## Stock Market Investing And Trading Foundation

### Useful Links

1. [www.finance.yahoo.com](http://www.finance.yahoo.com)
2. [www.investing.com](http://www.investing.com)
3. [www.investopedia.com](http://www.investopedia.com)

### Can you make money in stocks?

The good news for investors; long term market makes returns. Usually stock investor survive or make money only for long term investment, even through the great depression or covid-19 pandemic for instance. Buy why? Because stock rises over time, even with big pull back, such as covid-19 or even with high inflation.

### How to evaluate a Stock?

There are 3 ways to evaluate stock.

1. Competitive advantage.
2. Ratios.
3. Technical Analysis (Charting).

### Competitive Advantages

What is competitive advantage? Competitive advantage defines how good is the stock good at. What advantages are the stock you buy. What advantages of this stock compared to its competitors or to their peer companies. There are usually 2 areas to define the advantages of a given stock.

1. Low-Cost Leader or high/quality services.
2. Strong brand name.

You can take an example of “Apple Inc.”. Although Apple products is expensive, but it has a high in terms of quality and services, also Apple is well known and has a good reputation.

### Ratios

Ratios means the price you are paying for a stock good in relation to something. There are 3 type of measures in ratios.

1. Price/Earnings (PE)
2. Price/Sales (PS)
3. Price/Book (PB) (**Best Recommendation**)

### Price/Earnings (PE)

P/E are used by investor or analyst to determine the relative value for a company’s shares, it helps to determine whether the stock is overvalued or undervalued. It can be compared to the company’s historical record or even to its competitors or the similar aggregation market. Some would even compare against a broader market such as the S&P Index. P/E can be estimate by trailing (backward looking) or a forward looking (future projected estimate or even call “estimate price to earnings”). P/E less than 25 is good. But the rule of thumb, the **lower** the number the better the stock to buy assuming if you are not applying forward looking P/E ratio.

Some of the financial web sites, such as yahoo finance already calculated the P/E ratios. You can check it out on the website (please refer to the useful links above). From the yahoo finance web site you can click on the **statistic** link, from their you can find all sorts of calculated data including P/E (trailing or forward), P/S or even P/B ratios. To calculate P/E, you can also use the formula to calculate yourself:

From the formula, market value per share means the stock price, earning per share (EPS) is the value provided by the company (you can find this data from the yahoo finance website from the statistic section). As mentioned, the P/E ratio can be backward looking or forward looking. Usually, many companies can provide backward looking EPS (cause this data computed from historical records), however, not many companies can provide forward looking EPS, this is subject to whether the companies provide its earnings for near future, you can find this data from the company’s earnings release (if provided). Sometimes P/E ratios can be zero or N/A, this means there is no revenue or even posting a loss.

Let’s take an example:

Bank of America Corporation closed out the year 2020 with the following stats:

* Stock Price = $30.31
* Diluted EPS (Earning Per Shares) = $1.87
* P/E 16.21 X ($30.31 / $1.87)

Bank of America has a trailing P/E of 16.21. Bank of America’s P/E at 16.21 was slightly higher than the S&P 500, which over time traders has a trailing P/E ratio of 15. To compare Bank of American’s P/E to it’s peer, we can calculate the P/E of JPMorgan Chase & Co. as of end of 2020:

* Stock Price = $127.07
* Diluted EPS = $8.88
* P/E = 14.31

When you compare Bank of America’s P/E of 16 to JP Morgan’s P/E of roughly 14, Bank of America’s stock does not appear as overvalued as it did when compared with the average P/E of 15 for the S&P 500. Bank of America’s higher P/E ratio might mean investors expected higher earnings growth in the future compared to JP Morgan and the overall market. Why expected higher earnings? Because the smaller the P/E ratio number the better the stock to buy (Earning increase) , that means investors are hoping to see higher earnings or revenue for the company Bank of America.

### Absolute P/E

The term absolute P/E represents the P/E of the current time period. For instance, if stock today is $100 and the EPS is $2, then the P/E ratio is ($100/$2) that P/E is 50.

### Relative P/E

The relative P/E compares the absolute P/E to the benchmark or a range of past previous P/E over a relevant time period, such as past 10 years. The relative P/E shows what portions or percentage of the past P/Es. The relative P/E usually compares the current P/E to the highest P/E of a given time period. Sometimes investors could even compare the current P/E to the lowest P/E range, which indicates how close the current P/E is to the historic low. P/E below 100% if the current P/E is lower than the historical P/E range, P/E above 100% tells the investor the current P/E pass or surpass the past value.

### Limitations Of P/E

One primary limitation of P/E is when comparing P/E with P/E ratios of different companies. Valuation growth rates of companies often vary between sectors due to the different way companies earn money and different timeline. As such, one should use P/E as a comparative tool when comparing companies with the same sector.

### Pros of P/E

Investors can valuate short to long-term valuation trends such as P/E 10 to P/E 30, which the average of 10 to 30 years. The benefit of long-term measures can compensate for the changes or fruition of the business cycle. Can be used as a tool for the company’s future estimates, which provides a clear picture of what earnings will look like, without changes or accounting adjustment.

### Cons of P/E

Companies sometimes inherit problems with the forward P/E metrics, namely, to underestimate the earnings in order to beat the estimate P/E ratio, for the next quarter’s earnings announcement.

Other companies could even overestimate the P/E ratio and made adjustment later in the next quarter announcement. External analyst also provides P/E ratio estimate which may diverge from the company’s estimate which creates confusion. Companies sometimes could also provide inaccurate estimate P/E ratio, that’s why most investors prefer to choose the trailing P/E ratios. Furthermore, past performance doesn’t signal future behaviors.

### Price/Sales (PS)

The Price-to-Sales (P/S) ratio is a valuation ratio that compares a company’s total market capitalization to the year’s sales. It is an indicator of the value that financial markets have placed on each dollar of a company’s sales or revenues. It can be calculated either by dividing the company’s market capitalization by its total sales over a designated period (usually twelve months) or on a per-share basis by dividing the stock price by sales per share. Like all ratios, the P/S ratio is most relevant when used to compare companies in the same sector. A low ratio may indicate the stock is undervalued, while a ratio that is significantly above the average may suggest overvaluation.

The typical 12-month period used for sales in the P/S ratio is generally the past four quarters (also called trailing 12 months or TTM), or the most recent or current fiscal year (FY). A P/S ratio that is based on the forecast sales for the current year is called a forward P/S ratio.

Let’s take an example:

As an example, consider the quarterly sales for Acme Co. shown in the table below. The sales for fiscal year 1 (FY1) are actual sales, while sales for FY2 are analysts average forecasts (assume that we are currently in the first quarter of Q1 of F2). Acme has 100 million outstanding, with the shares presently trading at $10 per share.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **FY1 Q1** | **FY1 Q2** | **FY1 Q3** | **FY1 Q4** | **FY2 Q1** | **FY2 Q2** | **FY2 Q3** | **FY2 Q4** |
| **Revenues (Millions)** | $100 | $110 | $120 | $125 | $130 | $135 | $130 | $125 |

At this present time, Acme’s P/S ratio on a trailing 12-month basis would be calculated as follows:

* Sales for the past 12 months (TTM) = $455 million (sum of all FY1 values)
* Sales per share (TTM) = $4.55 ($455 million in sales / 100 million shares outstanding)
* P/S ratio = 2.2 ($10 share price / $4.55 sales per share)

Acme’s P/S ratio for the current fiscal year would be calculated as follows:

* Sales for the current fiscal year (FY2) = $520 million
* Sales per share = $5.20
* P/S ratio = $10 / $5.20 = 1.92

If Acme’s peers, which is assume are based in the same sector and are of similar size in terms of market capitalization, are trading at an average P/S ratio (TTM) of 1.5, compared with Acme’s 2.2, it suggests a premium valuation for the company, because the P/S ratio of Acme is higher than its peers. Then a question will be asked, will you still be interested in buying this stock? The answer will be yes. Acme P/S forecast ratio is 1.92 which is still lower than its trailing P/S ratio 2.2. By calculating; (($520 minus $455) / $455) x 100%, there will this has an 14.3% revenue growth that Acme is expected to post in the current fiscal year.

### Limitations Of P/S

The P/S ratio doesn’t take into account whether the company makes any earnings or whether it will ever make earnings. Comparing companies in different industries can prove difficult as well. For example, companies that make video games will have different capabilities when it comes to turning sales into profits when compared to, say, grocery retailers. In addition, P/S ratios do not account for debt loads or the status of a company’s balance sheet.

### Price/Book (PB)

The Price to Book (P/B ratio) is a ratio to compare a firm’s market capitalization to its book value and locate undervalued companies. This ratio is calculated by dividing the company’s stock price per share by its book value per share (BVPS).