the company generates sales and collects cash faster.

8. **Cash Conversion Cycle** = Operating Cycle - Days Payable Outstanding
   CCC measures how fast a company converts cash into more cash. It represents the number of days a company pays for purchases, sells them, and collects the amount due. Generally, like operating cycle, the shorter the CCC the better.
9. **Total Asset Turnover** = \( \frac{Net\ Sales}{Average\ Total\ Assets} \)

Measures overall efficiency of a company in generating sales using its assets. The formula is similar to ROA, except that net sales is used instead of net income.

**Leverage Ratios**

1. **Debt Ratio** = \( \frac{Total\ Liabilities}{Total\ Assets} \)

Measures the portion of company assets that is financed by debt (obligations to third parties). Debt ratio can also be computed using the formula: 1 minus **Equity Ratio**.

2. **Equity Ratio** = \( \frac{Total\ Equity}{Total\ Assets} \)

Determines the portion of total assets provided by equity (i.e. owners’ contributions and the company’s accumulated profits). Equity ratio can also be computed using the formula: 1 minus **Debt Ratio**.

   The reciprocal of equity ratio is known as **equity multiplier**, which is equal to total assets divided by total equity.

3. **Debt-Equity Ratio** = \( \frac{Total\ Liabilities}{Total\ Equity} \)

Evaluates the capital structure of a company. A D/E ratio of more than 1 implies that the company is a leveraged firm; less than 1 implies that it is a conservative one.

4. **Times Interest Earned** = \( \frac{EBIT}{Interest\ Expense} \)

Measures the number of times interest expense is converted to income, and if the company can pay its interest expense using the profits generated. EBIT is earnings before interest and taxes.

**Valuation and Growth Ratios**

1. **Earnings per Share** = \( \frac{(Net\ Income - Preferred\ Dividends)}{Average\ Common\ Shares\ Outstanding} \)

   EPS shows the rate of earnings per share of common stock. Preferred dividends is deducted from net income to get the earnings available to common stockholders.

2. **Price-Earnings Ratio** = \( \frac{Market\ Price\ per\ Share}{Earnings\ per\ Share} \)

   Used to evaluate if a stock is over- or under-priced. A relatively **low P/E ratio** could indicate that the company is under-priced. Conversely, investors expect high growth rate from companies with **high P/E ratio**.

3. **Dividend Pay-out Ratio** = \( \frac{Dividend\ per\ Share}{Earnings\ per\ Share} \)

   Determines the portion of net income that is distributed to owners. Not all income is distributed since a significant portion is retained for the next year’s operations.
4. **Dividend Yield Ratio** = Dividend per Share ÷ Market Price per Share

Measures the percentage of return through dividends when compared to the price paid for the stock. A high yield is attractive to investors who are after dividends rather than long-term capital appreciation.

5. **Book Value per Share** = Common SHE ÷ Average Common Shares

Indicates the value of stock based on historical cost. The value of common shareholders’ equity in the books of the company is divided by the average common shares outstanding.

Source:

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