Module 5 Article

Important Financial Ratios

Key Terms

- **Liquidity**: A measure of the ease with which an asset can be sold and translated to cash. Real estate is an example of an illiquid asset, while securities and actual cash are highly liquid.
- **Shareholder's Equity**: An accounting value that represents the difference between assets and liabilities. It consists of capital raised from shares and retained earnings.
- **Company Earnings**: Profit, net income, and earnings are synonymous. Company earnings are calculated by subtracting the cost of production from the revenues generated from a good or service. This value is generally found at the bottom of a company's income state, and is hence also referred to as the "bottom line".

There's A Lot Out There

The vast amount of quantitative information that companies provide in their financial statements can appear meaningless. However, when manipulated slightly into ratios, these numbers become important metrics for company health and performance.

Working Capital Ratio

In the business world, "capital" refers to a company's assets. Assets can include free-standing cash, inventory, buildings, real estate; anything that can be used to pay off debts and avoid bankruptcy. The "Working Capital Ratio" compares a company's current assets with its liabilities to measure its ability to pay off debts in the span of a year.

The Working Capital ratio is a telling metric for individual investors and institutions alike. Creditors can use the ratio to make decisions about whether or not to open credit lines with a certain corporation, while investors can use it as a preliminary insight on the financial health of a potential investment.

It's important to keep in mind that while useful, the ratio is just one number, and is most useful when compared with other financial values for a holistic view of a company. For example, the liquidity of the company's assets, their debt maturities, relationship with creditors, etc can all bring a different meaning to the working capital ratio.

Imagine you're an investor deciding between two companies, X and Y, for your first investment. Company X currently has $3 million in assets and $1 million in liabilities, while company Y has $5 million in assets but $7 million in liabilities. Their working capital ratios are 3:1 and 5:7 respectively.

Fast & Furious: Quick Ratio

Among a company's "assets" are those that are easily liquidated, and those that are less flexible. The quick ratio takes into account the former to measure how much cash a company readily has on hand. The formula for the quick ratio is (Assets-Inventories)/Liabilities. Inventory is subtracted out due to its lack of liquidity.

After the working capital ratio, you decide to calculate the quick ratio for company X. Of their $3 million in assets, $0.5 million are accounted for in inventories. The quick ratio for company X is (3-0.5)/1 = 2.5:1 ratio. Generally, any ratio greater than 1:1 is a good sign.

Earnings Per Share (EPS)
While other ratios measure direct company metrics, the Earnings per Share pertains to the valuation of a company's shares. The EPS is calculated by dividing a company's net income by its shares outstanding. The quotient depicts the income earned per share of a company's stock.

A high EPS indicates high profitability. The EPS is one of the most widely used indicators of corporate value, and investors will likely be willing to pay high prices for companies with strong profitability metrics. Armed with the working capital and quick ratio, you decide to calculate the EPS for company Y. This company has 3 million shares outstanding, with an annual net income of $6 million. 6/3 = 2, so company Y has an EPS of $2.00 per share.

Price-Earnings (P/E) Ratio
The Price to Earnings, or P/E ratio, represents investor sentiment about a company's earnings potential. The P/E ratio is calculated by dividing a company's share price by the EPS. A high P/E value might mean that a company is overvalued, as its share price is much greater than what its earnings warrant, but this doesn't mean the share price can't increase more.

A low P/E could indicate that a company is undervalued. PE ratios can vary greatly across companies, depending on the stage of growth they are in, and across industries depending on consumer sentiments. As such, this ratio must be taken in context with other financial metrics; for spectacular companies, a high P/E is sometimes justified if investors believe it will generate high earnings later on.

Imagine company Y is trading for $75 per share. Its P/E ratio is $75/$2 = $37.50, which means investors are paying $37.50 for each dollar of earnings generated by the company.

Debt Ratios: Insight Into Trouble
When evaluating a company, it is easy to become enraptured with strong revenue growth and a promising value proposition. However, it is important to keep track of the less glamorous metrics, specifically debt.

The formula for a company's debt ratio is total liabilities/total assets. This ratio is important because it clearly depicts whether a company has more debt than it does assets, and the relationship between the two. As we saw before, company X has $3 million in assets. It also has $8 million in liabilities. Therefore, its debt ratio stands at 2.6:1.

A Fine Line: Debt-Equity Ratio
The debt to equity or D/E ratio, not to be confused with the debt ratio, is calculated by dividing net debt(short and long term) by shareholder's equity. This shows the proportion of debt to raised equity that a company is using to finance its necessary payments and growth. While it varies by industry, a D/E ratio of < 2.0 is considered "good".

After reviewing both corporations, company X seems really appealing so far, but you have yet to analyze its debt. According to its reports, company X has $8 million in outstanding long and short term debt, and $2 million in shareholder's equity. Their ratio comes out to 4.0, well above the 0-2.0 range.

Looking for a Payout: Dividend Yield
Dividends are the other source of income that can be gained from stocks. For an investor looking to get the biggest bang for their buck, the dividend yield is an important metric. The dividend yield is calculated by dividing the company's dividend per share by the share price.

Due to the nature of the calculation, the dividend yield changes when a company's share price changes, unless they adjust the dividend accordingly.

Company Y consistently pays out $2.00 quarterly dividends, and its share price usually stays around $40.00. That means the company has a dividend yield of 5%, which is within the ideal range of 2-6%.

Return on Equity (ROE)
The Return on Equity, or ROE, shows how well companies manage the equity they raise from issuing shares. The formula for ROE is net earnings/shareholder's equity.

The ROE is especially helpful when comparing companies within the same industry, or with otherwise similar aspects. This metric sheds light on balance sheet management, an important differentiator for investors. Besides profitability in relation to shareholder's equity, the ROE.

You decide to calculate the ROE for company Y. The company has net earnings of $6 million and $50 million in shareholder's equity. Therefore, their ROE is 12%.

The Bottom Line
The 6 ratios discussed here are great preliminary metrics to get a feel for a company's earnings potential, balance sheet management, and market value. All of these ratios should be looked at in the context of the others, and in conjunction with deeper research as well.