# INTRODUCTION TO TECHNICAL ANALYSIS

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Technical analysis is a method of forecasting price movements by looking at purely market-generated data. Price data from a particular market is most commonly the type of information analyzed by a technician, though most will also keep a close watch on volume and open interest in futures contracts. The bottom line when utilizing any type of analytical method, technical or otherwise, is to stick to the basics, which are methodologies with a proven track record over a long period. After finding a trading system that works for you, the more esoteric fields of study can then be incorporated into your trading toolbox.

Almost every trader uses some form of technical analysis. Even the most reverent follower of market fundamentals is likely to glance at price charts before executing a trade. At their most basic level, these charts help traders determine ideal entry and exit points for a trade. They provide a visual representation of the historical price action of whatever is being studied. As such, traders can look at a chart and know if they are buying at a fair price (based on the price history of a particular market), selling at a cyclical top or perhaps throwing their capital into a choppy, sideways market. These are just a few market conditions that charts identify for a trader. Depending on their level of sophistication, charts can also help much more advanced studies of the markets.

On the surface, it might appear that technicians ignore the fundamentals of the market while surrounding themselves with charts and data tables. However, a technical trader will tell you that all of the fundamentals are already represented in the price. They are not so much concerned that a natural disaster or an awful inflation number caused a recent spike in prices as much as how that price action fits into a pattern or trend. And much more to the point, how that pattern can be used to predict future prices.

### Technical analysis assumes that:

- **All market fundamentals are depicted in the actual market data.** So the actual market fundamentals and various factors, such as the differing opinions, hopes, fears, and moods of market participants, need not be studied.

- **History repeats itself and therefore markets move in fairly predictable, or at least quantifiable, patterns.** These patterns, generated by price movement, are called signals. The goal in technical analysis is to uncover the signals given off in a current market by examining past market signals.

- **Prices move in trends.** Technicians typically do not believe that price fluctuations are random and unpredictable. Prices can move in one of three directions, up, down or sideways. Once a trend in any of these directions is established, it usually will continue for some period.

The building blocks of any technical analysis system include price charts, volume charts, and a host of other mathematical representations of market patterns and behaviors. Most often called studies, these mathematical manipulations of various types of market data are used to determine the strength and sustainability of a particular trend. So, rather than simply relying on price charts to forecast future market values, technicians will also use a variety of other technical tools before entering a trade.

As in all other aspects of trading, be very disciplined when using technical analysis. Too often, a trader will fail to sell or buy into a market even after it has reached a price that his or her technical studies identified as an entry or exit point. This is because it is hard to screen out the fundamental realities that led to the price movement in the first place.

As an example, let's assume you are long USD vs. euro and have established your stop/loss 30 pips away from your entry point. However, if some unforeseen factor is responsible for pushing the USD through your stop/loss level you might be inclined to hold this position just a bit longer in the hopes that it turns back into a winner. It is very hard to make the decision to cut your losses and even harder to resist the temptation to book profits too early on a winning trade. This is called leaving money on the table. A common mistake is to ride a loser too long in the hopes it comes back and to cut a winner way too early. If you use technical analysis to establish entry and exit levels, be very disciplined in following through on your original trading plan.

## Price charts

### Chart patterns

There are a variety of charts that show price action. The most common are bar charts. Each bar will represent one period of time and that period can be anything from one minute to one month to several years. These charts will show distinct price patterns that develop over time.

### Candlestick patterns

Like bar charts patterns, candlestick patterns can be used to forecast the market. Because of their colored bodies, candlesticks provide greater visual detail in their chart patterns than bar charts.

### Point & figure patterns

Point and figure patterns are essentially the same patterns found in bar charts but Xs and Os are used to market changes in price direction. In addition, point and figure charts make no use of time scales to indicate the particular day associated with certain price action.

## Technical Indicators

Here are a few of the more common types of indicators used in technical analysis:

### Trend indicators

Trend is a term used to describe the persistence of price movement in one direction over time. Trends move in three directions: up, down and sideways. Trend indicators

smooth variable price data to create a composite of market direction. (Example: Moving Averages, Trend lines)

**Strength indicators**
Market strength describes the intensity of market opinion with reference to a price by examining the market positions taken by various market participants. Volume or open interest are the basic ingredients of this indicator. Their signals are coincident or leading the market. (Example: Volume)

**Volatility indicators**
Volatility is a general term used to describe the magnitude, or size, of day-to-day price fluctuations independent of their direction. Generally, changes in volatility tend to lead changes in prices. (Example: Bollinger Bands)

**Cycle indicators**
A cycle is a term to indicate repeating patterns of market movement, specific to recurrent events, such as seasons, elections, etc. Many markets have a tendency to move in cyclical patterns. Cycle indicators determine the timing of a particular market patterns. (Example: Elliott Wave)

**Support/resistance indicators**
Support and resistance describes the price levels where markets repeatedly rise or fall and then reverse. This phenomenon is attributed to basic supply and demand. (Example: Trend Lines)

**Momentum indicators**
Momentum is a general term used to describe the speed at which prices move over a given time period. Momentum indicators determine the strength or weakness of a trend as it progresses over time. Momentum is highest at the beginning of a trend and lowest at trend turning points. Any divergence of directions in price and momentum is a warning of weakness; if price extremes occur with weak momentum, it signals an end of movement in that direction. If momentum is trending strongly and prices are flat, it signals a potential change in price direction. (Example: Stochastic, MACD, RSI)