

Market Breadth



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Objectives

In this section, we will develop an understanding of market breadth. It is important to understand this, as this will form the basis when we study TRIN as a sentiment indicator.

Breadth measures

Market breadth is the measure of the stocks that are participating in a market rally or a market fall. It gives us information about the number of advancing stocks and their volume, i.e. the stocks that are being bought in the market, and the number of declining stocks and their volume, i.e. the stocks that are being sold in the market. Breadth helps us understand the tussle between the raging bulls and the formidable bears as these sentiments are gauged based on the full range of the stocks participating in the market's movement. Market breadth statistics help us to understand the strength (by volume), breadth (by stock price movements) and the current direction in which the market is going. From an analyst's point of view, we would understand these breadth statistics and indicators, and use them as forecasting tools.

Importance of volume

- When volume data spikes for a particular security, it indicates that the ownership of the stock has changed hands significantly. This is because at these spikey points the new support/resistance levels are created. If the spike is when the share price is increasing then that becomes the new support level for the stock price.
- If a stock price is moving upwards with strong volume data, it is a signal that the bulls are acquiring the market with a greater strength. If this upward movement is coupled with weak volume, the bulls are not considered to be strong at present but it indicates an interest among the investors in that particular security.
- Similarly, if the stock price is moving downwards with a strong volume data, the strength of the bears is considered to be good.

Let us begin with understanding few measures:

High and Low measures

When we talk about high or low of a stock, it indicates how much the price of the stock has increased or decreased by, in a particular time period.

- Today's high or today's low of a stock indicates the highest traded price or lowest traded price the stock has traded at, on a particular day.
- 52 week high or 52 week low of a stock indicates the highest or lowest traded price of the stock in a 52 week time period.
- All time high or all time low is the highest or lowest price of the stock that has ever been traded historically.

A stock trades in these *ranges* bound by the high and low prices. More trades on the higher side of the range indicate a bullish sentiment in the stock and similarly trades towards the lower side of the range indicate a bearish sentiment. A range is also called the *stock price's spread*.

A *high* in a stock can be a signal that many things in that company are right on track or even better. The product or service offered by that company is accepted by its satisfied customers, the company's executives' and CEO's plans are solid and are being implemented, the networking of the company with all its stakeholders is good and the business has a scope in future. The investors in the company are being rewarded which in turn attracts new active traders and institutional investors to capitalize on the momentum generated. There is optimism regarding the particular stock, the company is trading at high prices and signals a bull run.

Contrary to high, a *low* in stock signals negativity as the core business of the company has definitely suffered, resulting in loss to investors. Along with business or its scope, there is also a possibility that the company has specific reasons for the same such as

a strike among employees (management's failure), bans or sanctions by the government, huge debts and solvency issues or just that the business has gone dry. This negativity attracts short sellers further driving the price downwards as selling becomes the trend among other investors too and bearishness sets in. There are indicators which capture these high/low movements in the stock suggesting the force and the direction in market prices.

New High and New Low Ratio

We first choose a specified time period to bind our range. The highs and lows are seen within these time periods. They are generally 52 week highs and lows.

$$\text{Ratio} = (\text{Today's New Highs}) / (\text{Today's New Lows})$$

This ratio revolves around 1 and generally is above 1 indicating that there are more stocks making highs than lows. When this ratio is plotted against time, spikes in the ratio crossing +2 represents higher number of new highs (good new high) and the one below 0.5 represents higher number of new lows (good new low). It indicates that the market is going to trend in that particular direction. A high in the ratio below +2 is an indication of a bad new high or a low above 0.5 is a bad new low as they are not confirming signals about the market trends.

It is important to understand that when the market is rising, i.e. the underlying stock index is increasing coupled with increase in the new high/low ratio for consecutive trading sessions, then this rally is sustainable and there is a confirmation that the market is driven by strong bulls. Confirmations in the bearish scenario follow similar guidelines that a downtrend combined with new lows and decrease in ratio in consecutive trading sessions, is an indication that the market is driven by bears.

Bearish divergence occurs when the market has attained new peaks and the index value is increasing while the number of new highs is equal to or less than the previous new

highs i.e. the ratio decreases or remains the same with an increase in the market index value. This is a signal that the market's bull run is not sustainable in the future.

Bullish divergence occurs when the market hits a bottom but there are same or lesser new lows indicating the bear is not sustainable and the market is correcting itself.

Similarly, there are ratios derived from this new high/low ratio.

$$\% \text{ New Highs} = [\text{New Highs} / (\text{New Highs} + \text{New Lows})] * 100$$

$$\% \text{ New Lows} = [\text{New Lows} / (\text{New Highs} + \text{New Lows})] * 100$$

Greater the percentage, greater the confirmation about a bull run or a bear drag.

Then,

$$\% \text{ High Low} = [(\text{New Highs} - \text{New Lows}) / (\text{Total Stocks})] * 100$$

$$\text{Cumulative New High Low Line} = \text{Yesterday's Value} + (\text{Today's New Highs} - \text{Today's New Lows})$$

This is another way to incorporate high and low values to interpret the market.

For example:

Case 1: There are 10 stocks that achieved new highs and 3 issues that achieved new lows and total there are 30 stocks in the market.

$$\% \text{ High Low} = [(10-3) / 30] * 100 = + 0.233 * 100 = 23.3\%$$

Case 2: There are 9 stocks that have achieved new lows and 1 stock that has achieved a new high and total stocks in the market are 30.

$$\% \text{ High Low} = [(1-9) / 30] * 100 = -0.266 * 100 = 26.6\%$$

The high low percentage oscillates between +100% to – 100%. This is a lagging indicator, which helps us understand the medium to long term trends in the market. To use it as a leading indicator, a value above + 70% or below -70% (which is rare), signals an overbought or oversold market respectively and a contrarian position at such a point would result in profits when corrections are seen in the market.

In the coming units, we will understand Advance-Decline measures and TRIN or Short Term Trading Index or Arms index as a sentiment indicator.