

RATIO	COMPUTATION	EXPLANATION
Tests of profitability		
Return on equity	$\frac{\text{Net Income}}{\text{Average Shareholder's equity}}$	How how well did the firm use shareholder investment? High ratio = Effective management of its shareholders investments, rising share price. HIGH = GOOD
Return on assets	$\frac{\text{Profit} + \text{Interest expense (net of tax)}}{\text{Average total assets}}$	Measures how much the firm has earned from the use of its total assets.
Financial leverage ratio	$\frac{\text{Average total assets}}{\text{Average shareholders' equity}}$	Measures the relationship between the assets and the investments made by shareholders to finance them. Low ratio = A high proportion of assets is financed with shareholder's equity LOW = GOOD HIGH = more risk, more reliance on debt
Earnings per share	$\frac{\text{Profit available to common shareholders}}{\text{Average number of common shares}}$	Measures the return on investment based on the number of shares outstanding. Determines if the company is profitable or not.
Quality of earnings	$\frac{\text{Cash flows from operating activities}}{\text{Profit}}$	Measures how much cash each dollar of profit generates. High ratio = A greater ability to finance operating and other cash needs from operating cash inflows.
Net Profit margin	$\frac{\text{Net Income}}{\text{Net sales}}$	Measures how much profit is earned (after expenses) as a percentage of revenues generated during the period. High ratio = Effective management of sales and expenses
Gross Profit Margin	$\frac{\text{Gross Profit}}{\text{Net sales}}$	How much profit is made after covering COGS High = company able to charge high price and keep costs low = higher net income
Fixed asset turnover	$\frac{\text{Net sales}}{\text{Average net fixed assets}}$	Measures the sales generated by the use of fixed assets (property, plant and equipment, net of accumulated depreciation)
Tests of liquidity		
Cash ratio	$\frac{\text{Cash} + \text{Cash equivalents}}{\text{Current liabilities}}$	Measures the adequacy of available cash by comparing the cash reserve to the current liabilities. The ratio should not be too high because holding too much cash is uneconomical (it should be invested instead)
Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Shows a firm's ability to repay current liabilities with current assets. High ratio = High ability to repay current liabilities.
Quick ratio	$\frac{\text{Quick assets}}{\text{Current liabilities}}$	Compares quick assets (cash, near-cash assets: cash, short-term investments, trade receivables) to current liabilities: a more stringent test of short-term liquidity.
Receivables turnover	$\frac{\text{Net credit sales}}{\text{Average net trade receivables}}$ Average collection period: $\frac{365}{\text{Receivables turnover}}$	Reflects how many times average trade receivables were recorded and collected during the period. High ratio = Fast receivable collection = good liquidity
Payables turnover	$\frac{\text{Net credit purchases}}{\text{Average net trade payables}}$ Average age of payables: $\frac{365}{\text{Payables turnover}}$	Measures how quickly management is paying its trade creditors. High ratio = The company is paying its suppliers in a timely manner.
Inventory turnover	$\frac{\text{Cost of sales}}{\text{Average net inventory}}$ Average days in inventory: $\frac{365}{\text{Inventory turnover}}$	Reflects how many times the average inventory was produced and sold during the period. High ratio = Inventory moves quickly through the production process to the customer HIGH = GOOD
Total Asset Turnover	$\frac{\text{Sales}}{\text{Average Total Assets}}$	High = Efficient management of assets to generate sales
Tests of solvency		
Times interest earned	$\frac{\text{Profit (before interest and taxes)}}{\text{Interest expense}}$	Shows the amount of profit before interest and tax that is generated relative to interest expense. Its measures the ability for a firm to meet its required interest payments.
Cash coverage	$\frac{\text{Cash flows from operating activities}}{\text{Interest paid}}$	Compares the cash generated with the cash obligations of the period. High ratio = The company generates more cash than it pays interest
Debt-to-equity	$\frac{\text{Total liabilities}}{\text{Shareholder's equity}}$	Expresses the company's debt as a percentage of its shareholders' equity. High ratio = The company relies heavily on funds provided by creditors
Market tests		
Price/earnings (P/E)	$\frac{\text{Current market price per share}}{\text{Net Income per share}}$	Measures the relationship between the current market price per share and its earnings per share. High = The market expects earnings to grow rapidly (lots of confidence profits will increase) HIGH = GOOD
Dividend yield	$\frac{\text{Dividends per share}}{\text{Market price per share}}$	Measures how much investors earn based on the dividends they receive.