What is Technical Analysis? ................................................................. (01)

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Technical analysis is a method of evaluating securities by analyzing statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity. Technical analysts believe that the historical performance of stocks and markets are indications of future performance.

Technical analysis is the study of past market action to try to understand what will be the market behavior in the future. At its most basic, it is the study of price.

**Technical analysis philosophy**

There are three premises on which the technical approach is based:

1. **The market discounts everything**
   All known information related to the security is reflected in the price of the stock. As soon as new information manifest, then it affects the price.

2. **Prices move in trends**
   In technical analysis prices of securities tend to move in observable trends with a slope to stay in the trend. The trend is considered to be flawless until the trend line is broken. After a trend has been established, the future price movement is more likely to be in the same direction as the trend than to be against it.

3. **History tends to repeat itself**
   Technical analysis is the study of what has happened to a security in the past with expectation that history is going to repeat itself. Many of the charts patterns in technical analysis is using history of 100 years old prices, they are still believed to be relevant because they clarify patterns in price movements that often might repeat themselves.

**Conclusion**

Technical analysis is basically the study of supply and demand. If you understand the benefits and limitations of technical analysis, it can give you a new set of tools or skills that will help enable you to be a better trader or investor. Keep in mind that technical analysis is performed by humans.

Technical analysis only focuses on market action. Technical analysis is only one approach to analyzing stocks. When considering what stocks to buy or sell, you should use the approach that you’re most comfortable with. As with all your investments, you must make your own determination whether an investment in any particular security or securities is right for you based on your investment objectives, risk tolerance, and financial situation. Past performance is no guarantee of future results.
A chart is a visual representation of a security’s price or index over a period of time. Any security with price data over a period of time can be used to form a chart for analysis. On the chart, the vertical axis represents the price scale and the horizontal axis represents the time scale. Prices are plotted from left to right.

Types of charts

Technical Analysts use a variety of charts to analyze price movements. The three main types are:

1. Line Charts
2. Bar Charts
3. Candlestick Charts

Line chart

The line chart is formed by connecting the closing prices (the last price traded) over a specified time frame. Some investors and traders consider the closing level to be more important than the open, high or low.

Line charts do not provide visual information of the trading range for the individual points such as the high, low and opening prices. However, the closing price is often considered to be the most important price in stock data compared to the high and low for the day and this is why it is the only value used in line charts.
What are charts?

Bar chart

This type of chart can show the Opening, High, Low, and Closing (OHLC) prices of a particular security on a particular time frame, which can give a better vision of how the stock have been traded.

The high and low are represented by the top and bottom of the bar. The close and open are represented on the vertical line by a horizontal dash. The opening price on a bar chart is illustrated by the dash that is located on the left side of the vertical bar. On the other hand, the close is represented by the dash on the right. One of the main differences between Line chart and Bar chart is that the Bar chart can show the fluctuation.

![OHLC Bars Diagram]
What are charts?

Candlestick charts

The third common chart type is the Candlestick chart. Many traders like this type of chart because it is similar to a Bar chart but it can present the information on one particular day’s trading in a quicker and easier to read format.

Candlestick charts are very similar to Bar charts as they provide the same information, just in a different way. The candlestick is constructed using a horizontal line to indicate the open and close and a vertical box is made connecting these two lines to form the “body” of the candlestick. A single vertical line is drawn in the middle above the box to show the high and a single vertical line in the middle is drawn below the box to show the low, these are called the shadows. Another difference is the color of the body whether it is filled or not. In traditional candlesticks, if the close is higher than the open then the body is left hollow (white or green) to indicate an up day in that day’s price action. If the close is lower than the open then the body is closed (black or red) to indicate a down day.

Conclusion

There are many different types of charts available, one is not necessarily better than other. The data may be the same to create the chart but the way it is presented visualized is different. Each will have its own benefits and caveats. Traders can choose any type or use multiple types of charts for analysis, it depends on personal preferences and investing styles.
Trend is the direction that prices are moving in, based on where they have been in the past. Market moves are characterized by a series of zigzags. These zigzags represent a series of sequential peaks and troughs. It is the general direction of these peaks and troughs that shapes a market trend.

Three directions of trend

1. Uptrend
2. Downtrend
3. Sideways

1. An uptrend is made up of ascending peaks and troughs. Higher highs and higher lows. An uptrend would be defined as a series of sequential higher peaks and higher troughs. Each new top created by the price action is higher than the previous one. Also, each new low would also be higher than the previous low.

2. A downtrend is made up of descending peaks and troughs. Lower highs and lower lows. A downtrend would be defined as a series of sequential lower peaks and lower troughs. Each new low created by the price action is lower than the previous one. Also, each new high would also be lower than the previous high.
3. A sideways trend (Consolidation) is when prices move sideways in a horizontal range. A lot of people tend to think of markets as being always either in an uptrend or a downtrend. However, the fact is that markets actually move in three directions. It is important to be aware of this distinction because markets spend a significant amount of their time moving in flat, horizontal patterns that are referred to as a sideways paths or a trading range. Although we’ve defined a flat market as having a sideways trend, we usually say that this market is trendless.
Three trend lengths

Charles Dow developed some principles for understanding and analyzing market behavior which later became known as Dow Theory, that became the principle of technical analysis. Charles Dow believed that prices are moving in waves or trends. He believed that like a rising tide where the wave’s would move further up with each ebb and flow and cause smaller ripples, so would stock prices. Conversely, once the tide had peaked and changed to move further down until low tide, so too would stock prices.

Trend lengths:

1. Long term - Year or longer (Primary): The Tide in Dow’s explanation
2. Intermediate - One to three months (Secondary): The waves in Dow's explanation
3. Short term - Less than a month (Minor): The ripples in Dow’s explanation

Along with the three trend directions, there are three trend classifications. A trend of any direction can be classified as a long-term trend, intermediate trend or a short-term trend. In terms of the stock market, a major trend is generally categorized as one lasting longer than a year. An intermediate trend is considered to last between one and three months and a near-term trend is anything less than a month. A long-term trend is composed of several intermediate trends, which often move against the direction of the major trend. If the major trend is upward and there is a downward correction in price movement followed by a continuation of the uptrend, the correction is considered to be an intermediate trend. The short-term trends are components of both major and intermediate trends.
Trend lines

Trend Lines are an important tool in technical analysis for both trend identification and confirmation. A trend line is a line that connects two or more price points and then extends into the future to act as a line of support or resistance. Many of the principles applicable to support and resistance levels can be applied to trend lines as well.

Uptrend line

An uptrend line is a line drawn upward that connects two or more low points. The second low must be higher than the first for the line to have an upward slope. Uptrend lines act as support and indicate that there is more demand than supply, even if the price are rising. As long as prices remain above the trend line, the uptrend is considered to be unbroken. A break below the uptrend line indicates that a change in trend may be occurring.

Downtrend line

A downtrend line is a line drawn downwards that connects two or more high points. The second high must be lower than the first for the line to have a downward slope. Downtrend lines act as resistance and indicate that there is more supply than demand, even if the price are falling. As long as prices remain below the trend line, the downtrend is considered to be unbroken. A break above the uptrend line indicates that a change in trend may be occurring.
Conclusion

Using trend and trend line analysis is a very important aspect of technical analysis, but keep in mind that it is only one of the many tools and techniques available. When a trend line is broken it should only serve as a warning that the trend may be changing. When a trend line is broken you should use additional tools and signals to confirm the change in trend.
Support and resistance levels are important points in time where the forces of supply and demand meet. These support and resistance levels are seen by technical analysts as crucial when determining market psychology and supply and demand. When these support or resistance levels are broken, the supply and demand forces that created these levels are assumed to have moved, in which case new levels of support and resistance will likely be established.

**Support**

Support is the level at which demand is strong enough to stop the security from falling any further. In the image above you can see that each time the price reaches the support level it has difficulty penetrating that level. The reason is that as the price drops and approaches support, buyers (demand) become more into to buy and sellers (supply) become less willing to sell.

**Resistance**

Resistance is the level at which supply is strong enough to stop the stock from moving higher. In the image above you can see that each time the price reaches the resistance level it has a hard time moving higher. The rationale is that as the price rises and approaches resistance, sellers (supply) become more into to sell and buyers (demand) become less willing to buy.
Support and resistance role reversal

A key concept of technical analysis is that when a resistance or support level is broken, its role is reversed. If the price falls below a support level, that level will become resistance. If the price rises above a resistance level, it will often become support. As the price moves past a level of support or resistance, it is thought that supply and demand has shifted, causing the breached level to reverse its role.

Conclusion

Technical analysis is one approach of attempting to determine the future price of a security or market. Some investors may use fundamental analysis and technical analysis together; they’ll use fundamental analysis to determine what to buy and technical analysis to determine when to buy.

If you continue your study of technical analysis you’ll likely hear someone say it is more of an art than a science. As with any discipline of analysis it takes work, dedication, and discipline to become skilled at it.