**Stock Analysis, Prediction, and Trading Project Notes**

*Research Materials:*

* **Form 10-K:** An annual report that includes key financial statements that have been independently audited. Here you can review a company’s balance sheet, its sources of income and how it handles its cash, and its revenues and expenses.
* **Form 10-Q:**A quarterly update on operations and financial results.

*Metrics to Value a Stock*

* **Revenue:** This is the amount of money a company brought in during the specified period. It’s the first thing you’ll see on the income statement, which is why it’s often referred to as the “top line.” Sometimes revenue is broken down into “operating revenue” and “nonoperating revenue.” Operating revenue is most telling because it’s generated from the company’s core business. Nonoperating revenue often comes from one-time business activities, such as selling an asset.
* **Earnings and earnings per share (EPS).** When you divide earnings by the number of shares available to trade, you get earnings per share. This number shows a company’s profitability on a per-share basis, which makes it easier to compare with other companies.
  + EPS indicates how much money a company makes for each share of its stock and is a widely used metric for estimating corporate value.
  + A higher EPS indicates greater value because investors will pay more for a company's shares if they think the company has higher profits relative to its share price.
* **Price-to-Earnings (P/E) Ratio:**The price-to-earnings ratio (P/E ratio) is the ratio for valuing a company that measures its current share price relative to its [earnings per share](https://www.investopedia.com/terms/e/eps.asp) (EPS).
  + A high P/E ratio could mean that a company's stock is overvalued, or else that investors are expecting high growth rates in the future.
  + Companies that have no earnings or that are losing money do not have a P/E ratio because there is nothing to put in the denominator.
  + <https://www.investopedia.com/terms/p/price-earningsratio.asp>
* **Price-to-earnings-growth (PEG) ratio:**Different companies grow at different rates. The PEG ratio takes a stock's P/E ratio and divides it by the expected annualized earnings growth rate over the next few years to level the playing field.
  + The PEG ratio enhances the P/E ratio by adding in expected earnings growth into the calculation.
  + The PEG ratio is considered to be an indicator of a stock's true value, and similar to the P/E ratio, a lower PEG may indicate that a stock is undervalued.
  + The PEG for a given company may differ significantly from one reported source to another, depending on which growth estimate is used in the calculation, such as one-year or three-year projected growth.
* **Return on equity (ROE) and return on assets (ROA):**Return on equity reveals, in percentage terms, how much profit a company generates with each dollar shareholders have invested. The equity is shareholder equity. Return on assets shows what percentage of its profits the company generates with each dollar of its assets. Each is derived from dividing a company’s annual net income by one of those measures. These percentages also tell you something about how efficient the company is at generating profits.
* **Debt-to-EBITDA ratio:**One good way to gauge financial health is by looking at a company's debt. There are several debt metrics, but the debt-to-EBITDA ratio is a good one for beginners to learn. You can find a company's total debts on its balance sheet, and you'll find its [EBITDA](https://www.fool.com/investing/how-to-invest/stocks/ebitda/) (earnings before interest, taxes, depreciation, and amortization) on its income statement. Then turn the two numbers into a ratio. A high debt-to-EBITDA ratio could be a sign of a higher-risk investment, especially during recessions and other tough times.

*Non-Technical Metrics to Evaluate a Company Stock:*

* **Durable competitive advantages:**As long-term investors, we want to know that a company will be able to sustain its market share over time. This can come in several forms. A trusted brand name can give a company pricing power, patents can protect it from competitors, and a large distribution network can give it a cost advantage over peers, just to name a few.
* **Great management:**It doesn't matter how good a company's product is or how much growth is taking place in an industry if the wrong people are making key decisions. Ideally, the CEO and other main executives of a company will have successful and extensive industry experience and financial interests that align with shareholders'.
* **Industry trends:**Investors should focus on industries that have favorable long-term growth prospects. For example, over the past decade or so, the percentage of retail sales that take place online has grown from less than 5% to more than 11% today. So [e-commerce](https://www.fool.com/investing/stock-market/market-sectors/consumer-discretionary/internet-direct-marketing-retail-stocks/) is an example of an industry with a favorable growth trend. [Cloud computing](https://www.fool.com/investing/stock-market/market-sectors/information-technology/cloud-stocks/), payments technology, and [healthcare](https://www.fool.com/investing/stock-market/market-sectors/healthcare/) are a few other examples of industries that are likely to grow significantly in the years ahead.

*Factors That Influence Share Price*

* **Marketplace**: The marketplace determines share prices. While seller supply and buyer demand meet in the market, there is no perfect equation that lets investors know exactly how share prices will behave. However, there a number of factors that can move stocks up and down.
* **Demand and Supply**: Demand and supply in the market affect the prices of shares. When demand for shares exceeds supply, which means the buyers are more than sellers, the prices increase. When demand is less than supply, meaning that buyers are less than sellers, the prices decrease.
* **Interest Rates:** In case of lower interest rates, demand for funds is higher and the subsequent demand for shares rises. On the other hand, high interest lowers the demand for funds and the demand for shares is lower.
* **Investors**: Market players have an impact on share prices. With more bulls than bears, the prices increase. With more bears than bulls, share prices decline.
* **Dividends**: Dividends indicate the movement of share prices. When companies make dividend announcements, the share prices of such companies are likely to increase. It is important to note that if the dividend rate announced is lower than the investors’ expectations, share prices decline while if they are up to more than expected, share prices increase.
* **Management**: Management profile has a significant effect on company success and stock prices. If management consists of experienced professionals with a proven track record, share prices are likely to be higher. If the management that takes over a company lacks integrity, share prices tend to fall.
* **Economy**: Fluctuations in the economy feature what are commonly referred to as booms and depressions. Under favorable conditions share prices are at their peak and their lowest point is experienced during depressions. Share prices gradually rise during recovery and fall during recessions
* **Political Climate**: Political factors that range from relations with other nations to government policies can affect share prices.
* **Short-Term and Long-Term Investors**: Different investors rely on different factors. A short-term trader or investor is likely to prioritize and incorporate technical factors such as inflation, trends and demographics. Long-term investors focus on fundamentals like earning power and acknowledge the crucial role that technical factors play. Investors who prioritize fundamentals can integrate technical factors.
  + It is widely believed that market sentiment and technical factors are overwhelming on a short-term basis but fundamentals ultimately set share prices in the long run. Since conventional theories are not sufficient for explaining all the things that go on in the market, behavioral finance or market sentiment will always be a keen area of interest.

*Considerations*

* Stock prices change for various reasons. While some people believe that it is impossible to predict the changes, others think that observing past price movements and charts can determine when you should buy and sell.
* Stocks are volatile, which means that prices can rapidly change.
* Fundamentally, demand and supply in the market influence share price.
* Comparing the share prices of two different companies is not conclusive when determining the value of a company.
* Earnings affect how investors value companies but other indicators are used for the purpose of predicting stock prices. Stock prices are affected by investors’ expectations, attitudes and sentiments.