

Ratio Analysis

Liquidity Ratios			
Name	Formula	Guide	Interpretation
Working Capital (in \$)	Current Assets – Current Liabilities	Positive	A positive number here means you have more assets that you can turn into cash within 1 year than debt that will be due within 1 year = ability to pay debts when due (ie: free money to work with above what you need to pay debts)
Current Ratio	Current Assets Current Liabilities	2 is ideal	This is a ratio of the above. A 2 means you have twice the value of current assets that you have of current liabilities = ability to pay debts twice over
Quick Ratio	Current Assets above Inventory Current Liabilities	1 is ideal	Not all current assets can be sold quickly. Like Current ratio, but measures only the most liquid assets (those listed above Inventory)
Inventory Turnover	Cost of Goods Sold Average Inventory	Higher is better	This shows how many times you sell through your inventory in the period. More means you <i>don't</i> have to tie up lots of cash in goods to generate lots of sales = better use of cash.
Inventory Turnover Period (in days)	365 Inventory Turnover	Lower is better	This measures how many days it takes to sell through your inventory once. Fewer days means takes less time = you sell more during the year.
Accounts Receivable Turnover	Net Sales on Credit Average A/R	Higher is better	This shows how many times you collect your receivables in the period. More means you <i>don't</i> have lots of your cash in the hands of customers who aren't paying = better use of cash
Accounts Receivable Turnover Period (in days)	365 A/R Turnover	Lower is better	This measures the length of time it takes to collect on your receivables once. Fewer days mean you get your hands on your money faster.
Operating Cycle (in days)	Inventory Turnover Period + A/R Turnover Period	Lower is better	These two turnovers together measure how long it takes to buy goods, sell them, and then collect the money and buy more goods. This is one business (or operating) cycle. The lower the number, the faster you can do it, and that means the more often you can do it in the year = more sales and less risk of insolvency.

Borrowing Capacity Ratios			
Name	Formula	Guide	Interpretation
Debt Ratio (%)	Total Liabilities Total Assets	<50%	This measures the percentage of all the assets that are financed with debt. The higher the number, the greater the risk of insolvency due to higher interest rates, mortgage payments, etc.
Equity Ratio (%)	Total Equity Total Assets	>50%	This is just the opposite of the above.
Times Interest Earned	Profit Before Interest & Taxes Interest Expense	Higher is better	This measures a company's exposure to changes in the interest rate. If they can pay their interest charges many times over, they're ok.

Profitability Ratios			
Name	Formula	Guide	Interpretation
Making Money Efficiently	Return on Net Sales (%)	$\frac{\text{Net Income}}{\text{Net Sales}}$	Higher is better This is a measure of profitability or efficiency. It states what share of your sales is profit to you. It's a measure of your ability to control costs and generate sales efficiently.
	Return on Equity (%)	$\frac{\text{Net Income}}{\text{Average Equity}}$	Higher is better This is also a measure of efficiency. Compares the size of your profit to the size of your equity. The larger the number, the more money you are making for each dollar of your investment in the business = more efficient investment for you
	Return on Assets (%)	$\frac{\text{Operating Income}}{\text{Average Assets}}$	Higher is better This is also a measure of efficiency. Compares the size of your profit to the value of all the business's assets. The larger the number, the more money you are able to make for each dollar the business has invested in assets. If it's low, you have a lot of cash tied up to generate very little profit = low efficiency

Cash Flow Ratios			
Name	Formula	Guide	Interpretation
Solvency	Cash Flow to Current Debt	$\frac{\text{Cash from operations}}{\text{Average Current Liabilities}}$	Higher is better Indicates the amount of cash to pay off current debt that is generated from operating activities. The ratio provides a better picture of liquidity than using the current ratio because it uses cash provided by operating activities rather than the year-end asset balance.
	Cash Flow to Total Debt	$\frac{\text{Cash from operations}}{\text{Average Total Liabilities}}$	Higher is better Indicates the amount of cash to pay off total debt that is generated from operating activities. The ratio is the cash based counterpart to the debt ratio.

Liquidity	Cash Return on Sales	$\frac{\text{Cash from operations}}{\text{Net Sales}}$	Higher is better Cash return on sales indicates how quickly sales are turned into cash. The company is efficient at turning sales into cash when its cash return on sales is greater than its profit margin.
	Cash Flow per Share	$\frac{\text{Cash Flow}}{\text{Common Shares Issued}}$	Higher is better Cash flow per share indicates the cash flow generated for each common share.

NOTE: to find "average" numbers like *Average Inventory* and *Average Accounts Receivable* just take the number at the start of the period, add it to the value at the end of the period, and divide by two.