

## Financial Ratios

Financial ratios categories:

- *Profitability ratios*: measure a company's ability to generate profit from its resources.
- *Efficiency ratios*: measure how efficiently a company is utilizing its assets and resources.
- *Liquidity ratios*: measure a company's ability to meet short-term debt obligations. Here, liquidity refers to the amount of cash that a firm holds and how quickly a firm can turn its assets into cash.
- *Leverage ratios*: evaluate a company's capital structure by measuring how a firm uses debt and equity to finance its operations.

Category	Ratio	What it measures
Profitability	$Return\ on\ sales = \frac{Net\ income}{Sales}$	% of net income that a company generates from sales.
	$Return\ on\ assets\ (ROA) = \frac{Net\ income}{Total\ assets}$	% of profit that a company generates from its shareholders' equity.
	$Return\ on\ equity\ (ROE) = \frac{Net\ income}{Equity}$	% of profit that a company generates from its shareholders' equity.
Efficiency	$Asset\ turnover = \frac{Sales}{Total\ assets}$	How efficiently a company is using assets to generate sales.
	$Inventory\ turnover = \frac{Cost\ of\ goods\ sold}{Inventory}$	How fast a company sells inventory.
	$Average\ inventory\ period = \frac{Inventory}{Cogs} * 365$	The average number of days that a company holds its inventory before selling it.
	$Average\ collection\ period = \frac{Accounts\ receivable}{Sales} * 365$	The average number of days that clients take to pay their bills.
	$Average\ payment\ period = \frac{Accounts\ payable}{Purchases} * 365$	The average number of days that a company takes to pay its vendors.
Liquidity	$Current\ ratio = \frac{Current\ assets}{Current\ liabilities}$	A company's ability to cover its short-term debt with its current assets.
	$Quick\ ratio = \frac{Current\ assets - inventories}{Current\ liabilities}$	Ability to cover short-term debt with current assets excluding inventories.
	$Cash\ ratio = \frac{Cash\ and\ cash\ equivalents}{Current\ liabilities}$	Ability to cover short-term debt with cash and marketable securities.
Leverage	$Equity\ to\ assets = \frac{Equity}{Total\ assets}$	The proportion of a company's assets that are financed by equity.
	$Debt\ to\ equity = \frac{Total\ liabilities}{Equity}$	The relative proportion of debt and equity used to finance a company's assets.
	$Coverage\ of\ fixed\ investments = \frac{Equity + long\ term\ debt}{Fixed\ assets}$	The proportion of a company's fixed assets that are financed by equity and long term debt.
	$Interest\ coverage = \frac{EBIT}{Interest\ expenses}$	Ability to cover interest payments with EBIT.