

GF Markets Academy

# TECHNICAL ANALYSIS INDICATORS ADVANCED



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# Introduction

- In the first Technical Analysis for Beginners, we learned what is a Simple Moving Average and an Exponential Moving Average, Stochastic Oscillator, and Moving Average Convergence Divergence. (e-book: Technical Analysis for Beginners)
- Let's freshen up your memory.

# Simple Moving Average

- The moving average (MA) takes into consideration the average price by dividing the price of a specific period by the total price. The MA is calculated constantly in order to include the latest price fluctuations.
- The SMA is the most straightforward of the moving averages and is considering the recent data of price and divides them by the total data prices of an asset to find the average. Traders use it to identify potential entries or exits in the market. An SMA is a back looking tool and can be applied to past prices for a given period.
- The SMA helps to identify resistance and support levels or buy or sell signals in the market.

# Stochastic Oscillator

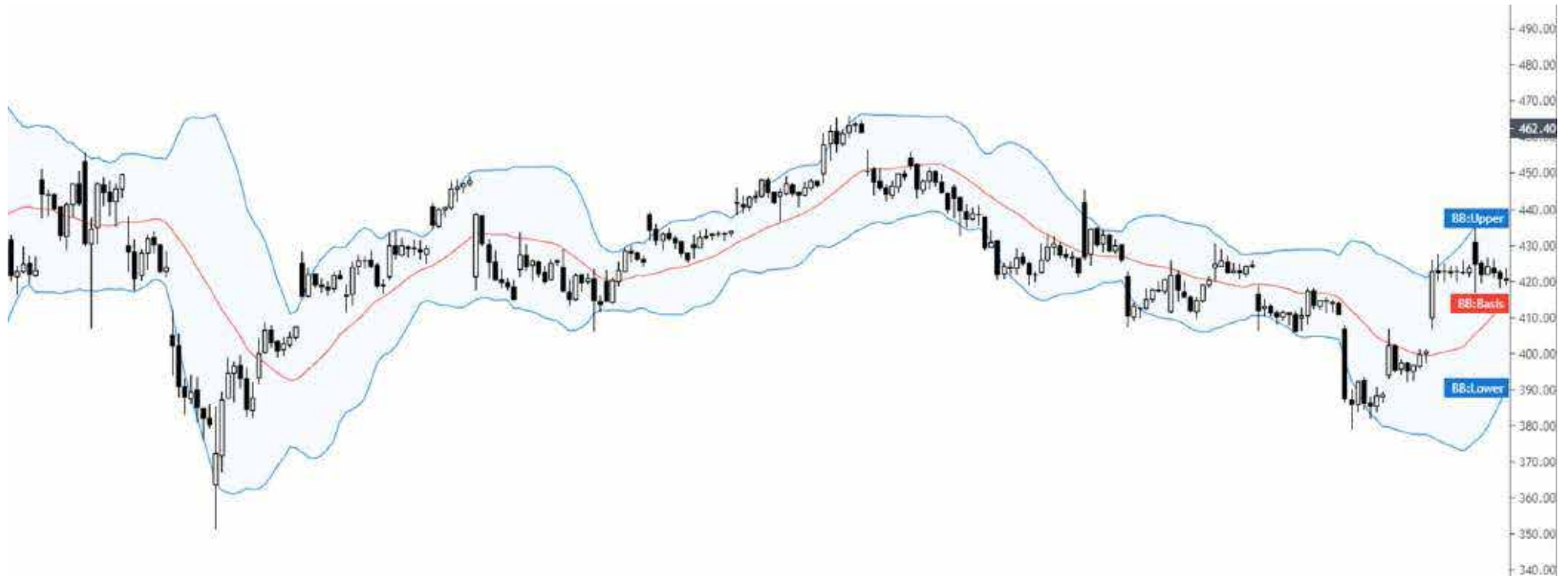
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# Bollinger Bands

- Bollinger Bands is a trading tool used to analyze the movement of stock prices in the market. This tool was created by John Bollinger, during the early 1980s. It consists of lines that represent standard deviations, positive, and negative relative to the simple moving average (SMA).
- These lines, which deviate from the Simple Moving Average of a stock price, give traders better insight when assets are overbought or oversold.



# Essential Bollinger Band Parts



Bollinger Bands has three lines plotted on the chart, and these are:

1. Upper Band
2. Middle Line
3. Lower Band

# Essential Bollinger Band Parts

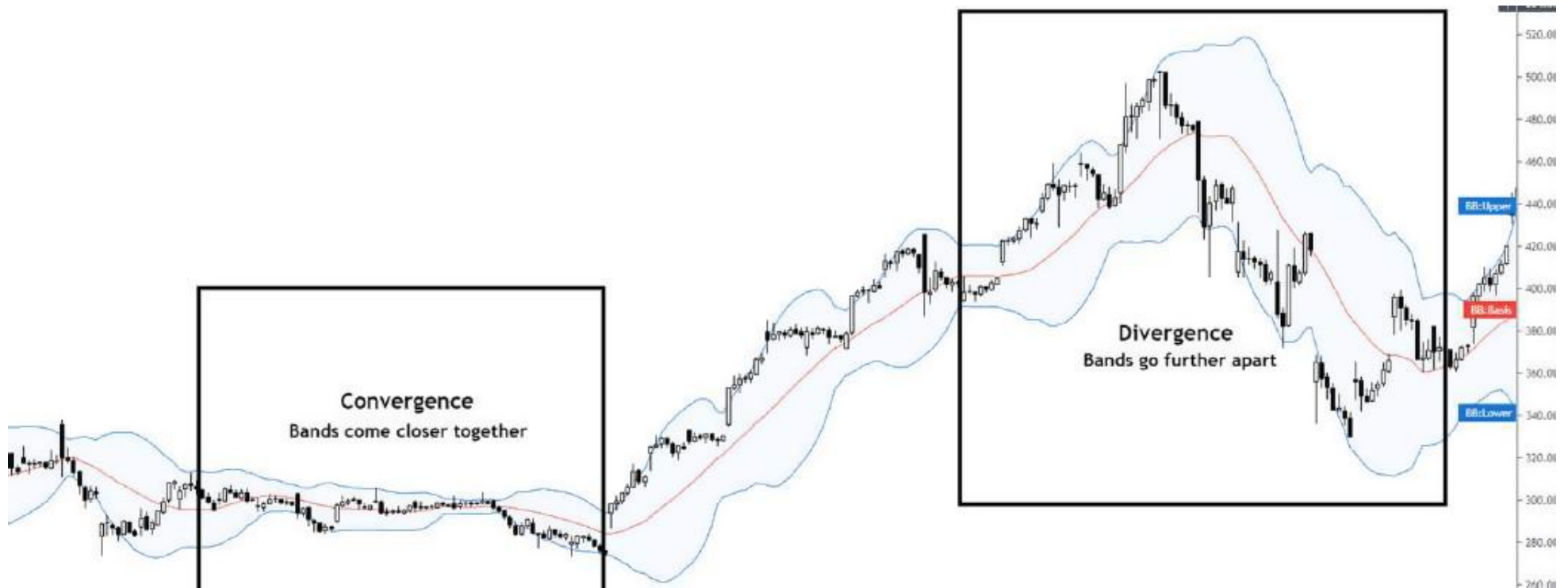


The Middle Line is a Simple Moving Average (SMA) and is located between the Upper Band and the Lower Band. Upper and Lower Bands represent deviations, positive, and negative from the Middle Line (SMA). These are the main components of this tool. It is an indicator of volatility. In other words, it shows how high or low is the price of goods concerning the middle line. This line (SMA) is usually set for 20 days and serves as a base for the other two lines.

Here, in fact, lies the power of this tool. The stock price is high if it is on the Upper Band and low if it is on the Lower Band. In combination with other indicators, it becomes an even more powerful tool. How far the Upper and Lower Band will be from the SMA depends on the price volatility. If the volatility increases, the lines are more spread, therefore further away from the SMA. If, on the other hand, volatility decreases, Upper and Lower Bands will narrow and approach the SMA.



# Essential Bollinger Band Parts

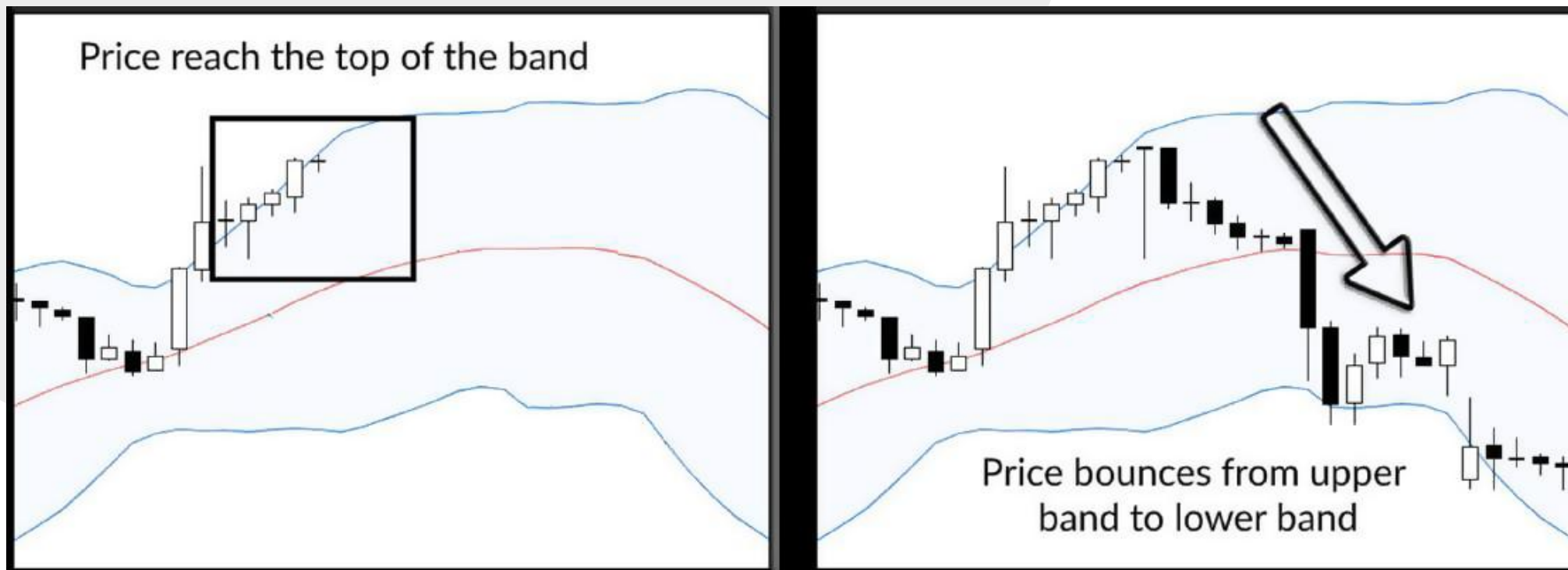


Bollinger Bands indicate market volatility that recognize overbought and oversold zones. When prices go close to the upper band, the market is overbought. Conversely, when prices go close to a lower band the market is oversold.

Higher market volatility is when the standard deviation is higher, meaning a deviation from the midline. Then the upper and lower bands are wider, and then the market is loud. When market volatility is lower the bands are narrower, meaning they are closer to SMA, and then the market is quiet. Since the upper and lower bands measure market volatility, each time with changes in the market, the lines themselves are corrected.

# Now, what does it all look like in practice?

- When the bands are tight, the volatility is low. It may start a new price trend. There is always the possibility of a false move in one of the directions. The price would change direction and go the proper trend.
- Another specific case when the bands are wide is high volatility, and any trend at that point is possible to end. Prices will then most likely **bounce** off the band by touching it and move within bands to another band. The concept of this is the so-called **Bollinger Bounce**. It means that when the price touches one of the bands, it tends to return to the middle within the bands. When such changes occur, it means price fluctuations, further flows, and potential earnings can be identified or predicted.



Additional research can always be done to increase the possibility of winning predictions and gains. For example, if the price goes outside the band is to expect such a trend to continue. But if the price immediately returns within the band, then the proposed expected trend is negated.

A decorative graphic on the left side of the slide. It features a dark blue background with a grid of horizontal bars of varying heights, resembling a bar chart. Overlaid on this are several glowing blue circular icons containing currency symbols: the Japanese Yen (¥), the Euro (€), the British Pound (£), and the US Dollar (\$). A large, light gray circle is positioned at the bottom of this graphic area.

# Relative Strength Index (RSI)

The Relative Strength Index (RSI) is a momentum indicator that is used to enhance technical analysis. It is one of the most popular and widely used momentum indicators. RSI was developed by the famous mechanic engineer and technical analyst J. Welles Wilder. The indicator is measuring both the speed and rate of recent price changes to identify overbought and oversold positions in the price of an asset.



# How does Relative Strength Index work?

The RSI is displayed as an oscillator, meaning as a line graph that is moving between two extreme prices. The RSI takes on values from zero to 100. An RSI above 70 indicates that a stock is overbought and suggests investors should be cautious. The price is most likely going to fall since it is traded at a higher price than it is supposed to be. For example, Tesla has an RSI of 78, indicating how overvalued the stock is. Moreover, an RSI value of 30 or below indicates an oversold situation. Investors and traders will most of the time jump in to buy these kinds of stocks since they suggest that they have more chances of going up.

# SELL

A sell signal from the RSI will be when the RSI is 70 or above. Stocks like Nike have passed the 70% level many times but haven't stayed there. However, this does not make it less of an overbought stock. Investors will realize an overbought situation and short it in order to benefit from the reversal. Again, the stock might continue trading in the overbought situation longer time than expected.

# BUY

When the RSI is indicating an oversold situation meaning 30 or below, then investors should go and buy the stock. An oversold stock is always the best investment since it has more potential to go up or rebound to its normal price. That does not mean that the change will happen immediately. Some stocks tend to trade for some time in an oversold situation until they rebounded.









# When to avoid RSI

- Like already said above the RSI compares the stock price in bearish and bullish price momentum. However, like most of the technical indicators, it can generate false signals and influence the wrong decision for a trader. Therefore, the RSI needs to be used in the correct market conditions.
- True reversals are very rare compared to how often there are false alarms of reversals. A false positive for example would be a bullish crossover followed by a fast decline in the price. On the other hand, a false negative would be when there are a bearish crossover, and the stock price is all of a sudden inclining.
- Remember, since the indicator is showing the momentum, it can easily stay overbought or oversold for a very long time whether the momentum direction is one or the other. Thus, the RSI should be used in an oscillating market where the stock price is alternating from bullish and bearish movements.



# Parabolic SAR

The Parabolic SAR is a technical indicator used for technical analysis. It was developed by J. Welles Wilder that wanted to determine the direction that asset will move. SAR is an acronym for stop and reverse. As from the name we can understand that it is mainly used to identify potential reversals in a price trend of securities. This indicator can also be used to identify potential entries and exits in a trend and therefore enhance the trades of a trader.



# How to understand it?

When the dots are graphically presented on the charts are very easy to read and understand. What produces the signals is the dots when changing direction. For example, when the price is making big swings, it can produce profits. However, the Parabolic SAR is working better when the market volatility and has a lot of movement. The indicator is not as accurate when the market is flat or in a ranging market.

The figure above shows the movements clearly. For instance, when the market is moving upwards meaning that the price of an asset is going up the dots are also going up. The pace accelerates with the trend.

# PROS

The benefit of using the Parabolic SAR is that it helps to clarify the direction of price action. The stronger the strength of a bullish trend, the better results the Parabolic SAR. In addition, when the movement is against the trend the indicator gives an exit signal and protects the traders from losses when detecting a potential reversal. The indicator is more accurate in market trends that rally up significantly or declining strongly.

# CONS

The limitations of are that it can produce false signals when the trend starts moving sideways. This lack of trend is causing the indicator to “panic” making it move back and forth around the price and this is where mixed signals are produced. Traders that choose to rely completely on the Parabolic SAR without any other indicators combined will result in huge losses.



# Always Trade Smart

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