

Technical Indicators:-

1) The Relative Strength Index (RSI) is a momentum indicator which is used in technical analysis.

The RSI is displayed as a line graph on a scale of **zero to 100**.
an RSI reading value of **70 or above** indicates an **overbought** situation. A reading **Value of 30 or below** indicates an **oversold** condition.



RSI Range for Practice :-

When RSI is in between 60 to 80 and going up from 60 to 80 it shows Strong Buy Signal (Bullish UP Trends).

When RSI is in between 40 to 20 and going down from 40 to 20 it shown Strong Sell Signal (Bearish down Trends).

2) The Moving Average is thus calculated by adding up all the values of the data points of the security and dividing it with the total number of data points.

the Moving Average meaning is determined by the past price values of a security.

How to use to identify for Uptrend and Downtrend ?

1) If the Moving Average for a security is angled upwards, its price values are or have recently been rising. This denotes an upward trend.

2) On the other hand, a downward angled Moving Average denotes a fall in price or a downtrend.

Types of Moving Averages:-

Simple Moving Average: The most commonly used form of Moving Average in technical analysis is the Simple Moving Average. It is calculated by taking the mean of a set of values (mostly, prices of a security) and dividing it by the number of values. It can be calculated as follows:

$(A_1 + A_2 + A_3 + A_4 \dots A_n) / n = SMA$ Where n is the number of time periods and A is the average within a given time period.

The most common periods for Simple Moving Average tracking are 8, 20, 50, 100 and 200 days or periods.

- **Exponential Moving Average:** The other type of Moving Average is known as the Exponential Moving Average. This is a weighted form of calculating Moving Averages, whereby recent price values are given more weight than past price values.
Note:- Exponential Moving Averages adapt better and faster to changing price movements than Simple Moving Average.

Note:- it is recommended that Moving Averages should be used in conjunction with other Indicators like rsi and macd to form an accurate.

A Crossover is a Trading Strategy. :-

It is based on moving average of different time frames. This trading pattern is used by traders to identify the short term market trend. Mostly intraday, BTST (**Buy Today, Sell Tomorrow**) trader and **Swing traders** use this indicator to take Buy or Sell call.

Crossover Trading Strategy:-

Cross over is generally used by traders in 2 different time frames.

1) 20 Day Moving Average:-

The most popular crossover time frame is a 20-day moving average.

a) If a particular stock falls below its 20-day moving average indicates a bearish

trend and

b) if the stock crosses above its 20-day moving average indicates the bullish trend.

2) Moving Average cross over Strategy :-

1) When 7-day moving average crosses above 21-day moving average indicates a bullish trend or uptrend and is expected to form the higher high and lower low pattern.

2) If a 7-day moving average falls below the 21-day moving average indicates a bearish trend or downtrend and is expected to form a lower high and lower low pattern.



3) What Is Moving Average Convergence/Divergence (MACD)?

MACD Line :-

The MACD line is calculated by subtracting the 26-period EMA from the 12-period EMA.

The result of that calculation is the MACD line.

Signal line :-

A 9 day EMA of the MACD line is called the signal line.

which can function as a trigger for buy or sell signals.

The basic interpretation of the MACD indicator is:-

1)When the MACD Line crosses the centerline from the negative territory to positive territory, it means there is a divergence between the two averages. This is a sign of increasing bullish momentum; therefore, one should look at buying opportunities

2)When the MACD line crosses the centerline from positive territory to the negative territory, it means there is a convergence between the two averages. This is a sign of increasing bearish momentum; therefore, one should look at selling opportunities.

Simple 2 line crossover strategy with these two lines (MACD & Signal Line):-

1)**Buy signal:** when the MACD line crosses above the signal line as shown below. If MACD is above the signal line, the histogram will be above the MACD's baseline, or zero line.

Note for Buy confirmation : MACD line should be above zero and Above Signal line



2)**Sell Signal** or short :- when the MACD line crosses below the signal line as shown below.
Note for sell confirmation :- If MACD is below its signal line, the histogram will be below the MACD's baseline



Note:-

1)MACD line crossing above zero is considered bullish, while MACD line crossing below zero is bearish.

2)Secondly, when MACD turns up from below zero it is considered bullish.

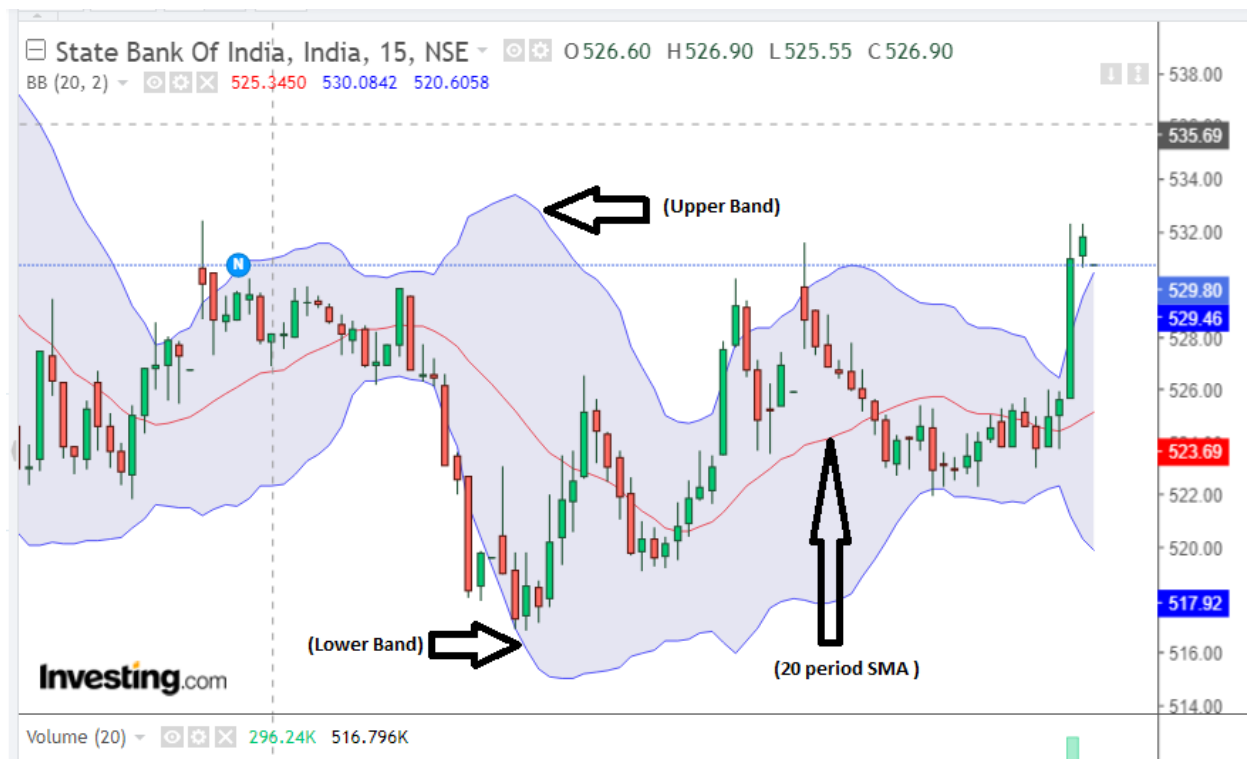
When it turns down from above zero it is considered bearish.

4) Bollinger Bands :-

Introduced by John Bollinger in the 1980s, Bollinger Bands (BB) is perhaps one of the most useful technical analysis indicators. BB is used to determine overbought and oversold levels, where a trader will try to sell when the price reaches the top of the band and will execute a buy when the price reaches the bottom of the band.

The BB has 3 components:

1. The middle line which is The 20 day simple moving average of the closing prices
2. An upper band – this is the +2 standard deviation of the middle line
3. A lower band – this is the -2 standard deviation of the middle line



Overbought :-

When the price reaches the upper band, the asset is trading at a relatively high price and is considered overbought. You could now look to sell the asset on the expectation that its price will fall back towards the central moving average band.

Oversold :-

When a price approaches the lower band, the asset is trading at a relatively low price and is considered oversold. **You could now look to buy the asset on the expectation that the price will go back towards the central moving average band.**

Be cautious, however – just because the price may reach the upper and lower bands does not mean

that the price will reverse. **You will need further confirmation — using, for example, candlestick ,Rsi and Macd.**

patterns or another indicator – that the price is reversing before you enter into a trade.

How to use Bollinger Bands ?

you can use it to identify Overbought and Oversold situation.

1)When the price reaches the upper band it is considered overbought and tends to fall back towards the central band.

2)When the price reaches the lower band it is considered oversold and tends to rise back up towards the central band.

Note : With Bollinger Bands always confirm with Rsi and Macd technical indicators.