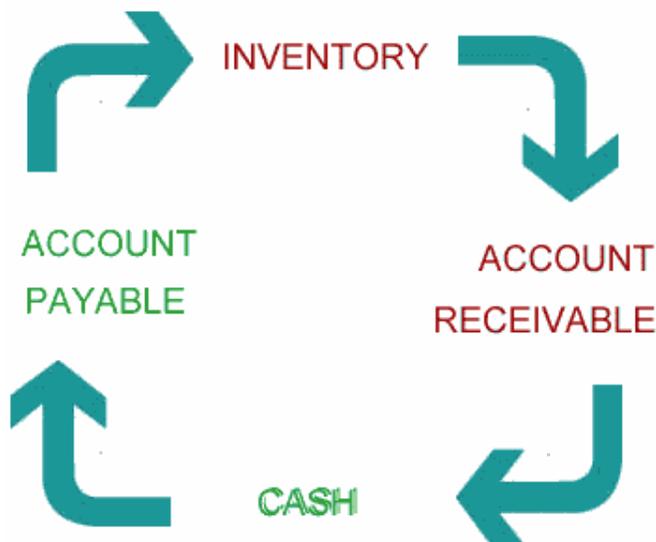


Jae Jun's Top 10 Stock Valuation Ratios

1. Cash Conversion Cycle (CCC)

- $CCC = \text{Days Inventory Outstanding} + \text{Days Sales Outstanding} - \text{Days Payables Outstanding}$
-
- It measure of management effectiveness on cash management. How efficiently the business turn cash over. The lower the better.
- CCC is a relative number. It need to compare with historical average and competitor's figure to determine whether it's good or not.
- CCC with decreasing trend is peferable.
- Need to be cautious with bing increase - possible cash shortage and inventory issues.



2. Cash Return on Invested Capital (CROIC)

- $CROIC = FCF / \text{Invested Capital}$
- Invested Capital = Shareholders Equity + Interest Bearing Debt + Short Term Debt + Long Term Debt
- The numerator can interchange with [owner earnings](#) - depending on the company and situation.
- CROIC is a lumpy figure and it is not going to be flat line. We need to look for some levels of consistency.
- $CROIC > 13\%$ consistently is a sign of moat - mean FCF is +ve and the business is a strong performer in the industry.

3. EV/EBIT

- $EV/EBIT = \text{Enterprise Value} / \text{Earning before Interest and Tax}$
- Buffett's rule of thumb is to pay 10x pretax when acquiring businesses.

4. FCF to Sales

- $FCF \text{ to Sales} = FCF / \text{Sales}$
- What percentage of sales is converted directly to FCF. - The higher the better
- Any company hash $FCF \text{ to Sales} > 10\%$ is a FCF generating machine.

5. FCF to Short Term Debt

- Whether the company can cover its short term debt with FCF. Not by borrowing or diluting, but with internally generated funds.
- < 1 , the company doesn't generate enough FCF to cover its debt. If the ratio consistently < 1 , there is a high change of trouble.
- > 1 , the debt can be covered without borrow more.

6. Inventory Turnover

- Inventory Turnover = $\text{COGS} / \text{Average Inventory}$
- Measure how quickly company sell its inventory
- The goal is to quickly turn inventory into cash, then reinvest the cash back into inventory, and then turn it to cash again for even more profits.
- Compare inventory turn over with similar companies.
- High inventory turnover can be achieved via
 - Tight inventory management (excellent)
 - Reducing price to quickly sell (bad)

7. Magic Formula Yield

- Magic Formula Yield = EBIT / EV
- It can be used to compare against earnings of another stock, sector or the whole market and even bond yields.
- A relative valuation to use it with reference.
- Look for EY $\geq 10\%$

8. Piotroski Score

- It is a quality score that leads to an easier valuation.
- The first four criteria of the Piotroski Score count towards profitability.
- Points 5-7 of the Piotroski Score, looks at the health of the balance sheet in terms of debt and the number of shares outstanding.
- The last two factors of the Piotroski Score looks at operating efficiency.
 1. Positive net income compared to last year
 2. Positive operating cash flow in the current year
 3. Higher return on assets (ROA) in the current period compared to the ROA in the previous year
 4. Cash flow from operations greater than Net Income
 5. Lower ratio of long term debt to in the current period compared value in the previous year
 6. Higher current ratio this year compared to the previous year
 7. No new shares were issued in the last year
 8. A higher gross margin compared to the previous year
 9. A higher asset turnover ratio compared to the previous year
- How to use?
 - Look for trends. Increasing? or Decreasing?

9. Price to Intrinsic Value

- This one is tricky. How to get intrinsic value?
- Intrinsic value can be calculated via [DCF](#), [Graham Net Net](#), Graham Growth Value, Katsenelson's Absolute P/E, [EV/EBIT](#), etc...
- The idea behind using a price to intrinsic value ratio is to invest in the most undervalued stock. If you have 10 stocks - how do you know which one to buy? Go for the one with lowest ratio

10. DuPont model for ROE

- [3 step formula](#) or [5 step formula](#)
- ROE is a way to measure the effectiveness of management. Now you can see in which area management is exceeding or lacking.
- To find which element to blame if ROE not perform well.

References:-

- [My Top 10 Stock Valuation Ratios and How to Use Them - Jae Jun](#)