

Profitability ratios

Ratio	Formula	Interpretation
Gross profit margin	$\text{Gross profit} \div \text{revenue} \times 100$	Higher = better cost control in production
Operating profit margin	$\text{PBIT} \div \text{revenue} \times 100$	Higher = better control of operating expenses
Net profit margin	$\text{Profit after tax} \div \text{revenue} \times 100$	Higher = more efficient after interest and tax
Return on capital employed (ROCE)	$\text{PBIT} \div \text{capital employed} \times 100$, where capital employed = total equity + NCL (or total assets – current liabilities)	Higher = more efficient use of long-term capital
Return on equity (ROE)	$(\text{PAT} - \text{preference dividends}) \div \text{equity capital} \times 100$	Higher = better returns for equity shareholders
Asset turnover	$\text{Revenue} \div \text{capital employed (times)}$	Higher = more revenue generated per \$ of capital

Key relationship: $\text{ROCE} = \text{operating profit margin} \times \text{asset turnover}$

Liquidity ratios

Ratio	Formula	Benchmark and interpretation
Current ratio	$\text{Current assets} \div \text{current liabilities}$	~2:1 generally expected; too high may mean excess idle assets
Quick ratio (acid test)	$(\text{Current assets} - \text{inventory}) \div \text{current liabilities}$	Rule of thumb ~1:1 (varies by industry); excludes inventory as less liquid; too low = liquidity risk

If the current ratio rises more than the quick ratio, inventory is building up. If the quick ratio is close to the current ratio, little inventory is held

Efficiency (activity) ratios

Ratio	Formula	Interpretation
Inventory turnover	$\text{Cost of sales} \div \text{average inventory (times)}$	Higher = faster stock turnover; lower may signal slow-moving stock
Inventory days	$(\text{Average inventory} \div \text{cost of sales}) \times 365$	Fewer days = faster conversion to sales
Receivables collection period	$(\text{Trade receivables} \div \text{credit sales}) \times 365$	Fewer days = faster cash collection from customers
Payables payment period	$(\text{Trade payables} \div \text{credit purchases}) \times 365$	More days = longer credit taken; better for cash flow

Cash operating cycle = inventory days + receivables days – payables days; lower = better working capital management

Gearing (financial leverage) ratios

Ratio	Formula	Interpretation
Capital gearing ratio	$\text{Long-term debt} \div (\text{equity} + \text{long-term debt}) \times 100$	> 50% = highly geared (more debt than equity); more financial risk
Debt to equity ratio	$\text{Long-term debt} \div \text{equity}$	Higher = more reliant on debt financing
Interest cover	$\text{PBIT} \div \text{interest or finance charges (times)}$	Higher = more comfortable ability to service debt; rule of thumb: above 3x is usually considered safe

✓ High gearing = higher financial risk (fixed interest payments), but potential tax benefits

✓ Low gearing = lower risk, more equity financed